



Music as Persuasion: Creative Mechanisms for Enacting Academe

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Definitions of creativity are not universally agreed to; our definition of the word would be “the ability to generate plans, ideas, knowledge, and information that differ significantly from those in common use and are part of our general culture.” Creative individuals are those who strike out in different directions. The “standard” direction” in communication centers on “information flow” similar to the process of electrons moving from one place to another. We have attempted to step outside of this process and invoke affect. An obvious way of invoking affect in a communicative interaction is to supplement the cognitive content with presentational elements having strong affective content (i. e., music). This process is inherently metaphorical.

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Our basic metaphor concerns the country rube encountering communication theory, much as Woody Guthrie did. Woody and other talking blues performers based their characterizations on the “Toby” shows that toured the rural American towns in the pre-television age. Toby was a wise-cracking rube who sees life more clearly than the pretentious big wigs do. The ancestor of the Toby character arose from rural characters like Asa Trenchard in *Our American Cousin*. Modern singers like John Prine and Arlo Guthrie slip into their “Toby” character when they sing. Our songs follow these juxtapositions.

Keywords: creativity, folk music, parody, metaphor, folk process

“Creativity” is a word that has been used in a variety of ways. Our definition of the word would be the ability to generate plans, ideas, knowledge, and information that differ significantly from those in common use and are part of our general culture. Creative individuals are those who strike out in different directions, such as the impressionists in painting, the vocal percussionists in music, and the “string theorists” in physics. Being creative seems to be highly prized by everyone and the search to achieve creativity even has paradigmatic overtones. A recent official of the National Communication Association seemed to be in favor of creativity when he urged his colleagues to “color outside the lines.” We are sure that his purpose was to open our minds to alternative solutions and non-traditional interpretations of communicative phenomena. Of course, if “creativity” becomes the norm, then the definition at the beginning of this paper cannot hold, because we then are conforming to a norm of “creativity.” Obviously, the idea of creativity is worthy of investigation, especially as it applies to persuasion.

In order to contribute to creative thinking in communication we will first define creativity—allowing

ourselves a bit of creative license as we peruse the literature and provide a context from which creativity can be interpreted and processed. In doing so, we discuss metaphors as creativity, creativity as persuasion, and song lyrics as persuasive communication. Ultimately, our claim is that music is a form of persuasion and thus is a creative mechanism for academics to use that has an impact on how listeners subsequently enact their profession.

What is Creativity?

“Coloring outside the lines” brings to mind one of the first author’s most prized possessions when he was a small boy—his Gene Autry coloring book. Gene and his horse, Champion, were significant icons in the thirties and, therefore, it was very important to get the correctly colored crayons for Gene’s outfit, the accompanying desert scenes, and Champion’s saddle. When little sister desecrated one of the pages in the precious book with her postmodern scribbling, the result was righteous rage and a plea for the authorities (Mother) to beat little sister within an inch of her life (Mother did not).

Little sister colored outside the lines, but the result was certainly not creative, nor was it even intelligible. Simply doing something shocking or unexpected might qualify as interpretive social science, but we think we have a right to expect that coloring that goes outside the lines bears the burden of adding to our understanding, rather than detracting from it, and, at the very minimum, must be intelligible. This clearly rules out much of modern art and even a great deal of popular music. So if little sister had given Ole Gene a ponytail or a pair of braids like Willie Nelson, we might think that her attempt to break the restriction of the “lines” was worth our attention, and even might help us deconstruct “Back in the Saddle Again.” But as it was, the scribbling did nothing to add meaning to an already meaningful illustration.

We have taken another approach to creativity, in that it has been our wish to break out of the straightjacket of examining communicative interactions in linear ways. The usual liturgy of communication theory is based on the underlying dogma of the [Shannon and Weaver](#) (1949) model, which was designed to describe electronic systems of communication. The Shannon and Weaver model was the foundation of David [Berlo](#)’s *The Process of Communication* (1960), probably the most influential work about communication in the last century. In this book, the Shannon and Weaver model appears as source, message, channel, and receiver.

The underlying mechanical process posed by Shannon and Weaver (1949) is “paradigmatic,” in that it represents reasoning based on a series of unquestioned assumptions. These assumptions were founded on electronic systems, which involve the transmission of electrons from one point to another and as such are highly linear. The notion of “information flow” is derived from the process of electrons moving from one place to another and the extension of the “flow” idea to sonic and electronic radiation is a small step. Since our nervous systems are composed of neurons interconnected in thousands of ways and neurons can be thought of as wires transmitting impulses, the electronic paradigm seems to fit. Thus, describing a conversation would seem to involve sources and receivers “sending” a series of back and forth “messages.”

On a very simple level, this description may be appropriate. But human behavior does not always follow the regularities implied by electronic processes and more often than not follows other “rules.” The result is sometimes hard to explain. Consider the example of a dialogue described by [Frentz and Farrell](#) (1976):

A: How do you do. It’s very nice to have you as our new department head.

B: Thanks —it’s nice to be here.

A: For us, too. Say, is it true that you’re having trouble with your wife? (p. 337)

Something has cropped up in this conversation that the Shannon and Weaver model can’t explain. Diehards clinging to the linear model might invoke the complexity of the system, or use more sophisticated computers as analogues. But there are some aspects of human communication that can’t be described this way. What we might call “complexity” is due to some more fundamental underlying aspects of the

interaction that the model ignores. Frenz and Farrell (1976) point out that considerations of *context* are crucial in evaluating any interaction and the notion of "message" is much less interesting than analysis based on *episodes*. The above telephone conversation is an example of such an "episode."

Using the Entire Range of Available Stimuli

Frenz and Farrell (1976) would have us focus on culture to examine such episodes but we feel that we still do not "understand" messages unless we consider *all of the elements* of any exchange. On the simplest level, this means that any message is strongly affected by the "nonverbal" cues present in the exchange ([Archer & Akert](#), 1977; [Buck](#), 1980, 1983; [Burns & Beier](#), 1973; [Furnham, Trevethan, & Gaskell](#), 1981; [Mehrabian & Wiener](#), 1967; [Zuckerman & Larrence](#), 1979). Often when nonverbal signals contradict the verbal ones, individuals accept the nonverbal as a more valid expression of the true feelings of the interactant ([Burgoon](#), 1985; [Leathers](#), 1979). Most investigations of nonverbal cues center on visual displays, such as facial expression, posture, and the like.

To us, vocalic decoding is a crucial element and most persons do it poorly. For example, in one study using a standardized vocalic listening task, a very large sample of college students and adults only identified correct answers 55% of the time ([Bostrom](#), 1990, p. 22). In other words, almost half of the time, people misinterpret vocalic signals. And while this kind of information access is universally considered to be of great importance, no one seems to have a clue as to how it should be improved ([Samuels](#), 1987, p. 9).

Research indicates that improvements in interpretive listening can be accomplished with training procedures, such as "sensitivity training," role playing, and the like ([Wolvin & Coakley](#), 1985). Interpreting the underlying affect implied in spoken messages may involve personal schemas ([Fitch-Hauser](#), 1990), or "cultural literacy" ([Hirsch](#), 1987). These changes, however, are changes in "attitude," "awareness," or "knowledge," not changes in basic ability. All of these elements are closely related to what we think of as creativity, in that they are involved with the structure of the brain itself.

Brain Structure and Interpretation

Creativity often has been described in terms of the lateralization of brain function. [Springer and Deutsch](#) (1989) have summarized the evidence for the existence of "left-brain" and "right-brain" functions in detail. Experimental evidence indicates that, in general, left-brain (for right-handed subjects) areas are more strongly involved in verbal and mathematical processing and right-brain areas in processing creative and affective functions. Springer and Deutsch conclude that the different hemispheres do, in fact, process information differently (pp. 73-101).

Nor is this all. [Kimura](#) (1964, 1967) has demonstrated lateral asymmetry in decoding information presented to different ears. Other studies (e.g., [Cohn](#), 1971; [Davis & Wada](#), 1974; [Galín & Ellis](#), 1975) show strong evidence for differences in processing between the hemispheres. [Papanicolaou](#) and others (1983) present evidence that lateral differences could be differentiated on the basis of the affect contained in the signal. [Millar and Whittaker](#) (1983) examined a number of studies in which "prosodic" comprehension was considered to be a task of the right brain. Their conclusion was that the evidence was definitely there and that "non-prosodic" (melodic) would, at least by implication, be a left-brain function. This led [Herrero and Hillix](#) (1990) to examine the possibility of lateral asymmetry in text that had vocalic differences in them.

In their study, Herrero and Hillix (1990) discovered that affective messages are differentially processed, depending on which hemisphere of the brain was initially involved. Their respondents listened with either left or right ears. Herrero and Hillix recorded the phrase "the book was on the table" with three differing affective emphases: "sad," "glad," and "mad." They examined the accuracy with which these affective messages could be detected. A three-factor model was tested: gender, left versus right ear of presentation (all respondents were right-handed), and specific affect (sad, mad, or glad). Left ear channels proved to be better for identifying affective content. No gender effects were observed, but an interaction among side of presentation and affect of message was present, in which left ear had an advantage. Basically the right ear

was *very much poorer* in identifying the "sad" messages.

In other words, affective content seemed to be processed in different ways depending on which ear receives it. Lateral asymmetry of brain function may well be an unsuspected contributor to the lack of accuracy in vocalic decoding. Unfortunately, most research in decoding has focused on cognitive aspects of the signal (e.g., [Bostrom](#), 1990; [Bostrom & Waldhart](#), 1980, 1988). Important as the cognitive aspects may be, complete decoding will depend on accepting a role for affective decoding.

Metaphor as Creativity

An obvious way of invoking affect in a communicative interaction is to supplement the cognitive content with presentational elements which have strong affective content (e.g., music, art). The next important question concerns the various means one can use to invoke affect. Since all communication is metaphorical, it would seem appropriate to further investigate the basic nature of metaphor.

When we think of metaphor, we are likely to consider studies such as [Bowers and Osborn](#) (1965), who tested the effect of brief metaphors on the persuasiveness of a message and found that the metaphors were more effective than a message without them. However, recent contributions of cognitive science have demonstrated not only a much broader notion of metaphor but an entirely new approach to philosophy ([Lakoff & Johnson](#), 1999), one in which basic physiological processes provide the root metaphors for most of our language, and by extension, our perception. Lakoff and Johnson provide an interesting way to sort out phenomena and perceptions by asking us to visualize concepts. We find that we can visualize "house" but not "real estate." Lakoff and Johnson would conclude that "real estate" is a concept of an entirely different type, which should be examined quite differently. They feel that all communication is metaphorical and the most meaningful processes are based on "root metaphors," which are founded on fundamental physiological and perceptual processes. What this means to us is that any message or message form which is composed primarily of root metaphors and experiences is an obvious way to break out of the linearity and artificiality of typical dialogues about theory and practice.

Everyday communication abounds in vivid examples. When U.S. Representative James McGovern (D) of Massachusetts returned to the U.S. after a trip to Cuba, he described Fidel Castro in these words: "He could talk a cat off a fish truck" ("[McGovern returns](#)," 1998).

Clearly other art forms beyond political speech can be used with similar effect. [Hirsch](#) (1987) argues that studying Shakespeare made it possible for his father and his father's contemporaries in the business world to communicate better with one another since they could use Shakespearean scenes or quotations as illustrations for points they wished to make. If one of these persons wished to characterize a loan and its terms as unnecessarily harsh, he might refer to a "pound of flesh," which was the penalty that Shylock wished to extract from one of his business rivals in *The Merchant of Venice*. But the same functions he mentioned can be as easily performed today by referring to motion picture scripts and rock lyrics. James [Gleick](#) (1993) has pointed out that *Sesame Street*, the Doors, and Monty Python are all replacing Greek and Roman classics in our popular culture.

Creativity as Persuasion

It often surprises persons to realize that songs and paintings can be persuasive. But occasionally the impact of persuasion in the arts is so strong that it provokes powerful reactions. The arts always have played an important part in shaping the attitudes and ideas of any society, and even government policy. Songs, plays, records and novels are intensely persuasive ([Kaufman](#), 1981). The greatest of our novelists and playwrights have often taken on political positions. Persuasion certainly is not confined to messages delivered in straightforward ways. John Lennon may have been a more effective persuader (in the long run) than John Kennedy. Clearly Bruce Springsteen has stimulated many to consider the plight of the poor and Willie Nelson has done the same for American farmers. In the newspapers, comic strips were once designed for amusement only—but Burke Breathed of *Bloom County* and Gary Trudeau of *Doonesbury* consistently have made political material highly salient.

In Nazi Germany in the 1930's, the propaganda minister, Dr. Joseph Goebbels, had complete control of the artistic life of the state. He commissioned the talented filmmaker Leni Riefenstahl to use her artistic powers to produce a number of films supporting the government, many of which are classics today. Goebbels encouraged Wagner and discouraged American jazz, especially the work of George Gershwin (who was considered not only decadent, but an "animal" because he was Jewish). At the same time the Soviet Union was producing films like *Alexander Nevsky*, in which the considerable talents of Eisenstein and Prokofiev were combined to a Pro-Russian, anti-German message. And we should remind ourselves that the use of the arts in persuasive activity is not necessarily a bad thing. Some of George Bernard Shaw's best plays (e.g., *Major Barbara*) were frankly propagandistic. And who can forget Robin Williams in *Good Morning, Vietnam*?

Few would argue that music has persuasive qualities. Do we really want to teach the world to sing in perfect harmony or just sell Coca Cola? Is the best part of waking up Folgers in your cup, or do we simply need a caffeine fix? Is McDonald's what we want...what we really, really want, or can we admit it is just a source of unnecessary cholesterol that some people think tastes good? Clearly, music is a form of persuasion. In particular, we believe that "folk music," which clearly draws on root metaphors and common experiences, can be a very effective form of persuasion. Further, by invoking parody through the lyrics set to folk music, we have the means to make subtle (or not so subtle) persuasive points in song that otherwise might be considered offensive and meet with resistance. Consequently, folk music and parody provide us with a creative mechanism to impact how communication scholars view and perhaps even subsequently enact their profession.

Lyrics as Satire, Cynicism and Love

Our songs were initially created for our own amusement, not necessarily to be persuasive—although if someone happened to take a message away with them from our lyrics, we would not try to stop them. Our [songs](#) first saw the light of day at the National Communication Association's seventy-fifth anniversary conference in San Francisco, where we appeared right after Bob Jeffrey's folk tales and just before Pamela Cooper's rendition of the tango. Our very first song was "inspired" by the nature of studying for a Ph.D., which in this era is one of the few sources of commonly shared agony in the University culture. Its melody is classic Woody Guthrie and is copied after his "Dust Bowl Blues." Woody and other talking blues performers based their characterizations on the "Toby" shows that toured the rural American towns in the pre-television age. Toby was a wise-cracking rube who saw life more clearly than the pretentious big wigs. The ancestor of the Toby character arose from rural characters like Asa Trenchard in *Our American Cousin*. Modern singers like John Prine and Arlo Guthrie slip into their "Toby" character when they sing. Here is our version of talking blues:

*A college teacher I wanted to be, so I thought I'd get me a Ph.D.
I quit my job and all its pay, went off to the University of I-o-way.
In I-o-way City. "Athens of the Midwest." Couple of buildings and a football stadium.*

*First I went to a graduate class, found it was taught by a horse's ass.
Wrote a paper, took a test, he said, "Son, you're really a mess. Where'd you come from?"
I said I'd been teaching in high school. He said, "That figures."*

*But pretty soon I started to do well, by and by you learn what'll sell.
Just go home and open a bottle, write another paper 'bout Aristotle. Quintilian.
All that modern communication theory.*

*Well I worked real hard, didn't give 'em no lip, and they rewarded me with an assistantship.
That's where you labor hard each day, get fifteen hundred dollars for pay.
"Hey," I said, "that's big money." "But it's gotta last all year." "Oh."*

*The time it came, I had to cram, gonna take that comprehensive exam.
Went to my advisor, feeling low, I said "What do I hafta know?" He says, "Everythin."*

Everythin? Not sure I can handle that.

*After those trials and tribulations, I started in on my dissertation.
Set that alpha, set that beta, ran those subjects, gathered that data.
My roommate says "what is goin on?" "I'm advancing the frontiers of knowledge. Get outta my way."*

*Well I got it done, and look at me, I'm a sure-as-hell by-God Ph.D.
Just one thing, I'll tell you right then, I ain't ever going to do it again. Ain't ever gonna work.
Gonna hang around the University the rest of my life.*

Would we ever do it again? Nope. Not even to advance the frontiers of knowledge.

Another version of Toby comes in our characterization of the "[New Rhetoric](#)" [MP3 File, 2.5MB]. For some reason, there always seems to be a "new rhetoric." We are not complaining—we just expect empirical evidence in place of surmise. For this next song, we borrowed a familiar melody from *Hee Haw*.

*I set out in life--a new rhetorician
With Corax and Tisias--all of those guys,
But epistemology is the new rendition,
My poor enthymeme was replaced by surmise.*

CHORUS

*Where, oh where, is Cicero tonight?
How could he leave me here all alone?
I search through the journals for critical study,
Thonssen and Baird have (phbbt) up and gone.*

*I'm still devoted to my Aristotle,
I just don't care--it's still good today,
Homo narrans strikes me as twaddle,
I wish you'd take those paradigms away.*

Repeat Chorus

*I can't be postmodern, It gives me a headache,
I can't be a Marxist cause I own a car.
I can't be a feminist, they'd never believe me,
I'll spend next convention asleep in the bar.*

Repeat Chorus Ad Nauseam

We continued our streak of creativity by co-opting John Denver's classic tune *Country Roads* to create "[Apprehension](#)" [MP3 file, 2.5 MB] We think our name for this tune is quite logical; though it usually takes audiences a few minutes to figure it out.

*Apprehension, grips me strongly
Makes my mouth dry,
Gives me trembling fingers.
Life is awful, when my turn comes around,
Who can help me? Who can calm me down?*

CHORUS

*Take the test! Get assessed!
It will put your mind to rest,
West Virginia, has the answer,
Take the test, it's the best.*

BRIDGE

*I'd like to drop but I need this course to graduate
Whose idea was this to make this a required class?
Something tells me when I puke each time I speak
It's gonna make it hard to pass... hard to pass!*

Repeat Chorus

*Well, I took it, got my percentile,
Now its official, now I have a number.
Life's still awful, I don't know my fate,
It's confusing--am I state or trait?*

The subtler message of this song—that more is involved with adjustment than simply taking a test—typically takes longer to soak in.

Our nastiest satire was inspired by a program at the National Communication Association where a starry-eyed recent graduate of the University of Illinois began her presentation with the fervent phrase “Constructivists believe...” and we were reminded of the “Credo” in the Catholic mass. The underlying religiosity of these folks led us to use the old hymn “Whispering Hope” as our melody. We called it the “Illinois Fight Song.” It still irritates some of the hard core, to our delight.

*Soft is our version of science,
Soft methodology, too,
Relativists are our clients,
Reality we eschew. (Bless you. Gesund Heit)*

*We haben eins neu Weltaungschaungen,
Even though it's hard to pronounce,
A system you never are wrong in,
Giving subjective accounts.*

CHORUS

*Let us construe, we'll be right, in whatever we do.
If we construe, all our axioms will come true.*

*We owe allegiance to Goffman,
We're sure that he set the pace,
He thinks we're utterly charming,
We think he's saving our face.*

*Habermas fits in our system,
Phenomenology, too.
We owe it all to our method,
Because we have learned to construe.*

Repeat Chorus

*Methodological triangulation,
Instantiation, too.
You'll understand all this bullshit.
When you have learned to construe.*

Repeat chorus ad nauseam

In the interest of fairness, and because pomposity is everywhere, we took on the behaviorists next. Because so few people read the original behaviorist accounts, it probably is useful to mention that a strict behaviorist position denies the existence of “inner” events, such as thoughts and attitudes, and concentrates on external manifestations of the same. This presents a big problem to the lovers among us, since “love” is certainly an “inner” construct. Since behaviorism was so strong in the sixties, we chose a melody from *Hair*, the “Age of Aquarius.”

*Reinforcing a relationship,
Behavioral exchange,
Attitudinal similarity,
Even if weird and strange.*

*This is the lovesong of the aging behaviorist,
Aging behaviorist.
Behaviorist. Behaviorist.*

*Stimuli and mediation, instrumental reinforcement,
Escalating self disclosure, and a mindless mere exposure
And a mindless mere exposure, and a mindless mere exposure,
My Behaviorist! Behaviorist!*

*Reinforcing a relationship, behavioral exchange,
Attitudinal similarity,
Even if weird and strange,
This is the lovesong of the aging behaviorist, aging behaviorist.
Behaviorist! Behaviorist!*

We have many more songs—for example, one celebrating the communication lab at Kentucky, one ridiculing the listening test, and a particularly inspired one about searching for a dean. But the above songs are enough to demonstrate our approach to breaking out of the mold.

We hope that we have been creative, in that we wrote the song lyrics ourselves. But more so, we hope that we have expanded the available stimuli to make particular points (e.g., apprehension is more than a score on a test and research is more than construal) and that the inherent metaphors in the folk idiom have added power to the persuasion. Music is a form of persuasion and thus is a creative mechanism for academics to have an impact on how listeners subsequently enact their profession—even when those listeners are other academics.

Works Cited

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Works Cited

- Archer, D., & Akert, R. (1977). Words and everything else: Verbal and nonverbal cues in social interpretation. *Journal of Personality and Social Psychology*, 35, 443-449.
- Berlo, D. (1960). *The process of communication*. New York: Holt, Rhinehart, and Winston.
- Bostrom, R. (1990). *Listening behavior: Measurement and application*. New York: Guilford.
- Bostrom, R., & Waldhart, E. (1980). Components in listening behavior: The role of short-term memory. *Human Communication Research*, 6, 211-237.
- Bostrom, R., & Waldhart, E. (1988). Memory models and the measurement of listening. *Communication Education*, 37, 1-13.
- Bowers, J., & Osborn, M. (1965). Attitudinal effects of selected types of concluding metaphors in persuasive speeches. *Speech Monographs*, 33, 147-157.
- Buck, R. (1980). Nonverbal behavior and the theory of emotion: The facial feedback hypothesis. *Journal of Personality and Social Psychology*, 38, 811-824.
- Buck, R. (1983). Nonverbal receiving ability. In J. Wiemann and R. Harrison (Eds.), *Nonverbal interaction* (pp. 209-242). Beverly Hills, CA: Sage.
- Burgoon, J. (1985). Nonverbal signals. In M. Knapp and G. Miller (Eds.), *Handbook of Interpersonal Communication* (pp. 344-390). Beverly Hills, CA: Sage.
- Burns, K., & Beier, E. (1973). Significance of vocal and visual channels in the decoding of emotional meaning. *Journal of Communication*, 23, 118-130.
- Cohn R. (1971). Differential cerebral processing of noise and verbal stimuli. *Science*, 172, 599-601.
- Davis, A. E., & Wada, J. A. (1974). Hemispheric asymmetry: Frequency analysis of visual and auditory evoked responses to nonverbal stimuli. *Electroencephalography and Clinical Neurophysiology*, 37, 1-9.
- Fitch-Hauser, M. (1990). Making sense of data: Constructs, schemas, and concepts. In R. Bostrom (Ed.). *Listening behavior: Measurement and applications* (pp. 76-90). New York: Guilford.
- Frentz, T. R., & Farrell, T. B. (1976). Language-action: A paradigm for communication. *Quarterly Journal of Speech*, 62, 333-349.
- Furnham, A., Trevethan, R., & Gaskell, G. (1981). The relative contribution of verbal, vocal, and visual channels to person perception: Experiment and critique. *Semiotica*, 37, 39-57.
- Galín, D., & Ellis, R. R. (1975). Asymmetry in evoked potentials and index of lateralized cognitive processes: Relation to EEG Alpha asymmetry. *Psychophysiology* 13, 45-50.
- Gleick, J. (1993). Bartlett updated: Renewing the idea of a shared culture. *New York Times Book Review*, (August 8), p. 3.
- Herrero, T., & Hillix, W. (1990). Hemispheric performance in detecting prosody: A competitive dichotic listening task. *Perceptual and Motor Skills*, 71(2), 479-486.

- Hirsch, R. (1987). *Cultural literacy*. New York: Houghton Mifflin.
- Kaufman, C. (1981). Poetic as argument. *Quarterly Journal of Speech*, 67, 407-415.
- Kimura, D. (1964). Left-right differences in the perception of melodies. *Quarterly Journal of Experimental Psychology*, 16, 355-358.
- Kimura, D. (1967). Functional asymmetry of the brain in dichotic listening. *Cortex*, 3, 163-178.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh*. New York: Basic Books.
- Leathers, D. (1979). The impact of multichannel message inconsistency on verbal and nonverbal decoding behaviors. *Communication Monographs*, 46, 88-100.
- "McGovern returns," (1998, February 2). *Christian Science Monitor*, p.11.
- Mehrabian, H., & Wiener, M. (1967). Decoding of inconsistent communications. *Journal of Personality and Social Psychology*, 6, 109-114.
- Millar, M., & Whittaker, H. (1983). The right hemisphere's contribution to language: A review of the evidence from brain-damaged subjects. In S. J. Segalowitz (Ed.) *Language function and brain organization* (pp. 86-92). New York: Academic Press.
- Papanicolaou, A. C., Levin, H. S., Eisenberg, H. M., & Moore, B. D. (1983). Evoked potential indices of selective hemispheric engagement in affective and phonetic tasks. *Neuropsychologia*, 21, 401-405.
- Samuels, J. (1987). Factors that influence listening and reading comprehension. In R. Horowitz & J. Samuels (Eds.), *Comprehending written and oral language* (pp. 4-13). New York: Academic Press.
- Shannon, C., & Weaver, W. (1949). *The mathematical theory of communication*. Urbana: University of Illinois.
- Springer, S., & Deutsch, G. (1989). *Left brain, right brain*. New York: W. H. Freeman.
- Wolvin, A., & Coakley, C. (1985). *Listening*. Dubuque: William C. Brown.
- Zuckerman, M., & Larrance, D. (1979). Individual differences in perceived encoding and decoding abilities. In R. Rosenthal (Ed.), *Skill in nonverbal communication: Individual differences* (pp. 171-203). Cambridge, MA: Oelgeschlager, Gunn, & Hain.