A Linguistic Approach
to Audiologic Counseling

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A set of linguistic information-gathering tools is proposed to enhance audiologic counseling approaches. Fundamental to the linguistic approach is the premise that language represents a person’s perceptual model of experience. That is, the surface structure of the language chosen by a client is a representation of the deep structure of the client’s meaning. This approach provides the audiologist with the tools necessary to determine the client’s thinking by challenging the surface structure of the client’s verbal discourse. Effectively challenging the client’s surface structure helps to clarify issues necessary to understand the dynamics of a problem. Once the issues are clarified and the dynamics of the problem understood, the client is able to consider options for change that were not considered previously. A case study of a hearing-impaired individual who rejected hearing aids is presented to illustrate the concepts and methods for gathering information from the client by using these linguistic techniques. Listening and responding to clients’ terms of their particular utterances allows the audiologist to identify appropriate management strategies to assist them in achieving their communicative potential.

Audiologists can address counseling needs of hearing-impaired clients through informational and affective counseling. The field of audiology has recognized the importance of affective counseling in the delivery of services. The Committee on Rehabilitative Audiology (1974) of the American Speech-Language-Hearing Association (ASHA) recommended that an organized program of counseling be included as an integral part of the total audiological habilitation plan. They stated that objectives should include the following: (a) enhancement of the individual’s welfare, (b) assistance in the resolution of pertinent problems, (c) stimulation and motivation to achieve, and (d) improvement of self-concept and social relationships.

It is ASHA’s stated position that counseling in audiological habilitation is not limited to informational counseling. Counseling should be designed to assist individuals with auditory disabilities in realizing their potential in com-

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munication, social adjustment, and vocational placement. The ASHA Committee on Rehabilitative Audiology (1980) proposed that persons providing aural rehabilitation possess knowledge of psychological, social, and educational-vocational effects of hearing impairment. In addition, they recommended that audiologists have knowledge of counseling techniques necessary to manage hearing-impaired individuals and their families regarding psychosocial, educational-vocational, communication, and economic problems associated with hearing loss.

The need to more effectively train audiologists in counseling skills has been recognized. McCarthy, Colepepper, and Lucks (1986) found wide variability in the emphasis placed on counseling by accredited programs in communication disorders. Of the study's 98 respondents, only 12% felt that most graduate programs in communicative disorders offered sufficient coursework and training in counseling. In preparing students to meet the counseling needs of individuals with communicative disorders, McCarthy et al. concluded that the emphasis placed on counseling by training programs in communicative disorders may not reflect its importance. They recommended that an educational standard specific to counseling be established at the graduate level. As audiologists acquire training in counseling techniques and approaches, the recommendations of the ASHA Committee on Rehabilitative Audiology (1974, 1980) can be implemented more appropriately. It was the opinion of Erdman, Crowley, and Gillepie (1984), however, that hearing health care providers have more insight into the communication problems and subsequent adjustment difficulties of hearing-impaired persons than do most other specialists involved in counseling.

Luterman (1976) stated that many clients have emotional problems that do not require professional attention. In practice, the counseling skills of an audiologist dictate the depth of his or her involvement in individual and family counseling. Nevertheless, audiologists need to be aware when a client's problems are related to general mental health issues. It is imperative that audiologists refer to mental health specialists those clients who are suspected of mental health problems (Roberts, 1987).

The purpose of this paper is twofold. First, it is to describe an information-gathering approach based on language awareness for use in audiologic counseling. Second, it is to describe linguistic techniques used to identify the limits of the client's perceptual and experiential model of the world. Fundamental to this approach is the premise that language serves as a representation of a person's perceptual model of experience. Strong (1972) stated that all sentences are comprised of both a deep and a surface structure. Meaning is conveyed by a sentence's deep structure, whereas the form that is used to communicate the meaning is found in the surface structure. Bandler and Grinder (1975) developed an explicit set of information-gathering tools designed to determine the thinking of the client by referring to the surface struc-
ture of the client's verbal discourse. They purported that the client's surface structure is a representation of the client's complete model of the experience, the deep structure.

Listening to the language that hearing-impaired individuals use to express their concerns is invaluable for affective counseling. The words that individuals choose to represent their experiences may reflect inappropriate coping strategies. Luterman (1984) stated that irrational assumptions can be reflected in the language that people use to describe their problems. According to Bandura and Grinder (1975), deletions, distortions, and generalizations are universal processes which can occur when individuals create models of their experiences. Deletion is a process in which individuals are attentive to certain aspects of their experience and exclude others. Distortion is a process which allows individuals to make interpretive shifts in their model of experience. Generalization is a process in which components of a person's model of experience detach from the original experience and represent the entire category of which the experience is an example. Thus, audiologists must notice and respond to the particular words and sentences that clients use to express their communicative, vocational, and psychosocial needs.

There are two advantages to using the linguistic approach. First, it provides a structured and organized method for gathering information by challenging the verbal discourse used to represent a client's perceptual model of experience. Second, effectively challenging deletions, distortions, and generalizations contained in a client's statements helps to clarify issues necessary to enhance the client's understanding of the dynamics of a problem. Once the issues are clarified and the problem dynamics understood, the client is able to consider options for change that may not have been recognized previously.

CASE EXAMPLE

The following case will be used to illustrate the principles and techniques of gathering information needed to formulate and achieve a well-formed outcome for audiologic habilitation.

Nicole was an 18-year-old high school senior with bilateral moderate-to-severe sensorineural hearing loss that was diagnosed at two years of age. She had not regularly worn hearing aids since she was 14 years old, but acknowledged the benefit of wearing hearing aids in educational, vocational, and social situations. Nicole was evaluated and fitted with binaural hearing aids, but refused to wear them. She stated that she did not want the "stigma" associated with wearing hearing aids or to be perceived as being "disabled." Nicole acknowledged that the decision not to wear the recommended hearing aids may contribute to feelings of isolation, helplessness, and loss of self-esteem. She wanted to meet new friends, but felt that they would not accept her because she wore hearing aids. Nicole was dissatisfied with her self-image and current communicative status. She reported that she was angry and felt that it was not
"fair" that she was born with a hearing impairment. She desired to improve her situation, but did not know what to do.

Because of the emotional complications that Nicole experienced, a linguistic counseling approach was used to allow Nicole to recognize an appropriate solution to her problem. The goal of counseling was to have her wear her hearing aids and to assert herself appropriately in communication situations. Nicole attended four one-hour sessions. The following section contains excerpts of the dialogue that illustrate the linguistic tools and the counseling process by which the goals were achieved.

GATHERING INFORMATION

Counseling begins with the initial encounter between the client and the hearing health care professional, and continues throughout the course of their relationship. The initial exchange includes the counselor's attempts to determine (a) the purpose of the client's visit; (b) a detailed and accurate description of the client's perceived problems; (c) the reasons which prevent the client from realizing optimal communication, social adjustment, and vocational placement; (d) the outcomes of counseling desired by the client; and (e) assessment of the client's motivation needed to achieve the therapeutic outcomes. Once these factors have been assessed, various goals of audologic counseling are identified and a treatment plan is developed. A technique of assessing the client's perception of current and desired states is listening and responding to the words and sentences (i.e., the surface structure) used to communicate these states. A person's attitude is evident in the way an individual talks (Luterman, 1979).

The following discussion will describe specific linguistic tools for gathering information during the therapeutic exchange. Bandler and Grinder (1975), Grinder and Bandler (1976) and Cameron-Bandler (1985) proposed focusing on deletions, lack of referential indices, unspecified verbs, and nominalizations.

Deletions

The purpose of identifying deletions which are present in a client's verbal discourse is to assist the client in recovering the deleted material and help recover a more complete representation of the client's perceptual model of experience. Audiologists are faced with three options in assisting the client to recover deleted material. First, the impoverished linguistic representation of the client's perceptual model can be accepted. This option places complete responsibility for recovering the deleted material on the client who is seeking assistance from the rehabilitative audiologist. It also makes the counseling process slow and tedious.

The second option is for the audiologist to interpret or make an educated guess at the deleted material. This presents a risk in which interpretation or guesswork may be inaccurate.
The third option is for the audiologist to ask for the specific information which has been deleted. Change begins as the deleted components of the client’s perceptual experience are challenged and recovered (Randler & Grinder, 1975).

Deletions associated with verbs and adjectives. This class of deletions involves noun or noun phrase deletions which are associated with a verb or adjective. For instance, in the statement, “I’m angry,” there is a deletion associated with the adjective “angry.” One technique that is used to recover the deleted information is to ask, “About what or whom?” Following is an example of a communication exchange in which the audiologist asks for the deleted information associated with the adjective.

Nicole: I’m angry.

Audiologist: With what or whom are you angry?

Nicole: I’m angry about having to wear hearing aids to understand conversations.

Nicole’s anger was nonspecific at the beginning of this exchange. At the end of the exchange, both the object of her anger was specified because of a question that requested deleted information. Once the specific object of the anger has been identified, it can be more easily resolved.

Deletions associated with comparatives. This class of deletions involves adjectives which compare two different things. Comparatives are represented in two forms: (a) the adjective plus the “er” suffix (e.g., better, quicker, and faster) and (b) “more” or “less” plus the adjective (e.g., more exciting, less frustrating, and more stimulating). In the following example, one of the components of the comparative construction, “less noticeable,” has been deleted. The audiologist can ask, “Compared to what?” to recover the deleted information.

Nicole: These hearing aids are less noticeable.

Audiologist: These hearing aids are less noticeable as compared to what?

Nicole: Compared to the hearing aids that I’ve been using for the past four years.

Nicole’s comparison was incomplete at the beginning of the exchange. As a result of the audiologist’s challenge, Nicole was introduced to the idea that her new hearing aids may be less noticeable and, therefore, more acceptable to her than her previous hearing aids. Once that idea was introduced, she was more likely to wear the hearing aids.

Deletions associated with superlatives. Superlatives are adjectives in which one member is selected and identified as having the highest value or being the most characteristic of the set. Superlative constructions are (a) the adjective plus “est” (e.g., best, quickest, and fastest) and (b) “most” or “least” plus the adjective (e.g., most exciting, least frustrating, and least stimulating). For instance, in the following example there is an omission in one of the components of the
reference set of the superlative "best." In order to recover the deleted material, the audiologist can ask, "With respect to what?"

Nicole: These are the best hearing aids that I've worn.
Audiologist: With respect to what are these hearing aids best?
Nicole: Because of their size, they're not as noticeable as my other aids.

Nicole's superlative was not referenced at the beginning of the exchange. As a result of the audiologist's challenge, Nicole admitted a preference for her new hearing aids. Once a preference had been expressed, she was more likely to wear the hearing aids that she had chosen.

Deletions associated with "ly" adverbs. This class of deletions can be identified by "ly" adverbs occurring in the client's statement. Bandler and Grinder (1975) reported that "ly" adverbs are the result of argument deletions associated with a deep structure verb. An example is "Obviously..." Bandler and Grinder (1975) described a paraphrase test to determine if the "ly" adverb is derived from a deep structure verb. First, delete the "ly" from the client's statement and place it in front of the paraphrased statement. Second, add the phrase "it is" in front of the former adverb ("It is obvious that... "). Third, if the paraphrased statement and the original surface structure are synonymous, ask for the deleted information ("obvious to whom").

Nicole: Obviously, I need to wear hearing aids.
Audiologist: It's obvious to whom?
Nicole: It's obvious to me. I need to wear them to understand conversations.

As a result of the audiologist's challenge to recover the deleted information associated with the adverb "obviously," Nicole acknowledged the importance of her hearing aids for successful communication.

Lack of Referential Indices

Nouns, pronouns, or noun phrases which specifically identify something in a client's experience are words which have a referential index (Bandler & Grinder, 1975; Cameron-Bandler, 1985; Gordon, 1978; Grinder & Bandler, 1976; Lankton, 1980) and are helpful in gathering information. For instance, in the statement, "Nobody understands the communication problems associated with a hearing loss," "nobody" lacks a referential index. It has not been stated "who" specifically does not understand the communication problems associated with a hearing loss. Thus, if the word or phrase fails to identify a specific person, place, or thing, a generalization has occurred in the client's model. The audiologist can ask the client to specify the generalization.

Nicole: Nobody understands the communication problems associated with a hearing loss.
Audiologist: Who specifically doesn't understand?
Nicole: New people that I meet very seldom understand that I need for them to speak directly to me in order to understand the conversation. It's embarrassing to ask others to repeat themselves when I don't understand what they're saying.

Nicole's indefinite pronoun "nobody" was not referenced at the beginning of the exchange. The audiologist's challenge revealed that Nicole's concern was specific to new people's misunderstanding of her communicative needs.

**Unspecified Verbs**

Verbs are words that express action, occurrence, or existence (Rogers & Whitten, 1982) and are specified if the statement includes how or in what way (Gordon, 1978). Bandler and Grinder (1975) determined that the clarity of a verb image is determined by the meaning of the verb itself and the amount of information preserved in the rest of the sentence. For example, in the client's statement, "My friends don't consider my feelings," the verb "don't consider" is unspecified. The audiologist can ask specific questions to clarify the verb image. Bandler and Grinder stated that if the therapist cannot visualize the actual sequence of events being described in a client's statement, a more completely specified verb should be requested.

Nicole: My friends don't consider my feelings.

Audiologist: How specifically don't your friends consider your feelings?

Nicole: My friends laugh at me when I misunderstand what they say and respond inappropriately.

Audiologist: Do your friends laugh at you when you do understand what they say and respond appropriately?

Nicole: No, only when I misunderstand the conversation.

Audiologist: What would have to change for you to understand more of what your friends say to you?

Nicole: I would need to hear them better.

Audiologist: How might that be accomplished?

Nicole: I guess wearing my hearing aids would help considerably.

At the beginning of this exchange, Nicole's use of the verb "consider" was unspecified. The audiologist's challenge allowed Nicole to restate her concern in a manner that was clearer and more easily understood by the audiologist. Furthermore, the audiologist's challenge allowed Nicole to acknowledge that wearing her hearing aids would provide Nicole some degree of control over the situation and would allow her to understand more of what her friends say to her.

**Nominalizations**

Nominalizations are nouns which have been derived from verbs, adjectives, or other nouns (Steng, 1972). The linguistic transformational process of
nominalization occurs when a process word (e.g., verb, adjective) in the deep structure appears as an event word (e.g., noun) in a client's surface structure (Bandler & Grinder, 1975). That is, an ongoing process becomes a thing or an event. In the statement, "Sometimes, I regret the decision not to wear the hearing aids," the noun "decision" is a nominalization. The verb "deciding" is present in the deep structure, "Sometimes, I regret that I'm deciding not to wear hearing aids."

Cameron-Bandler (1985) suggested two ways to identify nominalizations in a client's sentence structure. First, those which are not nominalizations will not fit into the syntactical phrase, "an ongoing_______." If the event word fits into this phrase, it's a nominalization. For example, "an ongoing decision" is syntactically correct; whereas, "an ongoing deciding" is not. Second, nominalizations, unlike true nouns, are not persons, places or things that can be visualized. That is, the nominalization "decisions" is not a noun that can be visualized.

Inherent in nominalizations is deleted information. The purpose of challenging nominalizations in a client's statement is to assist the client in becoming aware of the linguistic transformation that occurs from a process to an event in the client's surface structure. In the previous example, the audiologist can challenge the client's nominalization, "decision," by transforming it into the verb, "deciding." However, leading questions require the client to take responsibility for the process of deciding. The audiologist's questioning may assist the client in connecting the linguistic model with the ongoing processes.

Nicole: Sometimes, I regret the decision not to wear hearing aids.

Audiologist: Who is responsible for deciding not to wear them?

Nicole: Me. I'm the one who's responsible for deciding not to wear them.

Audiologist: What is it that prevents you from changing your decision?

Nicole: I don't know. I guess that if I wear hearing aids, others may notice that I'm hearing impaired. I don't want to be different. It's important to me that I'm accepted by my friends.

Audiologist: What would happen if you reconsidered and decided to wear your hearing aids, became more assertive, and educated others about your communicative needs?

Nicole: I'd probably become more comfortable about being with other people. I wouldn't feel so alone, isolated, and rejected.

As a result of the audiologist's challenge to recover the deleted information associated with the nominalization "decision," Nicole acknowledged that she was responsible for her decision not to wear hearing aids and the associated feelings of loneliness, isolation, and rejection. Nicole also acknowledged that her decision to wear hearing aids would allow her to become more comfortable about being with others.
IDENTIFYING THE LIMITS OF THE CLIENT’S MODEL

This section will describe the linguistic tools for identifying the limits of a client’s perceptual and experiential model during the therapeutic exchange. Cameron-Bandler (1985) and Grinder and Bandler (1976) identified three categories of utterances that can be challenged: (a) universal quantifiers, (b) modal operators, and (c) semantically ill-formed sentences.

Universal Quantifiers

Bandler and Grinder (1975) defined this category as words or phrases that do not have a referential index and which contain words such as "all," "each," "every," "any," "never," "nowhere," "none," "no one," "nothing," and "nobody." In the example, "I could never wear my hearing aids at school," the word "never" is a universal quantifier. One technique to challenge this statement is to exaggerate the client’s universal quantifier through voice quality and by inserting additional universal quantifiers in the original sentence. This form of challenge asks if there are any exceptions to the generalization and specifies referent indices in the client’s statements.

Nicole: I could never wear my hearing aids at school.

Audiologist: Do you mean to tell me that you could NEVER EVER wear your hearing aids at school AT ALL?

Nicole: Well, I don’t mean that I could never ever wear them at school. It would be very difficult for me, but I guess I could wear them during classes.

The audiologist’s challenge of the universal quantifier "never" allowed Nicole to acknowledge that there were, in fact, specific times of the school day during which it would be very beneficial for her to wear her hearing aids.

Another technique is to ask whether the client has had an experience which contradicts the generalization. The audiologist can then inquire as to what makes the generalization possible or impossible.

Nicole: It is impossible to relate to anyone in this counseling group.

Audiologist: Is it always impossible for anyone to relate to anyone in this counseling group?

Nicole: No, it is impossible for me to relate to anyone in this group.

Audiologist: What is it that prevents you from relating to anyone in this group?

Nicole: Many in the group have said that they wear their hearing aids on a regular basis. I guess I’m afraid to admit that I need to wear my hearing aids too.

In this example, the audiologist’s challenge of the universal quantifier “anyone” allowed Nicole to acknowledge that she needed to wear her hearing aids on a regular basis.
Modal Operators

This category of words comprises the modal auxiliaries, "will," "would," "shall," "should," "may," "might," "must," "can," "could," and their synonyms. Hoedjes and Whitten (1962) stated that modals are used to refer to general states of obligation, possibility, doubt, necessity, wishes, promises, and conditions contrary to fact. Bandler and Grinder (1975) divided this category into modal operators of necessity and possibility.

Necessity. This class of statements claims that something "must" occur. Bandler and Grinder (1975) emphasized that these statements often involve rules or generalizations that clients have developed in their personal belief system. This category of words expresses necessity, obligation, expectation, and appropriateness. Words such as "have to," "necessary," "should," "must," "ought to," "shall," "will," and "would" assist the audiologist in recognizing modal operators of necessity occurring in a client's statement. It is essential for the audiologist to know the consequences to the client of failing to do what is claimed to be necessary ("Or what will happen?")

Nicole: I should feel more comfortable about asserting myself, and educating others about my communication needs.

Audiologist: What would happen if you failed to feel comfortable doing that?

Nicole: I don't know. I'd probably continue to feel anxious and frustrated and those are the feelings that I want to change.

Because the modal operator of necessity is associated with limited options or choices in a client's model of perception, there is merit in identifying and challenging these statements. In this example, the audiologist's challenge allowed Nicole to acknowledge that failure to assert herself would perpetuate her feelings of anxiety and frustration. This challenge also allowed Nicole to realign that changing these feelings was one of her counseling goals.

Possibility. A second class of words which identifies rules or generalizations from the client's model of perception are modal operators of possibility. The modals "can," "able," "could," "may," and "might" combined with universal quantifiers such as "no one," "nobody," "never," "none," and "nothing" will assist the audiologist in identifying modal operators of possibility in the client's statement; for instance, "Nobody can..." "No one is able..." "I can't..." "Nothing may..." "none might," "it's not possible," "That's impossible," and "I'm unable..." The clue words occurring in the client's statement identify rules or generalizations which are often associated with the client's perception of a limited set of available options or choices. The audiologist needs to determine what causes the stated impossibility to be impossible. Leading questions that may be asked by the audiologist are, "What is it that makes impossible?" "What is it that prevents, stops, blocks you from...?"
Nicole: I'm unable to express my feelings.
Audiologist: I'm interested. What prevents you from expressing your feelings?
Nicole: I'm confused about so many issues that I don't know where to begin sorting out my feelings.

At the beginning of the exchange, Nicole's use of "unable" indicated that she perceived few options to resolve her inability to express her feelings. The audiologist's challenge allowed Nicole to realize the cause of her perceived inability thus clarifying the issue and allowing Nicole to consider options not previously apparent to her.

Semantically Ill-Formed Statements

The value of recognizing and challenging sentences which are semantically ill-formed is two-fold. First, information is gathered that assists the client in developing and achieving a well-formed outcome. Second, aspects of the problem which limit options for desired change are identified. Bandler and Grinder (1975) stated that it is not the world that lacks choices, but the individual's perception of the world. Assisting clients in the clarification of ill-formed portions of their perceptual model will afford options for effecting change.

Cause and effect statements. The first class of semantically ill-formed statements consists of implied cause and effect. This is the belief that an individual or situation causes another person to experience an emotion or behavior (Bandler & Grinder, 1975; Cameron-Bandler, 1985; Grinder & Bandler, 1976; Gordon, 1978; Lankton, 1980). In the statement, "The thought of having to wear hearing aids makes me angry," the client experiencing the emotion of "anger" is portrayed as not having a choice in the manner of response. The client may not perceive that there are any other options available besides that of anger in coping with this thought of having to wear hearing aids. It is not known specifically how the thought of having to wear hearing aids is causing the client to become angry. Since the client chooses to become "angry" at the thought of wearing hearing aids, another emotion can also be selected. For example, the client can choose to become confused, depressed, or despondent. Thus, the audiologist may respond by asking the client how this process occurs.

Nicole: The thought of having to wear hearing aids makes me angry.
Audiologist: How specifically does this thought make you angry?
Nicole: Wearing hearing aids draws attention to me. Some of the kids at school tease me and imply that I am dumb and slow.

As a result of the audiologist's challenge of Nicole's implied cause and effect, Nicole acknowledged that her hearing aids drew attention to her, but realized that they were not the cause of her anger. Thus, it was determined that the lack of sensitivity demonstrated by Nicole's classmates contributed to her feelings
of anger.

*Mind reading.* Mind reading implies the belief that the speaker is privy to the thoughts or feelings of another person without any direct communication on the part of the second person (Bandell & Grinder, 1975; Cameron-Bandler, 1985; Grinder & Bandler, 1976; Lankton, 1980). For instance, in the statement, "People don't understand the loneliness associated with hearing loss," the client is claiming to know the unexpressed thoughts of a group of individuals. Since the client's decisions have already been formulated about what other people think or feel, there are few options available for change. Clients fail to consider that their assumptions may be invalid. Clients that are mind reading may also assume that other people know what they are thinking and feeling and, thus, withdraw from interaction with those other people. Since mind reading is not possible, the audiologist may respond by asking the client to specify what information is known.

Nicole: I'd like to meet new friends. People don't understand the loneliness associated with having a hearing loss.

Audiologist: How specifically don't people understand your loneliness?

Nicole: I'm often excluded from conversations and activities. I want to actively participate in conversations, but don't know what to do.

Audiologist: I'm curious, Nicole. What could you change to become more actively involved in conversations?

Nicole: I would need to accept the responsibility of wearing my hearing aids and educating others about my communicative needs.

Nicole claimed to know the unexpressed thoughts of a group of individuals. The audiologist's challenge provided clarification by revealing that Nicole felt excluded from actively participating in conversations. When asked what she could change about the situation, Nicole was able to provide a solution to her problem that she had not previously considered.

*Generalized value judgements.* A fact can be observed, measured, and tested; whereas, opinions or personal preferences are value judgements. Statements can be semantically ill-formed if they generalize to others those rules that are appropriate to a client's belief system. For instance, "It's wrong to feel angry about my hearing loss," is an example of a statement which includes a generalization of a personal opinion stated as fact. As illustrated, there is no indication that the client is aware of the basis of the expressed judgment. Generalizations can be challenged to assist a client to recognize the specific rules that govern the client's perceptual model of the world. In order to challenge the generalization, the audiologist should ask for whom the statement is true.

Nicole: It's wrong to feel angry about my hearing loss.

Audiologist: It's wrong for whom to feel angry?

Nicole: It's wrong for me to be angry about a condition that I can't change.

However, I can change my situation by accepting the responsibility to
wear my hearing aids and assert myself more in conversations.

Nicole's statement includes a generalization of her personal opinion stated as a fact. The audiologist's challenge of Nicole's generalization assisted Nicole to accept responsibility for her opinion and refocus her attention from the hearing loss to the solutions of her communication difficulties.

As previously stated, an appropriate solution to the problem of Nicole's self-image should result in Nicole wearing her hearing aids. The goal of audiologic habilitation through counseling was to have her wear her hearing aids and to assert herself appropriately in communication situations. Effectively challenging Nicole's verbal statements helped to clarify issues necessary to enhance understanding of the dynamics of the problem. Once the issues were clarified and the dynamics of the problem understood, Nicole was able to consider options for change that were not previously recognized.

DISCUSSION

Wodack (1986) emphasized that an approach using linguistics and its sub-disciplines is not only justified, but desirable and important. She stated that psychic processes manifest themselves linguistically. Counseling involves verbal communication and, in many situations, the change process can be detected in alterations of speech behavior. However, Wodack criticized Grinder and Bandler's linguistic approach by stating that it fails to consider several factors. First, since therapeutic discourse occurs at the text level, it is inappropriate to apply sentential grammar. Second, the inclusion of geographic context and colloquial meaning is not reflected in their approach. Third, the institutional frame of psychoanalytic theory and technique are not included in their approach. Wodack summarized by stating that, without a closely-linked association between therapeutic procedure and a theory of colloquial language meaning, it would seem difficult to deal adequately with therapeutic communication.

Conversely, the clinical utility of this explicit set of linguistic tools has been reported in the fields of psychotherapy (Bandler & Grinder, 1975; Gordon, 1978; Lankton, 1980), family therapy (Bandler & Grinder, 1975; Bandler, Grinder, & Satir, 1976; Grinder & Bandler, 1976), sexual therapy (Cameron-Bandler, 1986) and audiologic habilitation (Roberts, 1986). Bandler & Grinder (1975) emphasized that the linguistic techniques and categories encompass only a portion of the verbal discourse which is possible during the therapeutic interaction. Wodack's criticisms ignore the fact that the linguistic approach was developed specifically for verbal communication and designed to be used in conjunction with other counseling approaches.

The linguistic techniques can supplement an audiologist's personal style of counseling and be incorporated during any phase of the audiologic treatment process. Grinder and Bandler (1976) stated that, although the content of cli-
ents' verbal discourse vary infinitely, the form which clients use allows the counselor to respond with a specific strategy chosen to assist the clients in changing. That is, by responding to the form of the client's surface structures, the therapist quickly comes to understand the client's model of experience, its impoverishing limitations, and the processes which the client typically uses to construct models of perception. Thus, listening and responding to the client in terms of the client's linguistic choices allows the counselor to identify the most appropriate strategies to be used to assist the client in achieving the goals of the counseling.

The recommended operational hierarchy for using this explicit set of linguistic tools is presented in Table 1. It is suggested that the audiologist challenge the client's surface structure at the highest level in the hierarchy first: assessing whether the client's sentence structure is semantically ill-formed and contains an implied cause and effect or the processes of mind reading. In the example, "Obviously, I'm angry about the way everyone perceives me as being handicapped and unable to express my needs." Nicole's surface structure is semantically ill-formed because it contains both an implied cause-and-effect relationship and indicates the process of mind reading. Nicole presumes that everyone perceives her as being handicapped and unable to express her needs (i.e., mind reading) and that makes her angry (i.e., cause and effect). The audiologist can clarify the semantically ill-formed statement by asking Nicole how, specifically, these processes occur.

At the second level of the operational hierarchy, the audiologist determines

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<tr>
<th>Levels of Challenge</th>
<th>Categories of Senseless Structure</th>
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<tbody>
<tr>
<td>First</td>
<td>Implied Cause &amp; Effect</td>
</tr>
<tr>
<td></td>
<td>Mind Reading</td>
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<tr>
<td>Second</td>
<td>Modal operators</td>
</tr>
<tr>
<td></td>
<td>Possibility</td>
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<td>Quantifiers</td>
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<td></td>
<td>Generalized Value Judgments</td>
</tr>
<tr>
<td>Third</td>
<td>Deletions</td>
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<tr>
<td></td>
<td>Associated with Verbs &amp; Adjectives</td>
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<td>Associated with &quot;ly&quot; Adverbs</td>
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<td></td>
<td>Unspecified Verbs</td>
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<td>Lack of Referential Indices</td>
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<td>Nonverbalizations</td>
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whether a client's sentence structure contains modal operators of possibility or necessity, universal quantifiers, or generalized value judgements. In the previous example, Nicole views herself as perceived by "everyone" (universal quantifier) as being handicapped and "unable" (modal operator of possibility) to express her needs. The audiologist can either challenge the modal operator of possibility "unable" or the universal quantifier "everyone." That is, the audiologist can determine what Nicole's statement claims is impossible by asking what prevents her from expressing her needs. The audiologist can also ask if there are any exceptions to Nicole's generalization — "everyone" — to specify the lack of referential index in her statement.

At the third level of the operational hierarchy, the audiologist can gather information by recovering deletions, challenging generalizations associated with unspecified verbs and nouns or pronouns that lack a referential index, and specifying distortions inherent in nominalizations. In the previous example, there is a deletion associated with the "ly" adverb "obviously." Nicole states that she is "angry" (deletion) about the "way" (lack of referential index) "everyone" (lack of referential index) "perceives" (unspecified verb) her as being "handicapped" (lack of referential index) and unable to "express" (unspecified verb) her "needs" (lack of referential index). The following outlines the step-by-step procedure for gathering information, clarifying issues, and understanding the dynamics of the client's problem.

Step 1: Listen to the client's sentence structure.
Step 2: Determine whether the sentence structure is semantically ill-formed and claims cause and effect or mind reading. If the client's sentence structure claims cause and effect or mind reading, respond by asking how, specifically, these processes occur.
Step 3: Determine whether the sentence structure contains modal operators of necessity or possibility, universal quantifiers, or generalized value statements.
   (a) If the client's sentence structure contains a modal operator of possibility, determine the implied cause by asking what prevents the client from achieving the desired outcome. If the client's sentence structure contains a modal operator of necessity, determine the consequence by asking what would happen if the client achieved the desired outcome. That is, what would be gained and what would be lost if the client achieved the desired outcome?
   (b) If the client's sentence structure contains a universal quantifier, ask if there are any exceptions to the generalization in order to specify the lack of referential index present in the client's verbal statement.
   (c) If the client's sentence structure contains a generalized value judgment, challenge the generalization to assist the client in recognizing the specific rules that govern the client's perceptual model of experience.
Step 4: Recover the deletions associated with verbs, comparative and superlative adjectives, and "if", "that", "how", "and". Specify the generalizations associated with unspecified verbs and lack of referential incoherence, and specify the distortions associated with nominalizations.

Initially, a linguistic approach to audiological counseling will entail active listening skills, concentration, planning, and presentation. However, as these skills become incorporated within the audiologist’s existing model of counseling, the opportunity to change the form and content of counseling will increase. This technique is not suggested as an alternative to other methods of audiological counseling. Rather, it is an approach that can augment the effectiveness of the audiologist’s existing counseling model.

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REFERENCES


of Rehabilitative Audiology, 20, 61-72.