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In 1972, Schultz reminded us that, as therapists, our clinical behaviors are influenced by our assumptions concerning the nature of the disorder we are treating. The evolution of treatment techniques for disorders, ranging from common syndromes such as apraxia of speech, to more rare disorders such as Gerstmann's finger agnosia or phonological impairment in aphasia provides strong evidence that our assumptions concerning the nature of a disorder will determine the strategy we select to treat the disorder, our expectations of the treatment effect, how we will evaluate the patient's response, and how we view the patient's role in the clinical process.

In discussing how treatment models arise from definitions of aphasia, Martin (1974) distinguished between "loss theories" of aphasia, which have produced learning approaches to treatment and "interference theories" of aphasia which have produced stimulation approaches to treatment. Models of the learning process itself have influenced the treatment of aphasia to a substantial degree. Operant principles have drawn our attention to programming of stimuli, shaping, reinforcement and measurement of response. Psycholinguistic models have produced more rule-ordered, developmental and pragmatic approaches to treatment. Incidentally, the concept of a theory "producing" the treatment might be interpreted to mean that the model is the cause of and precedes the treatment approach. Actually, once the distinction between a treatment and the theory behind it is made, it is more a case of mutual influence between the treatment and the theory.

Models and principles not only provide a rationale for treatment techniques, they also give us a vehicle for talking about therapy and identifying its shortcomings. Eventually this process creates questions about the models and principles themselves. In discussing the efficacy of language rehabilitation in aphasia, Darley (1972) stated "to study the effects of therapy, one must specify the procedures followed and clarify the rationale behind them: (p. 12). Similarily, Martin (1975) noted these remarks of Schuell et al. (1965): "a good clinical technique is only a device for accomplishing an end...it is the why that matters" (p. 333). Wepman (1972) has stressed, "too many patients get better and too many fail to do so without knowing why" (p. 128). So it seems reasonable that our concerns about therapy elicit questions about our rationales for therapy and our concepts of aphasia itself.

In the past several years, speakers at this conference have expressed concern that our perspective toward the treatment of aphasia has narrowed somewhat. Stimulus-response based therapies have received the brunt of this criticism. For instance, Martin (1975) discussed the tendency of stimulus-responsed based therapies to emphasize a pre-determined structure of therapy, almost to the point of excluding more pragmatic concerns, such as the patient's role in the communicative process. Elsewhere, Holland (1977) explained that therapy for aphasia has placed such importance on the propositional elements of the speech act, that is, how accurately the patient talks, that we've not given sufficient consideration to the system in which talking occurs—communication. Wepman's (1972) comment that "clinicians who use programmed approaches to therapy do so out of fear of interacting with the patient," is a bit extreme, but in a sense, may

represent the position of those who would argue against strict behavioral and programmed approaches to therapy.

Admittedly, stimulus-response based therapies could narrow one's perspective; however, the popularity of such therapies is well-documented. Behavioral models are operationally defined, their principles are explicit and have direct relevance to what the clinician is supposed to do. And recently, behavioral approaches have become an appropriate modality for dealing with the issue of accountability.

Concerns about stimulus-response based therapies stem from a more fundamental issue. Perkins and Curlee (1969) have described the tendency of science to seek causal explanations which are obvious, basic, if possible organic, and easily measured. They and others have called this tendency reductionism. Perkins and Curlee (1969) emphasize that there is a basic flaw in reductive reasoning; "deliniation of component parts does not specify their unique organization into a functional unit" (p. 234). Voicing her concern for such a flaw in our treatment of aphasia, Holland (1975) stated: "The application of behavioral technology in aphasia appears to me to have fractionalized the language process into component, teachable elements, and failed somehow to unify them back into language again" (p. 6).

In my opinion, reductionism is a weakness inherent in all models, not just those derived from behavioral principles. It is in the nature of models or theory to place constraints. The trouble begins when we stop questioning the model. The principles of therapy become so basic, and so fundamental that they begin to gather their own inertia, and after awhile it's the inertia itself that gives the principle credibility. We become, in a sense, smug about our assumptions concerning the nature of aphasia and therefore how we should treat people who have it.

Kearns (1979) has alluded to this problem as it relates to our enthusiasm for experimental results. He quotes Gilbert, McPeak and Mosteller (1977) who concluded that "repeated, weakly controlled trials are likely to agree and build up an illusion of strong evidence because of the large count of favorable studies. Not only may this mislead us into adopting and maintaining unproven therapy, but it may make proper studies more difficult to mount" (p. 687).

Yes, we are enthusiastic about our therapy and our studies, but one of the reasons we leave the comforts of our homes to annually gather at such bleak, isolated, destitute places as Scottsdale, Amelia Island, Keystone, Colorado, is to temper our enthusiasm just a bit, and review some of our assumptions. This afternoon our speakers will talk about some of the models and principles which influence the treatment of aphasia.

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