Panel: Aphasia With and Without Adjectives Aphasia: With and Without Adjectives

Frederic L. Darley
Mayo Clinic, Rochester, Minnesota

Back in the old days at the University of Iowa I had a friend named Sam who was majoring in Speech Pathology. Sam and his friends tired of the traditional requirements on forms they were always having to fill outnot exclusively University of Iowa forms of course. Sam took to filling in the blanks in a manner designed to register his discomfort and his outrage. Where it asked for an adjective "color," he might fill in rather dark chocolate. Where it called alternatively for an adjective to designate "race," he might fill in human.

A lot of people like Sam ultimately came to appreciate the uselessness, the folly, and the harm represented by those designations. They are now vestigial, you might say, at any rate outmoded and indeed in certain settings, outlawed.

Yet we still see lingering vestiges of such mindless classification. When I get a referral to see a patient from a neurology or neurosurgery resident at St. Marys Hospital in Rochester, as likely as not it will say something like "71-year-old white female s/p left parietal AVM resection." I wonder: Why are they telling me this? What motivates their assuring me that this is not a male--this is a female and further this female is not black or brown or red or yellow but--white. Do they expect me to do something different from what I would have done had they not so classified the patient for me? Are they perhaps trying to pre-set my judgment and my attitude toward the patient or perhaps relieve my mind? Probably not. It's probably just an automatic unthinking custom they fell into because some predecessor did it that way and they picked it up.

They often don't stop there. They further help me by supplying the information that this patient has an expressive aphasia. Or they will reveal that the patient has a motor aphasia—even a Broca's aphasia. The other day a referral informed me that the patient had a substitution aphasia, and that was important for me to know as I had not run into that kind before.

I wonder again: Why are they telling me this? Are they trying to show that they studied this business of aphasia once and they learned that's the way people are supposed to talk about it? Or do they think this is critical information and they must share their insight with me? Do they expect me to do something different in my evaluation of this patient or in his treatment because of the adjective they have supplied?

Well, I can tell them that I <u>don't</u> do something different on the basis of the adjective that they or anyone else supplies. What I really want to know and what they really need to know is this: Is the patient's communication problem aphasia—a language—specific problem, disproportionate to impairment of other cognitive functions, not attributable to dementia, delirium, or sensory or motor deficit, and manifested in impairment of all language modalities? Or is it another language dysfunction that must be distinguished from aphasia? What language and other behaviors does the patient display? How severely aberrant are they in what ways? For what we will do in undertaking or not undertaking treatment depends on that distinction and that description of <u>behavior</u>, and what we can anticipate and predict

concerning the outcome of that treatment depends on that distinction and description, not upon the vague implications of a shorthand label.

Why do people apply adjectives to aphasia so assiduously?

1. Possibly they are <u>driven</u>, as the parkinsonian patient is driven to accelerate his rate, to <u>say something more</u> because it seemingly bespeaks more knowledge of the disorder to add an adjective. Some people seem uncomfortable if they don't subdivide and classify, even though the gains from such subdivision and classification are negligible or nil.

Data from many studies emphasize commonalities across alleged clinical types rather than differences between types. On pages 43 to 47 of Aphasia (Darley, 1982) appear a sampling of 23 published studies that were designed to discover and delineate differences between clinical types, all of which studies revealed not differences but likenesses that outweighed the differences. In study after study of fluent versus nonfluent, Broca's versus Wernicke's versus conduction versus anomic, anterior versus posterior, the finding emerges: "The groups were not differentiated by their performance on the measure employed." And these measures cover a wide spectrum: in some cases auditory comprehension (even though case selection was supposedly based on contrasting abilities in auditory comprehension), or recognition of syntactic content or contrasts, ability to deal with simple versus complex syntactic structures, short-term memory, comprehension of questions and commands using various grammatical forms, recognition of semantic or syntactic deviancy in sentences, naming, word fluency on divergent language behavior tasks, etc.

2. Possibly the adjectivists are looking for a shortcut to determining location of lesion. Even as he admits that brain structures are infinitely variable from person to person, Alan Rubens has told me that he wants his residents to latch onto that minimal cue—this aphasia test pattern suggests a posterior lesion, that pattern an anterior one. But patterns of language behavior are far from stereotyped; they are variable; and brain mechanisms are variable; and brain tissue layouts are variable. Add together all this variability and what emerges is much too chancy a prediction of specific locus to bank on for any purpose that is critical.

Who needs that kind of gross prediction anyway when nowadays we have EEG, brain scans, ways to analyze evoked auditory responses, techniques for studying blood flow during mental activity, computed tomography, nuclear magnetic resonance, and other space-age ways of localizing function or trouble in the brain? It would be irresponsible, it seems to me, to consider seriously as of localizing significance the label of transcortical sensory aphasia or conduction aphasia or anomic aphasia offered by an aphasiologist after rather briefly indirectly palpating the patient's brain when direct objective procedures are available.

3. Possibly the adjectivitst believe that what is embodied in the adjective is an integral, enduring aspect of the aphasia. But data concerning the natural history of aphasia attest otherwise. Any label applied early is at best temporary and of transient accuracy, because longitudinal studies of aphasic patients show that, with recovery, the pattern of modality performances changes and thus the profiles or gestalts of performance to which various adjectives have been applied change. Seemingly dissimilar types of aphasia

move together to display more commonalities than differences. Leischner (1960), studying 46 patients longitudinally, reported on the "changeability of the aphasic syndromes...the symptomatological structures of the aphasias are often subject to change during the course of recovery...the individual aphasic syndromes don't represent something stable, but something dynamic; in most instances one does not do them justice by assuming a direct relationship between a syndrome and a lesion site."

Kohlmeyer (1976), studying some 300 cases, and Kertesz and McCabe (1977), studying 93 patients, reported similar observations. Anomic aphasia seems to be the common end-stage of various types of aphasia—a mild word-finding difficulty being the residual that all those variously classified patients came to display as recovery progressed.

We are faced also with the fact that some patients defy pigeonholing, as Goodglass has stated, even when tested with the Boston Diagnostic Aphasia Examination, which was designed for the purpose. Further, Goodglass, Quadfasel, and Timberlake, who in 1964 reported the study that importantly brought back into everyday practice the application of typological adjectives (Wernicke's, Broca's, amnesic) warned us, "Severity of aphasia must be taken into account since the profile offers no differentiation among patients who have recovered to a level of mild or slight residual aphasia."

- 4. Perhaps the adjectivists genuinely believe they are communicating useful and important information that people who are to work with the patient need to know. I think they are mistaken on two additional counts:
 - A. Use of typological adjectives purports to communicate useful information but instead it obscures it. It collapses data, eliminates detail, obscures uniqueness and idiosyncrasy while thrusting into categories. It emphasizes patients' behaviors that characterize a label and softpedals, even ignores, features that don't. It separates the Wernicke's patient with allegedly poor auditory comprehension from the Broca's patient with allegedly relatively intact auditory comprehension, ignoring the fact that if these patients are aphasic they all have some impairment of auditory comprehension. It emphasizes the fluent moments of the posterior lesion patient and overlooks his moments of word-finding struggle. emphasizes the grammatic problems of the Broca's patient and fails to mention those of the Wernicke's patient which are there if we look for them. It communicates by shorthand, but it is not clear communication. It is pseudo-communication, for it does not communicate what the patient really does and really needs in rehabilitation.
 - B. That is the second point. Adjectives don't prove useful in designing treatment. We can't treat an adjective. We should not prescribe in terms of gross patient groupings. We must analyze the components of the patient's behavior and treat specifics—specifics which can never be communicated in any single adjective.

So I am happy to deal with aphasia without adjectives. I don't need them. Nobody needs them. No thinking white or black, male or female aphasiologist need become an adjectivist.

REFERENCES

- Darley, F.L. Aphasia. Philadelphia: Saunders, 1982.
- Goodglass, H., Quadfasel, F.A., and Timberlake, W.H. Phrase length and the type and severity of aphasia. Cortex, 1, 133-153, 1964.
- Kertesz, A., and McCabe, P. Recovery patterns and prognosis in aphasia. Brain, 100, 1-18, 1977.
- Kohlmeyer, K. Aphasia due to focal disorders of cerebral circulation:
 Some aspects of localization and of spontaneous recovery. In Y.
 Lebrun and R. Hoops (Eds.), Recovery in Aphasia. Atlantic Highlands,
 N.J.: Humanities Press, 1976.
- Leischner, A. Zur Symptomatologie und Therapie der Aphasien. Nervenarzt, 31, 60-67, 1960.