

## A Problem of Diagnosis: Black English or Aphasia

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With the advent of sociolinguistics during the past decade, increased attention has been paid to the subject of language variation. Currently scholars are focusing on the study of nonstandard English dialects, particularly Black English which is the variety of English spoken and understood by people of Afro-American descent. In the field of speech pathology, the current literature on this subject emphasizes the language skills of the black child. The "deficit-difference" issue still commands much of the thought regarding Black English although the emphasis has shifted to determining whether the child is functioning normally within his speech community (Yoder, 1970). Attention is being directed toward black children and their reading problems (Stewart, 1969; Labov, 1967). Little investigation has been conducted on the variations of black adults but it is known that characteristics of the dialect are acquired with age (Cairns, Cairns and Williams, 1974). Although research has been focused toward aphasia in bilinguals (Lambert and Fillenbaum, 1959), very little specific information has been reported concerning aphasics who speak Black English.

Those who work with Black English recognize that it is a separate linguistic system, closely related to Standard English (Labov, 1970) but set apart by phonological, morphological and semantic variations. These features are quite regular and have been termed "socially diagnostic" (Wolfram and Fasold, 1974). Upon examination of the variant forms, the logic of the grammar of Black English is readily apparent. Various researchers (Baratz, 1969a, 1969b; Fasold and Wolfram, 1972; Labov, 1969, 1972; Wolfram and Fasold, 1974) have cataloged the syntactic features of Black English. Some of the more prominent grammatical characteristics of this dialect which appeared in the subjects studied include primarily variations in verb forms and nominal constructions.

The following is a cursory inventory of these features:

I. Variations in Verb Forms (Appendix A)

The (-s) or (-es) suffix used to indicate the third person singular present tense is absent.

Black speakers frequently omit the (-ed) suffix which marks the regular past tense and past participial forms.

Construction of the irregular past tense and past participial forms vary in Black English.

The coupla Be is a source of variation. The full form of the coupla, e.g., "he is," is an integral part of the dialect whereas the contraction, e.g., "he's," is not. Some speakers also show no person-number agreement with Be as well as other auxiliary verbs.

Auxiliary verbs with the exception of the contractions, 'm and 'd, can be deleted by the rules of Black English grammar.

II. Variations in Nominal Constructions (Appendix B)

In Black English, the plural suffix (-s) or (-es) is infrequently deleted.

Absence of the possessive marker ('s) is the most commonly omitted of the s-inflectional endings in Black English.

The above described features occur with a high frequency in Black English speakers. Other forms which show alterations include:

III. Variations in Modifiers (Appendix C)

Typically a black speaker will use the indefinite article a rather than an when it is called for.

Frequently the (-ly) suffix is dropped from the adverb.

Deletion of the comparative (-er) and superlative (-est) markers of the adjectives is common.

IV. Variations in Question Formation (Appendix D)

Either the form is inverted or the preposing auxiliary verb is deleted and the question is recognized by the inflectional patterns of the Black speaker.

V. Variations in Negation (Appendix E)

The use of ain't appears in Black English as well as every other Nonstandard dialect. Also multiple negation is another common feature of this dialect.

To date, speech pathologists have typically used the verbal behavior of middle class whites for determining parameters of normal speech and language (Taylor, 1973). Our profession is beginning to recognize the need for using various subgroups to establish related norms (Weiner and Hooch, 1973). When dealing with black patients, particularly those who have incurred aphasia, it becomes unrealistic to apply Standard English evaluations to their communication abilities. For example, a verbal naming response on the PICA (Porch, 1971) of "box of match" would be scored as a 12 or an incomplete response, regardless of the dialect of the aphasic. However, Black English allows for the deletion of the plural (-es) suffix; thus the black aphasic is penalized for his dialect variation.

Creation of Nonstandard English norms is not proposed, only that the examiner recognize these grammatical variations from Standard English. By assuming that only one version of language is correct and applying the same criteria to everyone, the validity of the test is jeopardized. It is important to know the defining characteristics of the subgroup tested and interpret results accordingly.

#### PROCEDURE

Subject: The patient studied is a 47 year-old , right-handed black male who presents aphasia and left flaccid hemiparesis following a right cerebrovascular accident, probably embolic in nature. An EEG showed slow activity in the right hemisphere. Brain scan revealed no abnormal uptake although some increased activity in the area of the choroid plexus was noted. He has remained normotensive throughout the course of his illness and continues on anticonvulsant medications. Social history reveals a man whose public education stopped with the eleventh grade. He attended business college for 18 months. He is native to the locale and has worked in various blue-collar positions.

Examination with the Porch Index of Communicative Ability (Porch, 1971) revealed a test profile (Figure 1) compatible with a lesion in the dominant language hemisphere. Currently he is functioning at the 88th percentile. Certain responses are incomplete or judged related by fault of spelling errors. The Boston Diagnostic Aphasia Examination (Goodglass and Kaplan, 1972) was also administered to provide a more comprehensive clinical picture of the aphasia. Findings (Figure 2) include normal prosody, grammatical constructions which surpass the seven word phrase length, intact auditory comprehension and articulatory agility, no paraphasias but depressed word-finding skills. The patient may be considered dysnomia, dyslexic, and dysgraphic with grammatical variations shown in all modalities of language.

Method: The previously described grammatical features of Black English were studied in this patient. Stimulus material consisted of sentences limited to eight words with vocabulary controlled to the fourth grade level. Tasks designed to elicit alterations of these grammatical forms consisted of repetition, oral reading and writing to dictation of these sentences. It is known that in repetition testing speakers of Nonstandard dialects unconsciously translate that Standard stimulus into their own dialect forms (Troike, 1972). Production of spontaneous speech and writing was obtained through the use of stimulus pictures and conversation. Discrimination of Standard/Nonstandard forms was tested both auditorily and visually. Sentence completion tasks were designed to elicit these forms. These tasks were presented to the subject both by a white and a black clinician to judge his response to these two audience groups since researchers (Stevens, Ruder and Tew, 1973; Lehist and Peterson, 1951) have reported conflicting data regarding the speech perception of blacks with white and black speakers.

A control group of five black men who had no history of neurological disease and who were matched for age, educational level and vocation was tested on the same tasks to establish regional features of Black dialect.

## RESULTS

The data collected through extensive testing of this black patient may be interpreted as manifesting the interference of Black dialect with the aphasic disturbance. As can be seen from a percentage ranking of grammatical variations (Table 1), the most deviant features identified in the black aphasic were omission of the possessive ('s) suffix, third person singular present tense (-s) or (-es) suffix, auxiliary verb other than Be, e.g. "have," regular plural (-s) or (-es) suffix, regular past tense (-ed) suffix, -n't or not in a question, Be in the contracted form, indefinite article an, auxiliary Be in the contracted form, regular past participial (-ed) suffix, present participial (-ing) suffix, adverb (-ly) suffix, irregular past participial and auxiliary Be in the non-contracted form. Other variations showing less than ten percent error were not felt to be of major significance.

It is postulated that the group of normal controls revealed features which are characteristic of the local Black dialect (Table 2). Therefore, the features which showed wide divergence in percent of variation from the control group and more than the mean percentage of variation are considered true aphasic errors (Table 3). These are omission of the contracted auxiliary verb other than Be, regular plural (-s) or (-es) suffix, auxiliary Be in the non-contracted form, Be in the contracted form, -n't or not in a statement, comparative adjective (-er) suffix, and regular formation of the irregular plural.

Comparison of the percentage of variation on the repetition, reading and writing tasks (Figure 4) reveal an increasing impairment as the tasks become more complex, as might be expected in aphasia, whereas the normal group showed essentially the same percentage of variation in all tasks. The aphasic was unable to discriminate either auditorily or visually presented Standard/Nonstandard English forms. Sentence completion tasks were impossible for him to produce verbally (due to impaired auditory retention span); graphically, deviant grammatical forms were produced. There was essentially no difference between his response to a black or white examiner. Therefore, these grammatical variations may be interpreted as both black and aphasic phenomena. Spontaneous productions showed more variations in both free verbalization and writing, again as might be expected with the aphasic.

Thus, from some points of view, the black aphasic might resemble to some extent either a Broca's or Wernicke's aphasic due to the above mentioned features of his dialect system. The agrammatism which marks Broca's aphasia reduces the verbal output to a skeleton of only nouns and verbs in the infinitive form with infrequent use of articles, prepositions, conjunctions and often adverbs (Alajouanine, 1956). The Goodglass and Berko study (1960) showed that for Broca's aphasics the greatest number of errors on a sentence completion test occurred with the possessive (-es) suffix, followed (in order) by the present tense (-es), possessive (-s), past tense (-s, -d, or -ed), present tense (-s), superlative (-est) and comparative (-er) adjective

endings. Plural markers showed the least frequency of error. These inflectional endings are the same that are deleted by the speaker of Black English. The aphasic patient presented in this paper cannot be classified as an aphasic with an anterior lesion because he presents test findings that show normal prosody, extended phrase length and use of complex grammatical forms apart from absence of some inflectional endings which are dialect features.

On the other hand, a black speaker may reveal paragrammatic-like features characteristic of a posterior lesion. The grammar of a Wernicke's aphasic is often incorrect although there is free use of complex verb tenses and complex sentence constructions. Paragrammatism is distinguished from agrammatism by the misuse, not the loss of grammatical morphemes. Although the aphasic studied omitted or changed number agreement of auxiliary verbs, used the irregular past tense and past participial forms of verbs and irregularly formed plurals, he cannot be considered an aphasic of the Wernicke's class. His auditory comprehension is extremely good and speech is not semantically empty; therefore, this diagnosis is dismissed.

#### CONCLUSION

The foregoing discussion was designed to alert clinicians that any speaker of Black English could be incorrectly diagnosed solely on examination of his grammatical features. Without knowledge of this dialect unrealistic goals may be formed for language rehabilitation. Certainly it is impractical to require the use of the possessive marker, if this feature was not present premorbidly. It is not the language clinician's role to teach new skills to the aphasic, but merely to reactivate those which were functional prior to the onset of aphasia. Examination results should be interpreted in this vein also. The functionality of the individual's language system is to be addressed, as is the culture within which he operates. A man's speech patterns are part of his identity; if they are non-standard it is his, not the clinician's prerogative to change them. Realistic goals can be set by incorporating the linguist's knowledge of sociolinguistics so that deficiencies rather than differences are treated.

## Appendix A

### VARIATIONS IN VERB FORMS

#### Standard English

#### Black English

Deletion of the third person singular present tense (-s) or (-es) suffix.

He walks home every day.

He walk home every day.

Deletion of the regular past and past participial (-ed) suffix.

He talked to her yesterday.  
He has finished the cake.

He talk to her yesterday.  
He has finish the cake.

Tendency to regularize the irregular past tense and past participle.

He ran the mile in ten seconds.  
He has caught a fish.

He run the mile in ten seconds.  
He catch/catched a fish.

Copula Be.

He is here now.  
He is/He's going home.  
He's sitting outside.

He be here now.  
He going home.  
He is sitting outside.

Deletion of auxiliary verbs.

They're coming to see you.  
He has seen the pictures.

They coming to see you.  
He seen the pictures.

## Appendix B

### VARIATIONS IN NOMINAL CONSTRUCTIONS

#### Standard English

#### Black English

Deletion of (-s) or (-es) suffix of regularly formed plural nouns.

It costs fifty cents.

It costs fifty cent.

Tendency to regularize irregular plural nouns.

A spider has eight feet.

A spider has eight foots.

Absence of the possessive ('s) suffix.

Jack Johnson's new car is blue.

Jack Johnson new car is blue.

## Appendix C

### VARIATIONS IN MODIFIERS

#### Standard English

#### Black English

Use of a consistently for the indefinite article an.

He broke an egg.

He broke a egg.

Omission of the (-ly) suffix of adverbs.

The coat fit him perfectly.

The coat fit him perfect.

Deletion of the comparative adjective (-er) suffix.

He chose the bigger apple.

He chose the big apple.

Deletion of the superlative adjective (-est) suffix.

He is the smartest in the class.

He is the smart in the class.

Deletion of the derived (-ed) adjective suffix.

A robin's eggs are speckled.

A robin's eggs are speckle.

## Appendix D

### VARIATIONS IN QUESTION FORMATION

#### Standard English

Inversion of direct questions

Did he finish the job?

Absence of preposing auxiliary verb.

Are they coming home today?

#### Black English

I wonder if he finished the job

They coming home today?

## Appendix E

### VARIATIONS IN NEGATION

#### Standard English

Use of ain't.

He isn't eating his carrots.

Multiple negation.

He doesn't have anything.  
Aren't they going anywhere?

#### Black English

He ain't eating his carrots.

He ain't got nothing.  
They ain't going nowhere?



Table 1

APHASIC VARIATIONS ON REPETITION, READING  
AND WRITING OF SENTENCES

<u>% error</u>	<u>Grammatical Form Deleted</u>
51.52	Possessive ('s) suffix
37.33	Third person singular present tense (-s) or (-es)
33.33	Auxiliary verb other than <u>Be</u>
31.29	Regular plural (-s) or (-es) suffix
30.86	Regular past tense (-ed) suffix
23.33	<u>-n't</u> or <u>not</u> in question
20.51	<u>Be</u> in contracted form, e.g., "he's"
14.04	Indefinite article
13.33	Auxiliary <u>Be</u> in contracted form
11.59	Regular past participial (-ed) suffix
11.11	Present Participial (-ing) suffix
11.11	Adverb (-ly) suffix
10.53	Irregular past participle
10.27	Auxiliary <u>Be</u> in non-contracted form

Table 2

NORMAL VARIATIONS ON REPETITION, READING  
AND WRITING OF SENTENCES

<u>% error</u>	<u>Grammatical Form Deleted</u>
35.71	Third person singular present tense (-s) or (-es)
35.71	Regular past tense (-ed) suffix
27.19	Possessive ('s) suffix
23.81	Auxiliary <u>Be</u> in non-contracted form
21.43	<u>-n't</u> or <u>not</u> in question
17.89	Adverb (-ly) suffix
17.14	Regular past participial (-ed) suffix
14.29	Irregular past participle
14.29	Indefinite article
12.86	Regular plural (-s) or (-es) suffix

Table 3

APHASIC VARIATIONS ABSENT IN BLACK ENGLISH

<u>% Difference</u>	<u>Grammatical Form Deleted</u>
26.19	Auxiliary other than <u>Be</u> in contracted form
24.33	Possessive ('s) suffix
18.43	Regular plural (-s) or (-es) suffix
13.54	Auxiliary <u>Be</u> in non-contracted form
8.56	<u>-n't</u> or <u>not</u> in statement
8.09	Comparative adjective (-er) suffix
7.09	Irregular plural

Table 4

COMPARISON OF GRAMMATIC VARIATIONS

	<u>Repetition</u>	<u>Reading</u>	<u>Writing</u>
Aphasic	11.48%	19.67%	38.52%
Normals	1.57%	1.46%	1.89%

  

	<u>Spontaneous Speech</u>	<u>Spontaneous Writing</u>
Aphasic	2.37 errors/minute	5.64 $\bar{X}$ errors/sample
Normals	1.81 errors/minute	1.50 $\bar{X}$ errors

## REFERENCES

- Alajouanine, T., Verbal realization in aphasia. Brain, 79: 1-28 (1956).
- Baratz, J.C., Teaching reading in an urban negro school system. In J.C. Baratz and R. Shuy (eds.), Teaching Black Children to Read. Washington, D.C.: Center for Applied Linguistics (1969a).
- Baratz, J.C., Language and cognitive assessment of negro children; assumptions and research needs. ASHA, 11: 87-90 (1969b).
- Cairns, H.S., Cairns, C.E., and Williams, F., Some theoretical considerations of articulation substitution phenomena. Language and Speech, 17: 160-173, (1974).
- Fasold, R.W. and Wolfram, W., Some linguistic features of negro dialect. Language, Speech and Hearing in the Schools, 3: 16-49 (1972).
- Goodglass, H. and Berko, J., Agrammatism and inflectional morphology in English. Journal of Speech and Hearing Research, 3: 257-267 (1960).
- Goodglass, H. and Kaplan, E., The Assessment of Aphasia and Related Disorders. Philadelphia: Lea and Febiger (1972).
- Labov, W., Language in the Inner City. Philadelphia: University of Pennsylvania Press (1972).
- Labov, W., The logic of nonstandard English. In F. Williams (ed.), Language and Poverty. Chicago: Markham Publishing Company (1970).
- Labov, W., The Study of Nonstandard English. Washington, D.C.: Center for Applied Linguistics (1969).
- Labov, W., Some sources of reading problems for negro speakers of nonstandard English. In A. Frazier (ed.), New Directions in Elementary English. Champaign, Illinois: National Council of Teachers of English (1967).
- Lambert, W.E. and Fillembaum, S., A pilot study of aphasia among bilinguals. Canadian Journal of Psychology, 13: 28-34 (1959).
- Porch, B.E., The Porch Index of Communicative Ability. Palo Alto, California: Consulting Psychologists Press (1971).
- Stewart, J.H., Ruder, K.F., and Tew, R., Speech discrimination in black and white children. Language and Speech, 16: 123-129 (1973).
- Stewart, J.H., On use of the negro dialect in the teaching of reading. In J.C. Baratz and R. Shuy (eds.), Teaching Black Children to Read. Washington, D.C. Center for Applied Linguistics (1969).

- Taylor, O.L., Sociolinguistics and the practice of speech pathology.  
Rehabilitation Record, 14: 14-17 (1973).
- Troike, R.C., Receptive bidialectalism: Implications for second-dialect teaching.  
In R.D. Abrahams and R.C. Troike (eds.), Language and Cultural Diversity  
in American Education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. (1974).
- Weiner, P.S. and Hoock, W.C., The standardization of tests; criterion and criticism. Journal of Speech and Hearing Research, 16: 616-626 (1973).
- Wolfram, W., and Fasold, R.W., The Study of Social Dialects in American English.  
Englewood Cliffs, New Jersey: Prentice-Hall, Inc. (1974).
- Yoder, D.E., Some viewpoints of the speech, hearing, and language clinician.  
In F. Williams (ed.), Language and Poverty. Chicago: Markham Publishing  
Company (1970).