THE LANGUAGE OF RESOLUTION AMONG THE OLD-OLD: The Effect of Validation Therapy on Two Levels of Cognitive Confusion

by

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1. STATEMENT OF THE PROBLEM

Confused elderly residents (80+ years) of nursing homes are frequently dysconfirmed in conversations with staff and family members. Their speech patterns may appear ideomorphic and eccentric. Staff members may attempt therapy with these residents by various forms of "reality orientation." "No, this is Monday, not Saturday." "No, your husband is not alive." "No, the chair is not your mother" (Folsom, 1968; Lehman, 1974; Phillips, 1973; Trotter, 1972). The old-old however, appear highly resistant to this therapy regimen. Their "confused" speech patterns usually persist in spite of intensive reality orientation therapy sessions (MacDonald & Settin, 1978; Voelkel, 1978; Zepelin et al., 1981).

A growing number of researchers observe that these residents appear to respond to a different therapy technique: Validation therapy. Here ideomorphic and eccentric speech patterns are confirmed by the therapist (Butler, 1968; Feil, 1967; Murrell & Norris, 1984; Hutchinson, et al., 1983; Sargent, 1982; Fry, 1983). By analyzing these patterns and searching the residents' medical and social histories, therapists frequently discover language patterns elders may be using to describe internal conflict. If this conflict is correctly identified and the therapist uses the resident's own terms to describe the conflict, the elder may return to a more lucid form of discourse.

Of course communication theorists are interested in describing these changed speech patterns and in extending plausible explanations for these effects. Apparently during therapy, confused elders attempt to fashion their perceived reality using some as yet undetected

calculus of coherence. These elders appear trying to resolve issues of death, separation, or losses of autonomy. Communication theorists propose explanations as to how these elders struggle to use language to express themselves clearly.

Perhaps the presence of one speech act may be linked to another by a set of "rules" (Sachs, et al, 1978; Jackson & Jacobs, 1980; Levinson, 1981; Goldberg, 1983). Coherence may further be the result of a host of linguistic devices elders use to signal connectiveness (Halliday & Hasan, 1976; Rochester & Martin, 1979; and Vuchinich, 1977). Elders may use these devices to differentiate themselves from persons with mental pathologies. Other communication researchers argue that the communicator's attempt at coherent speech may arise from the willingness of auditors to make some kind of connectedness. Cohesion depends on interpreters' abilities to infer plausibility (Hopper, 1983), and their ability to recognize what constraints are imposed on the conversation from the scene itself, from the information taken for granted, excluded, or generally expected to be shared (Sanders, 1983; Sigman, 1983). Tracy (1985), Brown & Levinson (1978) and Planalp & Hews (1982) suggest that regardless of confusion level, most persons are interested in positive self-presentations and will make these presentations in patterns that are easily recognized by others. For confused old-olds, communication is a complex task. Any way elders proceed during interactions will arise from the way the task of self-presentation can be made easier. The easier the response, the more preferred and frequently used the pattern(s). Apparently Validation therapy confirms and encourages these preferred

patterns among the confused elders. A primary research question would be one of description: What are frequently use patterns? Which of these patterns are susceptible to change during therapy? How do these patterns sound prior to therapy and after therapy?

2. THE INSTRUMENTS

Two instruments for the study of elder discourse were needed to proceed toward the answer: a systematic means of observing and sorting out elders' words, and a systematic means of sorting out elders' confusion levels.

2.1 CONFUSION LEVEL

Geriatric behavior patterns may be assessed by a variety of tools (Enright & Lapsely, 1983; Vitaliano, et al., 1984; Ware & Carper, 1982; Toseland, et al., 1984; Rosen, et al., 1984; Shader, et al., 1974; Plutchik, et al., 1970; McNain & Kahn, 1983; Overall & Gorham, 1962). Yet many of these instruments have little to do with the assessment of cognitive decline or were developed prior to 1980 when Alzheimer's type neuropathology was officially recognized by the research community (American Psychiatric Association, 1980). The selection of an appropriate assessment tool for cognitive impairment is crucial. Many confused old-old are casually labeled as having Alzheimer's disease using instruments with too broad an assessment spectrum or instruments which have little clinical value in measuring cognitive decline. Primary degenerative dementia is a diagnosis of exclusion in which underlying medical, neurological and psychiatric

etiologies for cognitive decline have been removed by CT scans measuring ventricular dialation, positron emission tomography (PET) measuring brain glucose utilization, or autopsy. Identification of precise behavior and speech patterns associated with different levels of cognitive decline are still needed to avoid casual diagnosis among the old-old.

Reisberg (1983) developed a scale which correlated positively with levels of cognitive impairment. This scale (The Brief Cognitive Rating Scale -- BCRS) measures cognitive impairment on five axes: concentration and calculating ability, recent memory, past memory, orientation, functioning and self-care. This instrument correlates highly with known instruments of mental impairment such as Inventory of Psychic and Somatic Complaints in the Elderly IPCS-E (Raskin & Rae, 1981), with CT scans and PET assessments for confused old-old.

The BCRC, however, cannot be administered to all confused elders. Some elders cannot speak a response. Others become hostile and suspicious of the questions. Others may only babble a repitious formula whenever engaged in conversation: "Oh, Oh, Oh;" "pappa, pappa, pappa." Clearly BCRS could not be administered meaningfully to all confused old-olds.

How then may elders' confusion levels be assessed? ~~them~~. A current gerontological researcher, Naomi Feil (1967; 1985) suggests four levels of confusion persist among confused elders. On the first level, (level I) lie persons who have not come to an amiable understanding of their past. Their discourse may be laced with negative attributions to others, by unwarrented blame of others for

misfortune, and hostile rejection to the interaction overtures of peers. Feil hypothesizes persons in the level have not yet resolved painful issues of loss in their lives. Level II elders are more confused. They frequently slip into memories of their past, do not fill in necessary facts in order to be understood, use pronouns without specific reference, lose track of present time, and do not remember facts. Feil suggests these elders move to the past in order to trigger feelings of when they were useful and when they could obtain pleasure from life tasks. Level III, a more severe confusion stage, finds elders who create their own language. This argot is often a repetitive mummering: they rock, coo, or babble, it is suggested, in an effort to reassure themselves and to control anxiety. Stage IV is the most severe confusion level. Here elders seldom speak, do not try to express feelings, and often only sit with eyes closed. Since BCRS would not be appropriate to test levels III and IV, it might be used to identify persons with mild confusion (Level I) and persons with Level II confusion. Persons in these groups still possess a recognizable language system. Low scores on the BCRS (low confusion) could become numeric equivalents of Level I confusion; high scores on the BCRS (high confusion) could become numeric equivalents of Level II confusion.

Though BCRS correlates positively with known dysfunctionalities, research is still needed on the precise behaviors associated with the levels of cognitive impairment. Communication scholars in health communication argue that once psychological and physiological variables are isolated, systematic analysis must be conducted on how

elderly persons actually converse (Carmichael, 1976; Nussbaum, 1983; Schmidt, 1975; Butler, 1968; Boylin, et al., 1976; Carlson, 1984; Cook, 1984; Jenson, 1984; Lewis, 1973).

2.2 LANGUAGE USE

How does one assess the language patterns associated with categories of cognitive impairment? A computer program, Syntactic Language Computer Analysis (SLCA) (Cummings & Renshaw, 1979) quantifies verbal syntax by tabulating a subject's use of nouns, verbs, tense use, and function words. Arising from the assumption that language mirrors cognitive perception (Boring, 1950; Gaito, 1965; Watzlawick, 1967), SLCA measures a subject's language use on eight dimensions: social perception, ability to differentiate between abstract and concrete forms, ability to differentiate between beliefs and disbeliefs, uses of action verbs, measures of subjective or indicative mood, time usage, symmetry, and conditionality.

Using BCRS it may be possible to isolate levels of cognitive impairment, define speech patterns associated with these levels (using SLCA), and determine if these speech patterns change with validation therapy.

Thus, the research question might be stated: The use of Validation therapy will produce no differences in SLCA scores on subjects in Level I and Level II on a post-test task.

3. METHOD

Subjects for this study were drawn from a 250 bed nursing home in a mid-western city. Subjects for this test were selected during an unfunded pilot study conducted in the summer of 1985. The Director of Social Services identified three men and fifteen women to participate in the pilot study. The criteria for selection were: all were 80 years old or older, all suffered from some degree of "confusion," none suffered from involutional psychoses, Parkinson's disease, chronic schizophrenia, or chronic toxic brain disease associated with drug use or alcohol.

Elder confused residents are frequently resistant to cognitive assessment ("Do you think I'm crazy? Is that why you're asking me these questions?"). To gain the confidence of these subjects and in order to prepare them for the assessment, the researcher conducted bi-weekly non-therapeutic interviews with each subject over a ten week period. Each subject received at least twenty interviews during the summer of 1985. At the end of the ten week interview schedule, each subject had learned to recognize and trust the researcher. Trust was operationalized by a compliance task. For each subject, staff members identified a compliance task usually resisted by the resident. For example, one subject insisted on leaving the building at supper time "...to fix dinner for Sam" her husband who had died eight years ago. The interviewer was able to persuade the subject to return to the building. Another subject refused all visitors: "I don't want anyone but my son John." She was unmarried and had no children. The interviewer was able to introduce new visitors to her so they would be

accepted by the resident. In each of the resident's cases, the subjects accepted the intervention of the researcher to comply with ordinary tasks. It was necessary to gain this level of confidence and trust before subjects would even agree to assessment using the BCRS.

During the summer of 1986 a second phase of the research was begun. The Director of Social Services obtained permission from legally responsible guardians to conduct the study and to record subjects' conversations on audio tape. Of the eighteen original subjects seven were excused from analysis. Four subjects had lapsed into stage III or stage IV; three subjects were placed on medications which affected their speech. The BCRS was administered to each of the remaining eleven subjects by three different staff members on three succeeding days. A mean score was be computed for each subject. The subjects were then divided into two groups: high confusion and low confusion. Placement in the groups was determined by computing a split mean on total BCRS scores. The week following the administration of the BCRS, two types of interviews were conducted by the researcher for each subject. The interviews were recorded on audio tape. During the first interview each subject was asked "Tell me about your home." This interview was labeled the "Open Interview." A second interview was conducted after the first. During this interview each subject was shown an 8" x 10" photograph of the Director of Social Services congratulating the head nurse, and the Administrator of the home for an achievement award. Each subject was asked, "How would you describe this man to a new resident who just moved into the home?" The Director of social services was well known to all residents. He was

often called by first name by residents. The responses to this session were also recorded on audio tape. Transcripts of both interviews were made and the syntax coded for analysis with SLCA.

After the BCRS and interviews had been completed each subject underwent ten weeks of Validation therapy. The therapy was conducted by a trained therapist at the research site. Each subject received two therapy sessions per week. The researcher maintained informal contact with the subjects during the therapy period.

After the ten week therapy regimen, each subject received an identical pair of interviews as in the pre-test. Recordings were made and transcripts were coded for SLCA analysis.

4. ANALYSIS

Only data from the first ten minutes of all open questions and the first five minutes of all closed questions were used for SLCA analysis. Small sample size limited extensive statistical analysis. T-tests for dependent groups were performed on each item in SLCA, since all subjects received the pre- and post-test, and since there was no control group in this initial study. Each subject's score in the pre-test was paired with his/her corresponding score on the post-test. The table below presents the thirty-six levels of SLCA, the pre- and post-test means for each level, the t values, and one-tailed probability levels that the differences between the pairs were not achieved by chance.

HIGHLY CONFUSED
N = 6; df=5

Open Questions			Closed Questions		
Mean	t value	prob.	Mean	t value	prob.
PCA					
.012/.031	1.88	.059*	.008/.023	1.97	.053*
INFO					
.307/.388	4.97	.002*	.328/.377	2.62	.023*
RELATIONAL					
.191/.218	1.40	.110	.207/.229	1.02	.177
QUALITATIVE/QUANTITATIVE					
.394/.502	4.35	.003*	.393/.465	1.82	.645
SENSATION DENSITY					
.025/.065	2.05	.047*	.024/.093	2.72	.021*
.281/.322	1.76	.069	.285/.305	.58	.292
.000/.001	1.55	.091	.000/.000	.00	.500
.394/.500	4.21	.004*	.393/.465	1.82	.064
EXISTENTIAL DENSITY					
.140/.168	1.19	.143	.140/.151	.86	.213
.166/.219	2.01	.050*	.177/.237	2.79	.019*
.394/.501	4.35	.003*	.393/.465	1.82	.064
.000/.000	.00	.500	.000/.000	.00	.500
.191/.217	1.40	.110	.207/.226	.94	.195
.000/.000	.00	.500	.000/.004	1.56	.090
SOCIAL PERCEPTION					
.006/.008	.41	.348	.004/.005	.20	.424
.000/.016	2.36	.032*	.002/.020	1.65	.079
.000/.000	.00	.500	.000/.002	1.00	.181
.000/.000	.00	.500	.000/.004	1.56	.090
.000/.021	4.23	.004*	.000/.025	2.29	.035*
.002/.038	4.77	.002*	.000/.056	5.65	.001*
.000/.000	.00	.500	.000/.000	.00	.500
.000/.000	.00	.500	.000/.000	.00	.500
.282/.323	1.76	.069	.285/.305	.58	.292

DEFINITIONAL DENSITY					
.307/.388	4.97	.002*	.328/.377	2.62	.023*
.000/.000	.00	.500	.000/.000	.00	.500
.086/.100	.06	.259	.097/.118	1.73	.072
.105/.118	1.55	.091	.110/.112	.08	.468
REFLEXIVE DENSITY					
.110/.171	5.08	.002*	.113/.156	1.75	.070
.047/.081	2.82	.018*	.074/.094	1.05	.170
MOTION DENSITY					
.191/.218	1.40	.110	.207/.228	.96	.191
.000/.000	.00	.500	.000/.002	1.00	.181
TIME DENSITY					
.000/.000	.00	.500	.000/.002	1.00	.181
.191/.218	1.40	.110	.207/.228	.96	.191
.000/.000	.00	.500	.000/.000	.00	.500
DISPOSITIONAL DENSITY:					
.183/.214	1.94	.055*	.195/.223	1.24	.135
.003/.024	1.42	.107	.007/.012	.80	.230

* = significant at the .05 level of probability

LOW CONFUSED
N = 5; df=4

Open Questions			Closed Questions		
Mean	t value	prob.	Mean	t value	prob.
PCA					
.019/.082	1.93	.063	.011/.016	1.16	.155
INFO					
.355/.389	5.02	.007*	.355/.368	1.08	.169
RELATIONAL					
.018/.456	1.73	.079	.202/.206	.56	.301
QUALITATIVE/QUANTITATIVE					
.403/.456	8.48	.001*	.430/.439	.56	.304
SENSATION DENSITY					
.016/.093	5.42	.003*	.012/.071	6.76	.001*
.296/.338	3.47	.013*	.297/.343	4.09	.007*
.000/.005	2.73	.026*	.000/.000	.00	.500
.403/.452	7.20	.002*	.431/.439	.56	.303
EXISTENTIAL DENSITY					
.191/.202	.82	.229	.172/.186	.94	.201
.164/.188	2.35	.039*	.169/.196	2.37	.038*
.403/.457	8.48	.001*	.431/.439	.56	.303
.000/.000	.00	.500	.000/.000	.00	.500
.189/.208	1.73	.079	.202/.206	.56	.301
.000/.000	.00	.500	.000/.004	1.56	.090
SOCIAL PERCEPTION					
.005/.020	1.17	.153	.007/.009	.62	.283
.006/.011	.58	.593	.005/.010	.72	.256
.000/.000	.00	.500	.000/.000	.00	.500
.000/.000	.00	.500	.000/.000	.00	.500
.000/.025	4.78	.009*	.000/.013	3.07	.018*
.000/.041	7.06	.002*	.000/.039	5.19	.003*
.000/.000	.00	.500	.000/.000	.00	.500
.000/.000	.00	.500	.000/.000	.00	.500
.296/.339	3.47	.013*	.297/.343	4.09	.007*

DEFINITIONAL DENSITY					
.355/.389	5.02	.003*	.355/.368	1.08	.170
.000/.000	.00	.500	.000/.000	.00	.500
.071/.078	.42	.348	.079/.081	.17	.436
.111/.135	1.56	.096	.123/.126	.21	.421
REFLEXIVE DENSITY					
.136/.162	1.52	.101	.139/.164	1.62	.090
.045/.053	.47	.332	.018/.024	2.25	.045*
MOTION DENSITY					
.189/.208	1.73	.079	.202/.206	.56	.301
.000/.000	.00	.500	.000/.000	.00	.500
TIME DENSITY					
.000/.000	.00	.500	.000/.000	.00	.500
.189/.208	1.73	.079	.202/.206	.56	.301
.000/.000	.00	.500	.000/.000	.00	.500
DISPOSITIONAL DENSITY:					
.186/.203	2.09	.052*	.194/.195	.13	.450
.003/.005	.48	.658	.006/.011	1.35	.123

* = significant at the .05 level of probability

For the highly confused subjects (Level II) significant differences in means at the .05 level of probability were observed for the following SLCA scores. For the purposes of this paper, only post-test scores that showed significant increase in both the open interview and the closed interview will be discussed.

Stage II subjects showed significant improvement after therapy on informational density (.002 and .023). This score indicates an increase of subjects' use of nouns functioning as subjects or objects of verbs. Their ability to use nouns in logical and coherent order was enhanced. These subjects also improved in their abilities to use subjects or objects of verbs that can be touched or sensed (.047 and .021). These subjects also showed a significant increase in the number of negatives tied to subjects of sentences and objects of verbs (.050 and .019). They also showed an increase in the use of positive and negative first person references (.004 and .035; .002 and .001), and nouns with more than one qualifier associated with them (.002 and .023). Their total perceptual cognitive activity (PCA) showed a significant improvement

Persons who were in the low confusion group (Level I) showed a significant increase in the use of sensory words (.003 and .001) as well as a significant increase in the use of figurative subjects and objects of verbs (.013 and .007), an increase in negatives tied to subjects and objects (.039 and .038), an increase in the use of first person references in the positive and negative sense (.004 and .018; .001 and .003) and an increase use of subjects and objects of verbs expressing "thing-ness" instead of "personness." These persons were

able to use the passive voice and objectify the actions of others rather than personalize those actions. The members of this group did not show a significant increase in PCA average scores.

5. CONCLUSION

The subjects in Level II are often classed as "Time Confused" because they no longer keep track of present time or find it a meaningful measure of reality. These persons do not struggle to deny or regain losses in domestic life. They have often turned inward. They prefer expressions of sensation rather than abstract expressions. According to Feil, they use these color words to trigger memories (which are also pictures) of times then the elders did feel happy or useful. They often think in vivid images and have little energy for reasoning. Negative attributions to self, use of pronouns without specific references, and the inexact use of nouns and subjects often make this person difficult to understand.

However with the validation therapy used on subjects in this study, Level II members were able to increase in the proper use of nouns that function as subjects and objects of verbs, increase in meaningful self-references, expand their repertoire of appropriate qualifiers, and increase in their preferred pattern: the use of concrete (sensed) words. Stage II subjects may prefer self-presentment, in terms of highly visible and concrete terms. The therapy technique which is appropriate is congruent with this feature of the language: "Mrs. Jones, your eyes look so sad today." "What a beautiful soft sweater you have on. Your hair is just as soft and lovely today." Perhaps

the easiest way for elders in this class to gain coherence is for them to generate a higher level of concrete terms. The following samples may illustrate this preference for concrete forms.

HIGH CONFUSED OPEN QUESTION (PRE-TEST)

> Oh we had so many friends. They lived across from us. Across the road. But it just seemed to be that they were always over at our place. Well we had a large kitchen and a table and then they had quite a few of them come over and several to come over. They played pinnochle a bunch of them. Oh dear. oh yeah. And then well I had made some cookies and then while they were counting who was winning I put the cookies on a table and they all ate and they came back and. Oh we had a lot of fun but though.

HIGH CONFUSED OPEN QUESTION (POST-TEST)

> I worked for a dentist. He came to me and asked me to work for him. They told me we think you will do as you are told. We think you can follow orders. While I was there I poured castings for the dentist. I would pour the plaster in the mold and then put the sets in the articulator. It would take quite a while to line it up just right in the articulator. The dentist had a daughter but he not did have her work. He told me that she not did care for the work at all. The dentist told me that he tried to get her to work, but she didn't care for the job. So he didn't want her.

HIGH CONFUSED CLOSED QUESTION (PRE-TEST)

> Yes. All of a sudden I can't remember his name. Well go ahead. Maybe it will come to me. Chris? Chris! That's it! He used to come in my room when i was on the first floor. And I and he told me he was in other peoples' rooms but they never uh, said anything and they acted like they didn't want him in there. And so, I have said always a few words and had a conversation and if I had baked cookies, I would leave a couple for him. But it was alright. He was he is a good man. Works hard.

HIGH CONFUSED CLOSED QUESTION (POST-TEST)

> I think his name is Chris. He was interested in Sunday School and Bible study. He would help people where he could. I taught Sunday School here when I first came. I had a lady in my class who never would behave. She would

let her hair down and shake it out you know and then she would act up. I reported her to Chris and he took her away.

The low confusion group, Level I, are persons Feil desoribes as deeply threatened by loss. They have not yet resolved their losses of autonomy. Denial, blame, loneliness, possessiveness mark their discourse. They often resent intrusion of others into their thoughts. These subjects can usually be understood and want to be understood. However their negative attributions may cause others to isolate and encapsulate their actions. This is a highly self-centered perspective. With the use of the therapy regimen, however, these subjects increased in their use of both abstract and concrete verb and noun forms. There is more evidence now of these subjects having the capacity to name instead of blame the objects in their environment. These subjects did not show a significant increase in PCA scores. A subject in this group may illustrate this rejecting pattern.

LOW CONFUSED OPEN QUESTION (PRE-TEST)

I can remember my second wife. I don't want to remeber my first wife. I can't remember much about anything. I can't even remember the names of everybody in my family. Why the hell do you want to know? Who are you telling this stuff to? I worked downtown. It was a good restaurant. I can't remember its name. It had plenty of customers. I had to wait on a lot of people. We sold a lot of shrimp. Yeah. I did the stew. They served a lot of people.

LOW CONFUSED OPEN QUESTION (POST-TEST)

I keep dreaming about my little dog. I had the nicest little dog and I dream about her all the time. She had a brown nose and all black down her chest. She was black all down here. She was a Pomeranian. I called her Lady. I keep dreaming about her and I don't know how I lost her. She was the smartest dog. She would lay down by the door of the apartment so she could get fresh air at night. That was the apartment on Detroit and Woodruff. You do remember

the Waldorf Hotel? I worked there when I had that little dog.

LOW CONFUSED CLOSED QUESTION (PRE-TEST)

Chris. Yeah that is a good picture of him. If you like that sort of stuff. Yeah that's Chris. I can tell him. Oh he was OK. Nice guy. That's all I know about him. Oh yeah. I was in unit unit one a long while when I first came here.

LOW CONFUSED CLOSED QUESTION (POST-TEST)

That's a good pictue of him. He's a sharp looking guy. If I saw this picture in the newspaper I would look first at Chris and then at her, and then at him. Who is this other guy anyway? She is the dietician. But him I don't know at all. He's got a real gut. Everybody knows Chris. When I first came in here he used to chew me out. He would get mad at me. I would go down to Foodtown and get wine and get loaded. Maybe two or three bottles at a time. The more I would think about my dog, the more I would drink. That's life.

One would think that the lower the confusion level, the more readily a subject would respond to therapy. Feil explains this phenomena. Apparently Level I persons feel so threatened, they are deeply suspicious of the therapist. If a Level I person begins to disclose to others in an institutional setting, he or she usually picks a high authority figure. In this study, the Level I subjects could at least begin to use word choice which would objectify instead of personalize the environment.

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