BABO NEWS

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SPEECH AUDITORY CIRCLE

By: Robert A. Hohendorf, O.D.

The Four Circle model by Skeffington has a speech - auditory circle. In the BABO courses we refer to it as The Communication Circle. It has always been a tough one for me to fully grasp. In the development of my visual model it was the last piece to come into focus.

A good friend of mine (while in vision therapy) mentioned a book by Roger Fouts, called *Next of Kin.* She talked about how Mr. Fouts communicated with chimpanzees through American Sign Language (ASL). Chapter eight in the book is entitled Autism and The Origins of Language.

The chapter goes through his work with two boys who have autistic characteristics whom he taught to communicate through ASL hand gestures. The first boy (David) he observes, "…had a problem connecting information from the auditory channel with the information from the visual channel…He could associate visual with visual, visual with motor and motor with motor… And without this link (visual-auditory) will have a hard time learning spoken language." David "…broke through the glass bowl that had encased him…" with ASL. His behavior improved dramatically, including his eye contact. He then began to speak aloud! The results were duplicated with a second boy he called Mark. These results were published in the 1976 *Journal of Autism and Childhood Schizophrenia.*

I felt the interesting part was his research and rationale as to why the boys learned to speak after learning to sign. He cited the work of Dr. Doreen Kimura, a Canadian neurologist. She had done much of her work with aphasics (persons unable to speak aloud). Dr. Kimura explained: that her patients "also had difficulty with sequences of fine motor movements of the finger…the region of the brain that controlled speech also appeared to control precise hand movements." Fouts' revelation was "…speech involves precise and sequential motor movements…the tongue and hands are not just related, they are connected through motor regions of the brain."

One prominent language theory holds that early language was gestural. Mr. Fouts contends oral speech evolved as finger dexterity in tool making occurred. He also stated that as man became upright (coming to balance with gravity, another circle) his hands were freed to manipulate (coming to balance with the task as described by R. A. Kraskin) and communicate!

Most professionals associated language with speech. Here is a key to dealing with those who feel all learning is language based. I remind them vision is still involved (beginning with written language and the use of abstract visual symbols).

Mr. Fouts goes on to talk about syntax and sentence structure, which triggered my memory of Dr. Jerry Getman talking about children and how verb usage begins with increased locomotion. Fouts states "…words symbolize objects; gestures symbolize relationships…gesture is grammar." This is where I got one of those "ah ha moments" of understanding vision's further role in language. From a random noise generating infant; through the use of nouns, verbs and the formation of grammar for spoken language; to the use of abstract symbols for printed language there is a sequence.

Another sequence is from visual motor experience; through visual motor gestures; through speech (language with and without gestures); to print (language with visual symbols for objects and gestures). See the chart below:

Behavior	visual motor -- (phonemes)	use of nouns (graphemes)	use of	
	experience	verbs and the		abstract visual
	random noise generation	formation of grammar		symbols

Lower Level Visual Motor ---------- Speech ---------- Hi Level Visual Motor
Auditory Integration

Fouts	hand and tongue ---	visual motor ---	oral language ---	printed language
	fine motor development	gestures	(speech)	

For those professionals who state that vision and learning are not related and for those professionals who state all learning is language based (to the exclusion of vision), I would ask them to show me how do language and learning occur without any use of the visual process? It helps me figure out if they understand human vision development, if they can exchange ideas at an open level, and if they are so set in their pattern of thinking that they don't want to be confused by the facts!! Those who don't use the facts about vision to understand human communication are not worth the time for anything other than gestures. We should save our breath.

Mind Candy

By: Robin Lewis, O.D.

Sometimes its good to have a little food for thought. If thought food can be fun and challenges our thinking it might be *candy for the mind* (if its not too serious).

Q: Is a controlled experiment an oxymoron? It is if the outcome of the experiment is predetermined by the experimenter's assumptions. If the dynamics of the experiment are limited by the experimental control, the result will be substantially changed from the more naturally

occurring process. A good example of this is the difference between using a spot or using a streak retinoscope. Both shine a light into a person's eye and view the light return. With a spot there is a brighter light due to the larger aperture and so more light is returned. This may be why it seems easier to view changes in color or brightness with a spot. A streak retinoscope limits (controls) the area of light that passes into the eye to provide a more precise reflection over a more narrow area. This experimental control is designed to eliminate the effects of distracting optical changes, but limits the available information about attention and the dynamic character of the patient's visual system. Even though there is a great deal more information available from a spot retinoscope, the most popular retinoscope is a streak; quite possibly because we want to control the outcome and to do this we are willing to assume that any information other than an approximate optical prescription is much less important or even irrelevant and distracting.

The same may be said of a wet versus dry refraction. How is it possible that some doctors believe that the measurement of two paralyzed eyes is more useful and accurate than the evaluation of the dynamic character of the visual system in action? It is probable that the answer is similar to that above. We are willing to assume that only a limited amount of the available information is really important. We get away with doing this due to the amazingly plastic and adaptable nature of the human visual system. In most cases there is a wide range of prescriptions (optical and otherwise) that will work for a given patient. If we get within the range of acceptable prescriptions, the patient will usually be satisfied. The secret of the highly skilled practitioner is to learn what that range of successful prescriptions is, and then to help the patient select the prescription that best meets their long and short-term needs. To do this well requires the understanding and evaluation of multiple variables simultaneously. The more information we obtain, the better. This can be difficult at first, but is the only way to assure the best outcome for the patient.

Memphis Meeting

BABO is proud to be a cofounder and cosponsor, along with OEPF, of the Conference on Clinical Vision Care, held each summer at Southern College of Optometry. This past summer marked the 5th annual meeting of this rather unique group. The size has been from 22-32 participants each year. Each year a topic is dealt with in detail by the group in both small breakout groups, and then in the full large group. Unlike most other meetings where the participants spend the majority of time listening to presentations, formal presentations are restricted to the opening hour of the meeting. The rest of the meeting involves each of the participants getting involved in small breakout groups of 7-8, each working on answering a question posed during the opening session. The individual small groups then work up their answers to the questions as composites of each members group contributions.

At the very first meeting Sr. Barbara who worked at the SA NOEL Center with Dr. John Streff and Bruce Wolff did a presentation on reverent listening and how to work towards group consensus. This has set the tone for each of these meetings as being on the search for group consensus emerging out of collegial listening and respect.

This past year the topic was binocularity. The meeting was the best ever in terms of the output as well as the feeling of each of the participants as they left the conference. Additionally, all participants agreed to participate in a quality of life survey study before and after VT with their

patients and to send the results to a central place for tabulation and evaluation. If you would like to participate as well, contact Theresa at 1-800-447-0370.

The next Memphis meeting will be held July 14-16 at Southern College of Optometry. The meeting begins promptly at 9:00 AM on Friday the 14th and concludes at 12:00 noon on Sunday the 16th. One evening Dr. Glen Steele and his wife host a dinner of Corky's barbecue. One other evening the group usually breaks up and some drive down to Tunica and do some gambling while others take in some Blues or other cultural events in Memphis. If you would like to be on the mailing list for this excellent one-of-a-kind meeting contact Bob Williams at OEPF 1- 949-250-8070

Drs. Lewis and Hohendorf Expand Teaching Duties

Drs. Robin Lewis and Robert Hohendorf continue on their increased commitment to BABO by devoting more time to teaching the BABO core curriculum. This has greatly enhanced the ability of BABO to meet the recent resurgence in demand for courses. This past year has seen nearly all courses scheduled to full capacity. BABO had to add two additional courses this academic year to meet the increased demand and anticipates having to move into expanded rooms for larger groups. The dedication to BABO and to continuing the excellence in education by Drs. Lewis and Hohendorf has been tremendous.

An Insurance Analogy

Dr. Gary Williams heard Dr. Michael Lange from Greene, NY use the following analogy when it came to insurance and vision care. Dr. Lange relates health insurance to automobile insurance. If they need work done on their car, do they choose not to get it done because the services may not be covered by the automobile insurance? Of course they get the car fixed. Coverage did not determine whether or not the car got fixed, only who paid for it. Coverage should not determine whether or not people get the health care they need. Of course in certain cases of financial hardship, some accommodations can be made; but insurance and the decisions made by the bean counters who work for them should not be the final arbiters of whether the work is done or not. Thank you, Gary, for sharing this analogy.

Web Site on Schachar Theory of Accommodation and the Surgery for Accommodation

Check out the web site: www.ultralase.co.uk for the latest information on the surgery for accommodation being done in England based on the work of Schachar.

Randot Stereograms Available From Bernell

The special Randot Stereogram with all the figures as well as the background done with the random dot patterns are now available directly from Bernell. When ordering be sure to specify the PH or HARRIS Randot to get the correct product.