FURTHER NEUROPSYCHOLOGICAL ASPECTS IN VISUAL GERIATRICS

By

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Introduction

A short time ago a great instructor and friend sent me a clipping which I quote in full: "Serendipity", "Sir Alexander Fleming discoverer of penicillin, was quoted as saying that the development of modern disease-killing drugs is frequently cited as an outstanding example of the importance of "Serendipity in Science".

Of course we immediately consulted Webster to get the meaning of this strange word and found it to be 'the gift of finding valuable or agreeable things not sought for', a word coined by Horace Walpole in allusion to a tale—The Three Princes of Serendip".

Thinking of "Serendipity in Science", and the definition "the gift of finding valuable or agreeable things not sought for", we are reminded of our colleagues who have in recent years become aware of the neuro-psychologic approach in applied visual science, and within their professional practices are using psychotherapy including counseling, and doing so most effectively.

Then we think of another group of our colleagues who totally unaware of the potential power of neuro-psychology and many aspects of psychosomatic conditions which we can control, go happily along doing good work, which could be greatly improved upon both in diagnosis and case management if they recognized this gift "Serendipity".

Members of the Visual Geriatric Society and the College of Syntonic Optometry have within our power the intelligent use of the Syntonic Principle in practice which is a tremendous aid in caring for our patients with these functional nervous or emotional disorders and conflicts.

Why is Syntonic Procedure such a great aid? Let us think f a number of factors packed with meaning.

In discussing conditioned mechanism, Bertrand Frohman lists <u>Identification</u> as number one, and gives this definition: "Identification is the subjective process by which one creates a morbid psychic unity with people, events or situations, totally different and non-identical in fact".

Discussing significance and neuro-dynamics of Identification, Dr. Frohman states, "The pathological significance of identification lies in its varied and extreme effects upon this "organism as a whole". The following is only an elementary and extremely simplified discretion of the neuro-dynamics of identification. The traumatic stimulus or nervous impulse travels to the thalamus. Here it registers emotionally, or with feeling content. It is not sufficiently 'filtered through the cortex and hence not

properly evaluated or differentiated'. Thereafter, anything which seems remotely related to he original traumatic experience is associated with it to the extreme of identification.

The thalamus is the region in which habits of emotional responses are canalized. It is also the region of identification Therefore, the individual in whom this process has taken place is conditioned in identification. Again, in discussing sources of simulated disease patterns, he states, "In hypochondrical anxiety and conversion hysteria the symptoms are frequently reproduced on the basis of identification." Thus the myriad forms of fear and the transference of the psyche to the somatic zones are canalized in the thalamus.

William James said "Emotion is a state of mind that manifests itself by perceptible changes in the body".

In syntonic Procedure we act upon, alter, and to a large degree control thalamic action, and thus syntonics is a tremendous aid in caring for the emotional disorders met daily in practice.

For years the neurophysiologist and the endocrinologist have taught that, "personality, the sum total of behaviorism, is the action of the body". The modern psychologist agrees that, "behavior is made possible by the body and also is limited by it, but we can change behavior because function alters structure". Therefore, "personality is a gestalt (organized whole)', as Koffka teaches, he also says "behavior is always behavior in an environment". All of this I endeavored to cover in "The normalization of vision in Maturity" (Syntonogram 1949).

In a program presented to the Visual Geriatric Society in 1949, Dr. Preston Kline Caye told of observing the patient in the waiting room, when the patient arises and walks to the examination room, carriage, gait, firmness of step, etc. He states, "This pre-ocular psychosomatic observation, I have found to be most helpful and useful over a period of years".

As a basis of Dr. Caye's observations let us again quote Koffka, "If an emotional stress steers action, then the ensuing movements will, to some extent, mirror the emotions; characteristics of overt behavior will map dragging movements of the irritable, correspond indeed to the leaden state of depression or the disrupted state of irritability.

The one, viv., the overt side is as much in depression or irritability as the other, the conscious side. Therefore, it is meaningful to say that behavior is emotional".

So we open our case book for study:

Example of Case Records

Preceding the case reports, let us consider: James Plant defines mental hygiene as, "a way of looking at things, a philosophy of life (rather than a refined clinical psychiatry)'. Therefore, an individual cannot be well adjusted without good mental hygiene.

A great deal of education from the child to the adult is to reduce reaction time, as seeing is a learned act, then our visual training which increases the ease and rapidity of vision, also greatly increases the rapidity of thinking.

In a number of previous papers I have stated that in my practice we use syntonic Procedure and other corrective procedures of visual training (Syntonic Orthoptics) together in the majority of cases. Now let us remember, that while visual training increases the rapidity of thinking as we increase the speed and accuracy and ease of vision, it seldom touches mental hygiene, and often increases mal-adjustment of the individual. By the addition of syntonic procedures (thalamic-somatic control, autonomic endocrine nervous system), and psychotherapy we are enabled to aid our patients to recovery, ocular, physical and mental; as well as high achievement levels of vision.

Rapidity of recognition (seeing) and rapidity of thought are increased by repetition, provided the repetition does not continue long enough to bring opposite forces into play. The classical asthenic type can be driven to exhaustion and fatigue, and further away from nervous balance and good mental adjust, by visual training without the aid of syntonic application.

Philip Eisenberg gives a balanced formula of behavior, Structure + Environment + Experience = Behavior. Remember, should any element of our formula be changed then the behavior would become different.

In a previous paper (Visual Normalization in Maturity, Syntonogram 1949), I give a plan or formula (adapted from Eisenberg) of visual normalization, <u>Structure</u> (body or eye, etc.) plus <u>Environment</u> (situation, society, racial culture) plus Experience (habits of vision, training etc.) equal Normal Visual Function.

Now, as an example, let us consider the case of N.M Case 1, February 1949, N.M. Extreme asthenic, age 26, "Very nervous, headaches, feels that vision should be trained to see equally well with either eye as it was a few years ago."

Let us construct our formula to simplify the case, first <u>structure</u> (body or eyes, etc.), the patient is asthenic: has had osteomyelitis with necessary surgery several times -- condition now negative; vision was 20/15 or better either eye until past three years, now vision, right eye 20/60 (second test 20/50). Left

eye 20/15; physical symptoms of frustration – twitch of shoulder – restlessness of hands – nervous laugh.

Next add environment (situation, society, racial culture) patient had been quite an out-door girl, grew up as a trick horseback rider, training fine western horses for rodeo and shows has always been a natural, use to riding in parades, the cheer of crowds, playing to grand stand, etc., intelligent, college studies easy, and with the drive made the highest of grades, desired to finish in veterinary medicine but married and took a responsible position in war plant work in last two years of war.

Then add experience (habits of vision, training, etc.), position required of working knowledge of mathematics and rapid critical seeing. Had vision training so could read well over a thousand words a minute with ninety percent comprehension. Mathematics mainly is simply a matter of the association of a set of ideas, then this vision training (by speeding up thought) reduced the time in associating ideas; and she could do her work with great rapidity and precision. The greater the amount of work that she could do, the greater the amount of work given her. Therefore, rapidity was increased to fatigue, a nervous system under a sympathetic drive as further "Keyed up" and driven to exhaustion.

Resultant Visual Function and Performance, had to quite work near close of war, became conscious of great fatigue and nervousness; vision of right eye became dim; headaches and insomnia.

Now let's add some of our case finding to the Resultant Visual Function, we find a difference in the vision of eyes of almost 49%, sometimes a greater percentage, suspenopia right eye when fatigued after reading speed tests. Reads 350 to 500 words min. according to physical fatigue, with poor comprehension. Positive fusional reserve (#16 finding), very, very low, Eso manifested at near (#13 finding.

As we think of our therapy and case management we immediately think of the Syntonic Frequencies that stimulate the parasympathetic and thereby have a relaxing effect, but let us remember that these frequencies brake or inhibit the sympathetic which is already in a state of almost complete exhaustion. I is easily understood that this patient must be treated with syntonic applications that, one time stimulate the sympathetic (for this branch of the nervous system must be built back to normalcy), and in the following treatment stimulate the parasympathetic nervous system.

The patient reaction in this case was most fascinating to observe, for five minutes of Syntonic Rx No. 1 or five minutes Rx 2 combination of frequencies caused the patient to perspire profusely and to feel very faint.

Syntonic Rx No 3 with a little training on the Rotoscope and several counseling appointments brought about an uneventful recovery. The counseling appointments brought were necessity to recovery to rebuild "ego consciousness of success" for we must remember her background in society.

In counseling I endeavor to do the work of the Christian counselor, and have found to be most helpful the writings and studies of Dr. V.C. Oltrogge. Two of these statements and Biblical quotations that I often use I will give you, hoping that they may be of value in your practice. "To the man who has accepted

Jesus Christ as Lord and Savior, God has this assurance, "For God hath not given us the spirit of fear; but of power, and of love, and of a <u>SOUND MIND</u>" (2 Tim. 1:7). His (the Christian's) fear over the physical and material needs of life, his need for <u>security</u> is met in the promise, 'My God shall supply all of your needs according to his riches in glory by Christ Jesus'".

The psychotherapy suitable to our professional work is in keeping with the very best of methods today, and is the direct or brief form of psychotherapy. We endeavor to aid the patient in a very few short appointments of counseling.

We cite a case in which several appointments in Christian counseling and syntonic orthoptics, together, brought nervous, mental and ocular balance to my patient.

Case Report No. 1

Syntonic Rx No. 1,
$$\ \omega$$
 or $\ \omega$ N $\ 5$ minutes or

Syntonic No. 2, $\alpha \delta$ 5 minutes

Syntonic Rx No. 3, NL 3 minutes

 $\alpha \lambda$ 5 minutes

 $\mu \delta$ 5 minutes

 $\alpha \delta$ 5 minutes

 $\mu \theta S$ 5 minutes

 θ S 5 minutes

Next treatment two days later:

N L 3 minutes

 $\alpha \omega$ 5 minutes

ω 5 minutes

 $\alpha \omega$ 5 minutes

ω N 5 minutes

and unsatisfactory reactions of $\,\omega$ or ω N $\,$ were corrected by

 δ N 5 minutes

CASE II, Patient Mrs. M.U., age 28, type A.S. one child. Complaining symptoms; Has glasses but must take them off when real tired, when does near work, feels as "knots in back of neck, frontal headaches", our formula; Structure (body, or eye, etc.) While wearing minus lens correction, patient should have lenses for near work only. Prescribed plus lenses combined with base in prism for near work. No lens correction for distance vision. Naked vision O.D. 20/25, O.S. 20/20 4, O.U. 20/15.

Environment, (situation, society, background, etc.) Not well as a child, poor start in health, couldn't sleep well, given a great deal of care by parents as only child. Insomnia and dizziness has continued to be present time, so nervous must take sedatives in order to sleep (Doctor's prescription). Otherwise, health good, now. Misses parents very much, her child is only grandchild and patients parents should be near grandchild, (states my patient).

<u>Experience</u> (habits, of vision, training etc.) Patient is assistant to husband, who is a photographer, does several hours of near work daily demanding critical seeing. The existing visual pattern can be typed as adductive fatigue with very low #6 or positive fusional reserve. Wearing an over correction with the existing pattern at near is responsible for original symptoms. The insomnia, dizziness and a great deal of the nervousness is due to an anxiety neurosis – a fear of insecurity held over from childhood. The nervousness is made worse by the minus lenses worn most of the time.

Six applications of Syntonic Rx No. 1 combined with short (ten min.) period of vision training, and several appointments of Christian counseling aided this patient to recovery.

In considering the completion of our formula <u>Resultant Visual Function</u>, it is significant to syntonists that 6 an exact, equal amount of base in and base out training on the Rotoscope was given. Visual performance now is good with a high achievement level.

This I believe completes my case of why we should within our practice work in this field of psychotherapy, and how we can aid our patients.

Dr. Frohman gives some advice to the psychotherapist that is of tremendous value to the vision specialist in this field of corrective visual care of the adult. The advice is this: "Upon discharge, the physician does not anticipate physiological perfection in the future. Similarly, the psychotherapist should not be embarrassed, and should avoid creating the impression that his work, even when excellently done, guarantees a result that will stand up 'forever' is the face of any future problem".

Nature endeavors to cling to a corrected or normalized pattern. Time is a great element in all of our visual care and psychotherapy, "the longer one goes without a reoccurrence of trouble, the less the changes are of future trouble". Therefore let us remember that old oriental proverb, "Time is a Gentlemen".

In passing to our conclusions, it is interesting to note another phase of the psychology of TIME, as example: A patient recently came in with a direct reference from a physician, who until this past year or so, seemingly had taken particular pains to speak ill of my work in corrective ocular procedure.

The physician knew that the patient (a very well educated man) was aware of his former dislike of personality and methods, said, "In the past I have not liked Dr. Mayers procedure of eye care, for he works with nothing that is tangible and in medical practice we want tangible aids--, but I have found that in certain cases his work is indeed beneficial, please report to him at once,".

Our mutual patient laughed with me as he told me this statement by the physician, for we both recognized that, "Time is a Gentleman".

CONCLUSION

With light there is knowledge, with vision there is intelligence, our work is with light and vision. By the aid of syntonic procedure (light frequency application) we normalize vision. Certainly by observation we are conspicuously in outstanding position to recognize the need of mental hygiene, likewise we have the means through which our patients can be aided to recovery.

In recent research group meeting one of our colleagues discussed the case record of a patient whom had had lenticular opacity and after an almost complete recovery the ocular condition remains with no <u>change</u> for a period of over five years.

The patient came to our colleague from a competent vision specialist and syntonist, a former member of the college, who had been unable to help or aid her visual condition.

Assuming the case management was similar in the prescribing of lenses, syntonic procedure, and other types of therapy, there was this great difference which accounted for the recovery: From the moment the patient entered our colleague's office, she was indoctrinated with good mental hygiene. Further, by careful observation our colleague was able to use the proper psychotherapy needed to make all corrective ocular procedures a success. She became a well adjusted person with good vision.

In 1995, Dr. E.W. Scripture, then Director of the Psychological laboratory in Yale University, gave us the basis of all scientific investigation with this simple illustration: "Eyes and No-Eyes journeyed together. No-Eyes saw only what thrust itself upon him; Eyes was on the watch for everything. Eyes used the FUNDAMENTAL METHOD of all KNOWLEDGE, OBSERVATION, OR WATCHING".

Dr. Walter C. Alverez made this interesting statement, "Dr. Ross, the great leader of English psychiatry, once said to me, he was grateful for the fact that he had learned almost all he knew from patients, many of them seen in his early general practice. He had thus escaped formal education in psychiatry and hence had escaped indoctrination with Freudian and other theories which he feared would have had a bad influence on his thinking and talking and writing. He feared that belief in strong theories would have closed his mind to what he learned from daily observation".

The 115 Psalm (entire chapter), gives a very definite description of those people who do not use their powers of observation and consequently can acquire no knowledge which is the acme of all scientific investigation. We might paraphrase the unscientific as those "Who observe not" because of "Lacking hearts to perceive, eyes to see, and ears to hear".

A part of the final instruction of our Lord Jesus Christ that His disciples might go about His ministry, "Teaching them to observe all Things" is meant for you and me, that we might "observe ad do".

Make psychotherapy and integral procedure in Visual Geriatric care.

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Case Report No. 2

Flash all frequencies, alter with:

 $\begin{array}{lll} N \ L & 5 \ \text{minutes} \\ \alpha \ \omega & 5 \ \text{minutes} \\ \mu \ \upsilon & 5 \ \text{minutes} \\ \alpha \ \omega & 5 \ \text{minutes} \\ \mu \ \upsilon & 5 \ \text{minutes} \\ \end{array}$

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This bibliography would be incomplete without mention of a great teacher, philosopher, physician and friend, whose teaching I constantly use in religious education and my daily practice, -- Dr. John I. Emig.

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