

“VISUAL NORMALIZATION IN MATURITY”  
PREVENTATIVE GERIATRIC APPROACH TO NORMAL VISUAL ACUITY

By Donald Mayer, O.D.

Part II

The Entity of Our Formula

Seeing is organismic, as Van Orden states, “We see with our whole being. We begin the seeing act in early fetal life. So much is written on modern optometric diagnosis, so much is being taught, availability of knowledge is so great, the sum of information of all procedures in applying visual science so large, that no attempt will be made to increase or alter our concept of diagnosis and corrective procedures.

Rather, let us think of the molar plan of our formula in a philosophical manner. Let us consider the “reality of intellect” as a great positive factor of being. We separate the component parts of our formula, thinking of them in relation to the intellect, that we may better consider the wholeness of the plan of vision.

Diagnosis is an art, one must make a conscious and constant effort toward improvement, toward perfection that is always beyond reach. Success in our field of diagnosis and satisfaction in practice is an outgrowth of your ability to develop with the progress of time. Change is constant, the capacity of the mind is unlimited; make a conscious effort toward growth of understanding that we may be better visual scientists.

Place emphasis on the love of your work. You must love your work to be really good in diagnostic and corrective optometry. Elbert Hubbard said “Get your happiness from your work or you will never know what happiness is.” You must have a most sincere desire to help people with their visual problems. You must like people and have a genuine inclination to like people better and understand them.

“People are on guard,” “We live within a shell,” “Let’s go beneath the surface,” and many other sayings, are the words of famous modern psychologists. A very early reference to a great major psychologist in “Understanding Human Nature”, is taken from the “Old Testament” when King Solomon asked of the Lord for an understanding heart that he might understand his people and rule in wisdom. We must strive to understand our patients to help them, and ever strive for progressive enlargement and improvement of our own capabilities. We are endowed with mind; mind is not physical but will expand through eternity. You have the power, by the Grace of God, to overcome the “inertia of human nature.”

So we leave the first part of our formula and examine the next component ENVIRONMENT.

ENVIRONMENT is often thought of with Experience, but remember, actually there is no line of demarcation any place in our formula. It is only for ease of understanding the wholeness of the plan of optometric diagnosis and procedures of recovery that we ever keep in mind the components of the formula.

Our colleague, Keith M. Walker, has had opportunity to make extensive investigations in clinical practice with large groups of industrial workers, who because of war work industry were taken from environments quite foreign to industrial plant work, and required to do near or close work of an inappropriate nature to both background and experience.

With the pressure of war time industry causing stepped-up nerve reaction, high wages, a possible laxity in duties, or at least a more narrow field of required duties than in civilian work, these people seemed to have very simple visual problems..

After the close of the war civilian industry became more strict, their jobs often more difficult and complicated, an industry assumed peace time activities and competition. Worry stealthily crept into the picture, causing frustrations and fears, as many workers were laid off. Visual problems became many and real, and chief among them, poor binocular localization or convergence insufficiency.

Thus illustrates the association of ENVIRONMENT and EXPERIENCE with a neuropsychiatric aspect.

Consider the case of the certified accountant, with a background of years of study in his field of endeavor, years of technical desk work, requiring critical seeing and a high level of visual performance, for which he had been trained and conditioned. This man was placed in the infantry of the Army. This patient structurally was also inadequate to the demands of the infantry, for being heavy and never having walked much, he promptly developed serious foot trouble.

The new environment and experiences definitely affected structure, which in turn affected visual function, for by the end of the war he had developed a chronic photophobia and a severe chronic conjunctivitis.

Acting subconsciously, the mental mechanism of resentment and blame (against the Army) caused some self pity, and the attitude had to be recognized and cast off, before his way of life could be reshaped and normalized.

I have stated that under EXPERIENCE are considered habits of vision, existing visual patterns, training, etc., and I have also stated that corrective phases of ocular care, visual training, etc., comes under this heading.

Let us think of our work in corrective optometry, Visual Training, Syntonic Orthoptics:

During the years of the recent World War II and the several years following, the writer has had the privilege of giving Visual Training (in the complete sense Syntonic Orthoptics) to a large number of candidates for special branches of our armed forces. Also, this afforded the special advantage of observing the lasting effect or permanence of this Visual Training, and further, observing the results of visual training of the type entirely (or nearly so) under conscious or voluntary nervous system control --- strictly a matter of conditioning reflexes.

If it were possible (which it isn't) to estimate the proportion of recovery or results, of syntonic application in relaxation to straight orthoptics in a given case, we could say that probably 80 to 85 per cent of the resultant pattern of correction is done syntonically, and perhaps 10 to 15 per cent of the corrected pattern of visual performance is due to straight orthoptics. For in my practice both procedures constitute syntonic orthoptics, and are used in every case.

Therefore, over a period of a little less than fifteen years I have made clinical observations showing that as we directly compensate the involuntary nervous system, and then condition the reflexes, the resultant pattern of correction or recovery quantitatively has a high degree of permanency.

Syntonic procedure is enhanced with time. The resultant effectivity of straight orthoptics decreases rapidly with time, as does any performance level dependent upon a conditioned reflex (voluntary nervous system control).

In a given type of case, practitioners of the healing arts may work along parallel lines, yet their exact procedures of treatment are seldom identical: Thus, your corrective ocular procedures may be different than mine yet, if the case is under proper management our work has a certain similarity in degree, and scope.

There is no substitute for knowledge, and there is no reason for any practitioner of our profession not being able to think his way through a given case in diagnosis, and then the various procedures of normalization or training to recovery.

Considering the last component of our formula, RESULTANT VISUAL FUNCTION we will have completion of our over-all plan of visual care, but remember the Intellect (conscious and sub-conscious) definitely is an accompaniment of every factor, Structure, Environment, Experience, and Visual Performance.

Every successful practitioner in complete optometric care is practicing psychology to a degree, and we must establish an awareness of the potential power of neuro-psychiatric control. Truly, this approach is a positive aid in practice. We may enter the Consciousness or a patient objectively by way of the nervous system (voluntary and involuntary) in syntonic orthoptics, as a physical aid in the reduction of tensions both physical and mental. We may enter the Sub-conscious as well as the Conscious Intellect by guided conversation, mental training, and re-education.

Certainly not all, but the great majority of your patients have some nervous disorder of a functional type or some emotional stress or conflict affecting vision, and you often aid them during the examination as they follow through observation examinations by the old “talking cure”. Increase the awareness of your various procedures in the therapy of relaxations.

The level of visual performance can be raised by the patient “helping himself” if given proper motivation. As an example of this, and also, showing the necessity of the Technician understanding and aiding in psychotherapy, let us review the following case.

H. N., a candidate for Navy R.O.T.C., on whom a vision development program (training) was being carried through. H. responded well but reached a point where the inertia of human nature slowed his progress of recovery. His Navy examination was near at hand.

My technician, Mrs. Hatta, said to him, “H., you can pass this test if you desire, you can do it if you want to. If you fail, you’ve willed it upon yourself, as we have given you all we can, and you can do it if you so desire. If you fail – you, and you alone, have done it, and if you win, it goes the same.”

The next day he could read the 20/20 letters five feet farther away. He passed his examination in fine order and is holding a high level of visual performance.

Visual Performance is greatly affected by the process of Self-Deception. The patient whose visual functions or performance is affected by self deception sincerely believes his condition is an actuality, and the logical result of what he believes to be logical “causes”.

As an example, I cite the case of the returned veteran, an Army officer in his late “thirties”, who said, “My depth perception is gone, everything in space is flat, as a result of battle fatigue and the responsibilities of war.” On a number of occasions he would describe the object although there would be a distance of eight or ten feet between the examiner and the wall.

By subtle means of measurement, the Technician found this patient had quite a high degree of depth perception and good depth throughout the space lattice.

When asked directly, “Are you becoming conscious of the improvement in your depth perception? There is an improvement of satisfactory degree do you realize this fact?” The answer is, “No, everything looks flat.”

Somewhere along the line of the unconscious association of ideas that caused his self deception, the patient also formed the idea of how his relief or recovery should take place. He feels that there must be a sudden reduction in nerve tension and his head will not longer ache or feel congested, and his visual difficulties will be quickly ended.

This patient has had many careful physical examinations and several months of therapy in mental hygiene (from the Army), but his deceptive neurotic manifestation now seems to be predicated on fear of recovery. It is probable that this patient will not be helped by our optometric service.

The value of suggestion is so great an aid in applied visual science (corrective optometry) that every one of us specializing in this field puts to work every day. Suggestion raises the level of Visual Performance and aids the patient in appreciating our service.

As an example, we have the case of the college instructor whose vision had decreased until she could no longer teach or drive her car. Deterioration of the central fibers of the optic nerve associated with lenticular opacity had lowered her vision to 20 per cent. When recovery of vision was between 85 and 90 per cent, this suggestion was made, “You can successfully pass any driving test right now.” Within two weeks the patient had established enough confidence in herself to attempt the examination. I gave her a letter stating the condition of vision as something material to “grasp” but also said, “There is no need to present or use this letter, so why show it?” The patient passed without the use of the letter.

There is a fine change in behavior, the patient radiates happiness. Whereas before securing her driver’s license, she was moody and felt depressed. Now, complete recovery will be more rapid.

### Conclusion

For the past twenty-five years Robert Bean has taught that the White Race is becoming more and more subject to emotional conflicts, less stable, and showing greater tendencies toward insanity. Since the

recent World War II, all psychologists and psychiatrists realize and teach that all the races of mankind are less stable, and becoming more so. The whole world needs training and therapy in mental hygiene.

Robert S. Bilhrimer, executive secretary of the Inter-Seminary Movement in the United States, recently stated, “In our country we find an increasing incidence of psychological illness, so that fifty per cent of the hospital beds, are filled with the mentally ill, and the stream of persons outside the hospitals who visit the psychiatrists’ office and the Pastor’s study, swells almost daily. Beyond this is the sudden mass who cannot lift themselves out of what they vaguely call unhappiness.

It is a known fact that the great THINKING of our time, the minds that control our DESTINY in finance, education, politics, culture, etc., advocate a “Return to Religion” as the answer to this growing uneasiness, much of which is mental, and requires a new world wide “Philosophy of Life, based upon the teachings of Christ”

Sadler states, “The God-knowing soul can face any situation of time and endure any experience of eternity – unafraid and with the spiritual equanimity of cosmic insight.” “The master technic of personality and adjustment ( on the higher levels of self-realization) is worship. Worship renews the spirit as sleep renews the body,”

“Side by side with the decline of religious life”, writes Jung, “the neuroses grow noticeably more frequent.”

“The teachings of Christ”, states Sadler, “are the greatest known destroyers of doubt and despair.”

We optometric specialists particularly in the field of Visual Geriatrics often can make use of this great motivation, “Faith in Christ, the Divine power.”

As we balance up our formula or over-all plan, we invariably find that new thoughts and new activities must be attained to replace incorrect visual and memory patterns.

The French psychologist Janet taught that relaxation through rest was valuable, but the individual had great resources of untapped strength, and under proper direction these resources of strength could be put into action and were as corrective of “fatigue” and all neuroses as any other possible therapy.

I have in mind the patient who sang well, and my suggestion that she arrange to sing in a church choir. Now her health has improved and she no longer has a visual problem. As her church activities have increased (and the burden is heavy), her health has improved, and her “Philosophy of Life” is now, indeed, a beautiful outlook.

I am sure that we all have had many patients with positive beliefs and faith in religion, and doing religious work, whose visual difficulties are amazingly simple, likewise I am sure that many practitioners in our field have seen religious therapy at work in correcting nervous and visual patterns of dysfunction. I have a deep conviction that active christian work will do much to aid the patient in retaining wholesome ideas of life, most desirable to environment reactions, and a high level of visual performance.

In our work as specialists in the care of vision, and again working in the specialized field of normalizing

and maintaining good vision in maturity, we often can aid the patient in tapping the great reservoir of strength that they have available for use in action, and this release of new energy is a positive factor in overcoming the neuroses that cause ocular dysfunction. There is no greater service than the guidance of the patient into fine christian work.

I believe that we are an important part of God’s plan of a design of better living, and that our work is on a most honorable, noble and high plane.

To illustrate the importance of this statement, I will conclude this discussion with the paragraph I used to open a recent forum talk before a group of well informed Bible Students.

Gen – 1-3 – And God said, Let there be light; and there was light.

Gen. -4 – And God divided the light from darkness.

VISION is almost a synonym for LIGHT; in fact, DARKNESS is an antonym for Vision.

And then our pledge – “Next to Life, God’s greatest gift to mankind is Vision. To this great heritage Vision. We Doctors of Optometry do sincerely and faithfully dedicate our Ministry.

And remembering that, God gave Solomon “The Wiseman” his choice of honor, wealth, power, long life, and victory over his enemies; but Solomon chose ”A wise and understanding heart” that he might discern between good and evil and judge is people rightly.

So we in Visual Geriatrics do pray for a “wise and understanding heart” that we may be able to understand our patients and aid them in living a more full and rich life, according to the plan of the MASTER.

Donald J Mayer, O.D., Ph.D.

6123 Magnolia Ave.  
Riverside, California  
1948

The above article by Dr. Mayer was read before the Visual Geriatric Society.

## BIBLIOGRAPHY

The reference of this bibliography were all used directly in the analysis, diagnosis, and care of the patients whose care records are outlined in this thesis, and in the direct preparation of the thesis.

1. Psychological Optics	Renshaw	1947
2. Psychological Optics	Grant	1938
3. Emotional Conflicts	Sadler	1947
4. Visual Skills	Barstow	1947
5. The Organism	Goldstein	1939
6. Gestalt Psychology	Koffa	1935
7. Human Variability	Dodge	1933
8. The Ego and Mechanism of Defense	Anna Freud	1946
9. Understanding Human Nature	Addler	1927-1947
10. Problems of Neuroses	Addler	1930
11. Why We Act As We Do	Eisenberg	1946
12. Eye Manifestations of Internal Disease	Tassman	1946
13. Physiology of the Nervous System	Kuntz	1934
14. The Autonomic Nervous System	Fulton	1943
15. Analytical Optometry	Skeffington	1947-1948
16. The Plant World	Gager	1933-1935
17. We See With Our Whole Being (American Journal of Optometry)	Van Orden	1948
18. The Embryology of Human nature	Gessel	1946
19. Doctors of the Mind	Bayon Ray	1946
20. The Holy Bible		
21. The Syntonic Principle	Spitler	1941
22. Emotions and Bodily Changes	Dunbar	1945
23. A series of Monographs by the writer (Mayer), American Journal of optometry, New Year Book of Optometry, Visual Digest, Syntonogram		1933-1947
24. Races of Mankind	Bean	1936
25. Geriatric Medicine	Stieglitz	1943
26. Practical Endocrinology	Goldzieher	1935