Introduction to Syntonic Phototherapy The Theory and Practice

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Historical Roots

- Blue and Sun-Lights, 1876; General Augustus Pleasanton, Blue stimulated the body's glands, UV could kill bacteria
- Blue and Red Light. 1877, Dr Seth Pancoast: red and blue glass to accelerate or relax the nervous system

Historical Roots

- The Principles of Light and Color, Edwin Babbitt, M.D. 1878: laws, science, philosophy, chromo-therapies, water
- Oculo-Physical Therapy for Optometry, 1930, Jack Kurtz
- Specto-Chrometry Encyclopedia, Dinshah Gadiali, 1933: color as chemical potencies, force fields, chakras

Historical Roots

- Harmo -Chrome Therapy, Carl Loeb, M.D. 1939: light as nutrition, psych-physical model, stimulate under-activity
- Chrome-Orthoptics, William Henning, O.D, 1938: palliate, stabilize, Rx lenses and prisms
- Secret of Light, Walter Russell, 1947,
 Electrical universe of rhythmic interchange

THE SYNTONIC PRINCIPLE HARRY RILEY SPITLER, D.O.S., M.D. 1941

Syntonic Phototherapy

- Syntonic phototherapy is defined as the application of specific light frequencies (color) into the eyes to restore syntony or balance in the autonomic nervous systems which is crucial in supporting visual function
- Often imbalances in the sympathetic or parasympathetic nervous system create vision problems that can be addressed by treating them at their source with light

Principle of Syntonic Science

- A fundamental, primary, or general law or truth from which others are derived.
- Light effects are physical, chemical, physiological, and psychological
- Based on the retinal-hypothalamic and subcortical pathways (non visual tract)
- Biophysics underlies bio-chemistry



HARRY RILEY SPITLER 1941

THE SYNTONIC PRINCIPLE

- 1. LIGHT BY WAY OF THE EYES
- 2. CONSTITUTIONAL TYPES: PYKNIC, SYNTONIC, ASTHENIC

Theory

Bodily health

Inherent electrical and energy systems

Physiology of eye for ocular pathology

Ocular function

Emotional centers

Syntonic Phototherapy Effects

Physical

Chemical

Physiological

Psychological

Conditions Treated

- Brain Injury: Stroke, Severe and Mild TBI
- High fever, toxemia, hypoxia, emotional trauma
- Pregnancy and birth insults
- Headache & Eye Strain
- Strabismus
- Amblyopia
- Eye Pathology: Glaucoma, ARMD
- Attention, Learning & Reading Disability

Conclusions of The Syntonic Principle

- There exists a close relationship between light frequency incident into the eyes and :
 - their responses: Treating through non visual tract for a wide range of visual disorders
 - 2. rate of cellular and tissue growth with light stimulating mitosis from the Pituitary. Cell is focus of light's impact

- 3.Physical development: bio-types and their modification via the midbrain and pituitary. Constitution affects light effects
- 4.Mass body potentials: electro-magnetic charge within the cell and between organs, ie eye(+), liver (-), driving biochemistry through ionization

Dual nervous system: neural and perineural (surround)direct current in eyes .04u amp.

- 5.Development of the biotype, modifying by epigenetics hormonal changes and ANS from light environment, direct current changing EMF, posture, functional tendencies for health and disease
- 6.Action currents leaving the brain: light frequency affecting EEG's, and overall brain energy

- 7. Functioning power of the pituitary: master gland directing systems overall hormonal actions in system interactions
- 8.Reproductive cycles: The ANS and Hormonal periods for pregnancy, PMS
- Dynamic tension of branches of ANS : It has a unique rhythms

- 10. Secretion of hormones by all co-acting and antagonistic endocrine glands with the pituitary, the ganglion cell receptors for melanopsin. The neuro-endocrine hormones are the keystone of the body's regulation
- 11.Light frequency and the restoration of health. All cells and systems are frequency driven

- 12.Degree of nerve irritability, thus modifying reflexes, affecting oxygen, blood flow, and Ph on a local level and sensory motor function via the thalamus, trigeminal and cranial nerves
- 13.Bodily health: hot/cold, red/blue, +/-,ANS balance, adjust nerves and spinal system, balance emotions through biophotonic regulation and communication

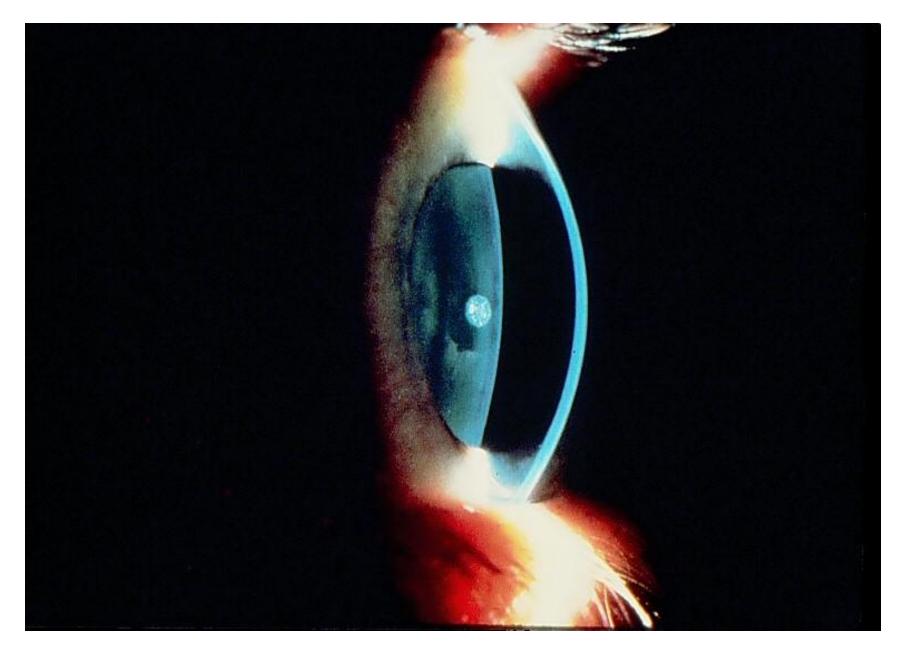
- 14. Nerve impulses from the eye and the state of tension in the ANS affect motor reflexes
- 15. Vitamin A content and the degree of dark adaptation. Low frequencies build charge to decrease leak of potential and decrease ionization for treatment of amblyopia and increase Vitamin A

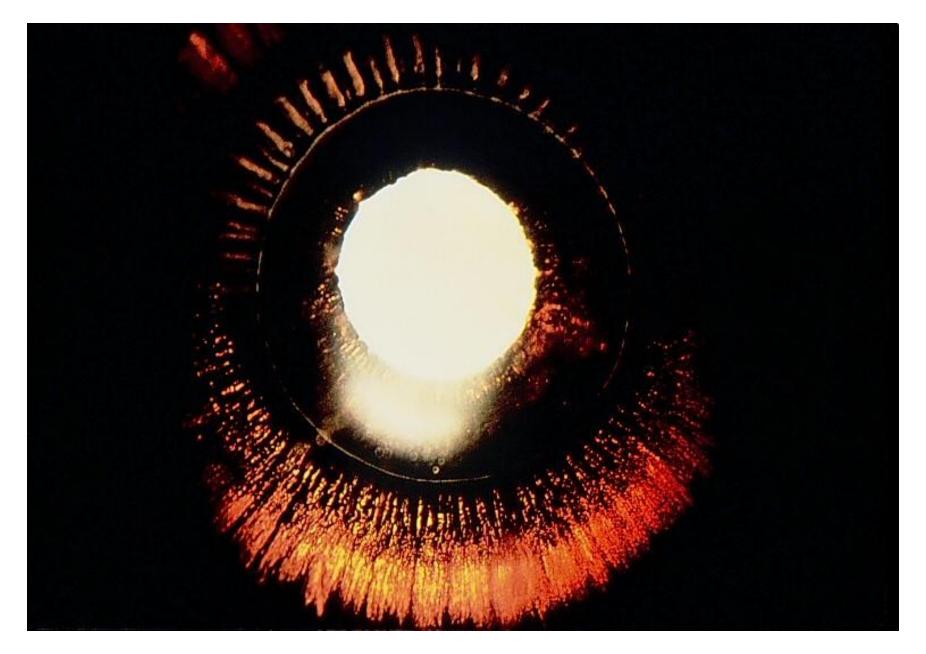
- 16.Perception of pain: change nerve tonus and anemia in brain pain centers in the thalamus
- 17.Relative response of smooth and striated muscles by changes in ANS. Such as the sympathetic stimulating the adrenals to affect ability to affect muscle contraction and endurance

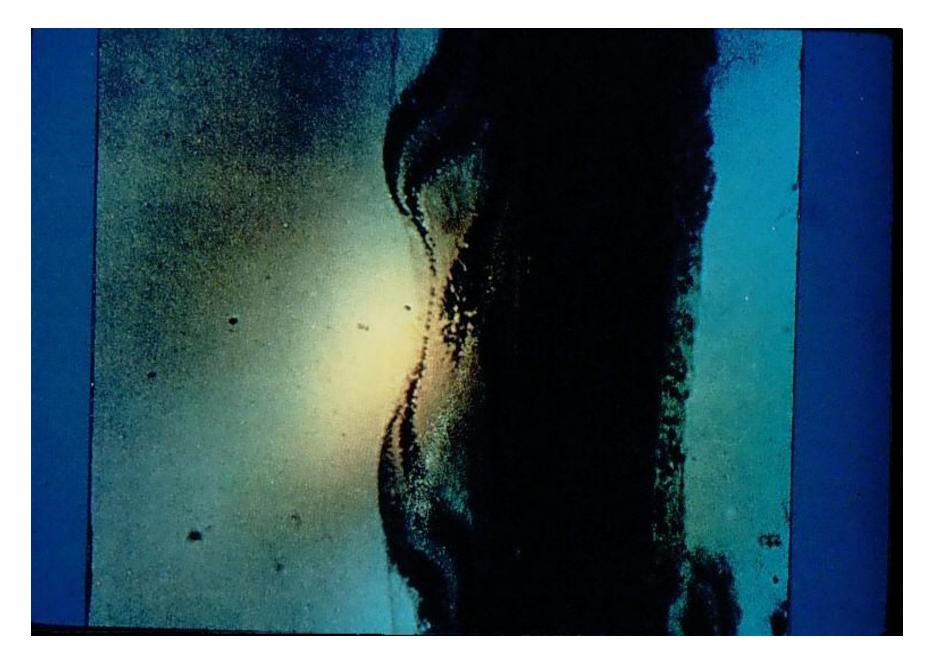
- 18. Produce Syntony of the ANS and integration of visual function
- 19. The ability to live depends on the syntony of the ANS in acute and chronic illness and this attainment of balance may be aided by light frequency in the eye.

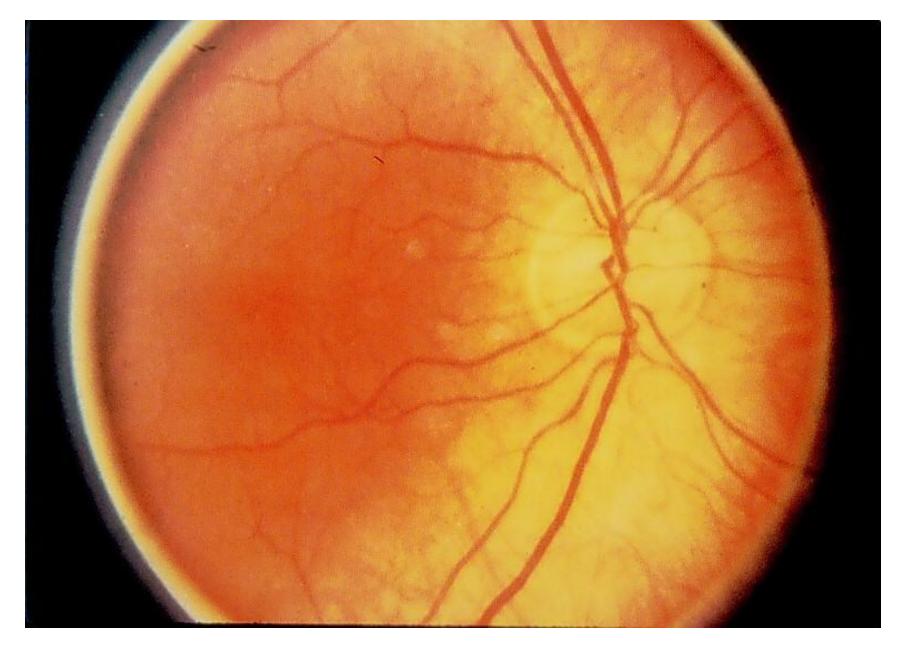
Syntonic Effectivity

- 3067 individuals were Synonized by Dr.Spitler for visual dysfunctions and cataracts
- Over 90% responded
- Over 80% had effective changes





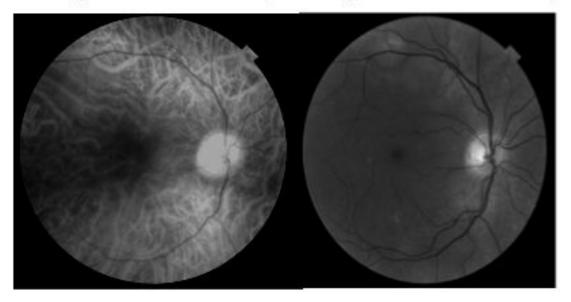






Blood flow into eye is approximately 80% choroid — 20% retina

Large Choroidal vessels compared to large retinal vessels of same eye

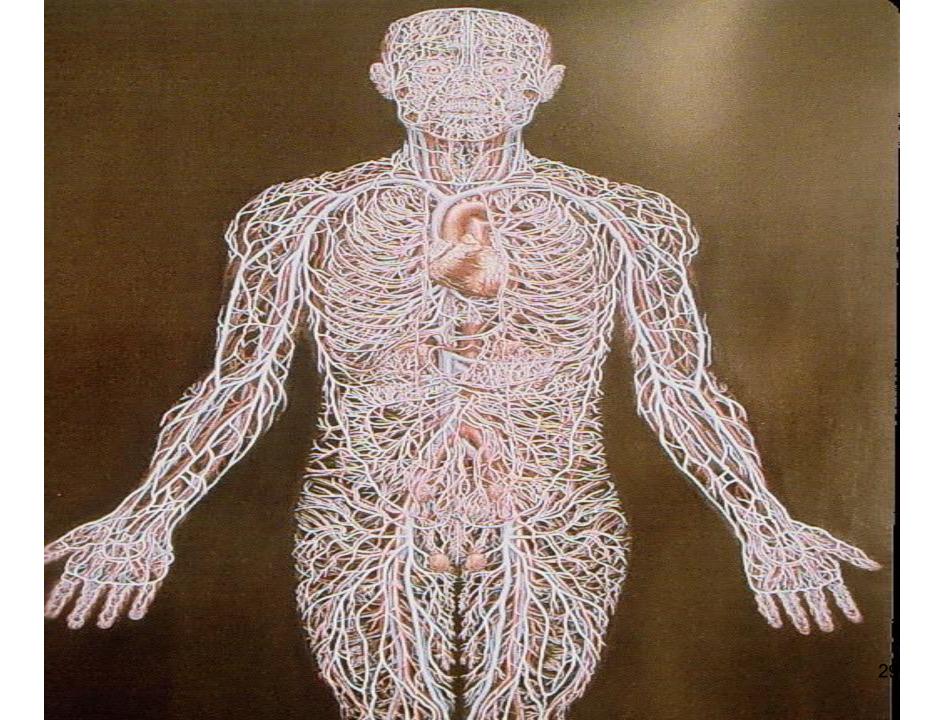


Photographs taken by Geoff Shayler with Topcon TRC NW6s



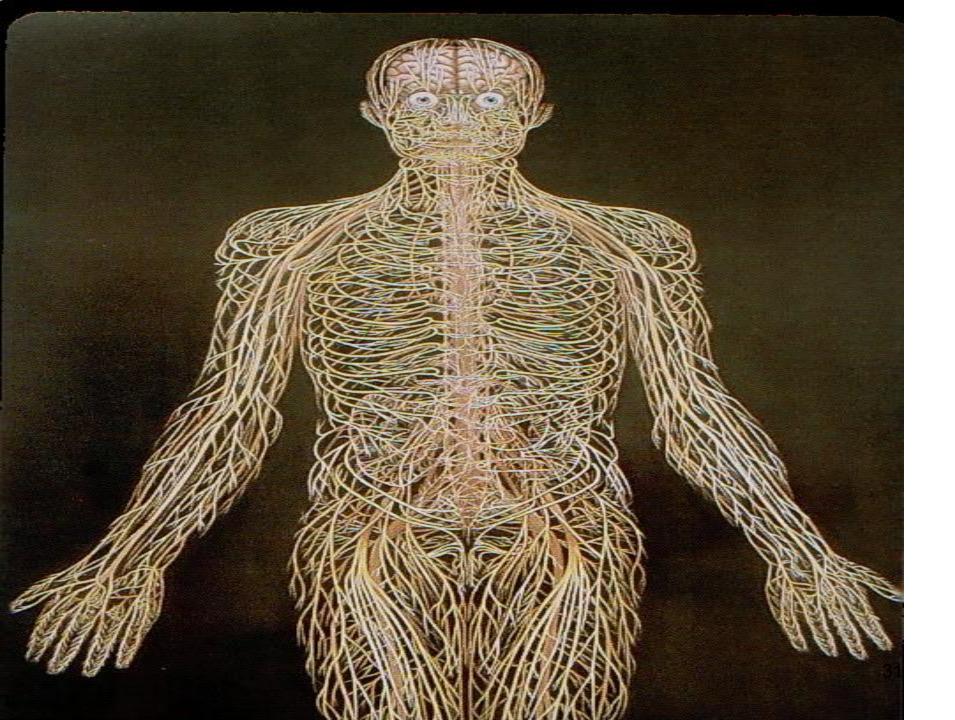
The Choroid

Functions: nourish and waste removal into the lymphatics Thermoregulation with melanin Changes in thickness change fovea for accommodation / emmetropization Intrinsic neurons controlled by the ANS Hormonal secretions Lines the brain producing cerebrospinal fluid



Cell Function

- Trillions of cells in the body
- 50 milion cells created per second
- Every cell has 100,000 biochemical reactions per second
- How could this be coordinated by chemistry or nerve pathways?
- Coordinated by light through water ,facia, tubulins within the nerves



Energy and Information

- Biophotons embed energy and information in energy traps which are released for physiological function and communication
- Light travels through liquid: blood, plasma, linked water, and the liquid crystal matrix.
- Electro= energy, Magnetic=information
- Information-energy is paired as a trap complex; shape in cellular matrix; energy as bio-chemical : DNA/ Mitochondria

Photobiology and Photobiomodulation

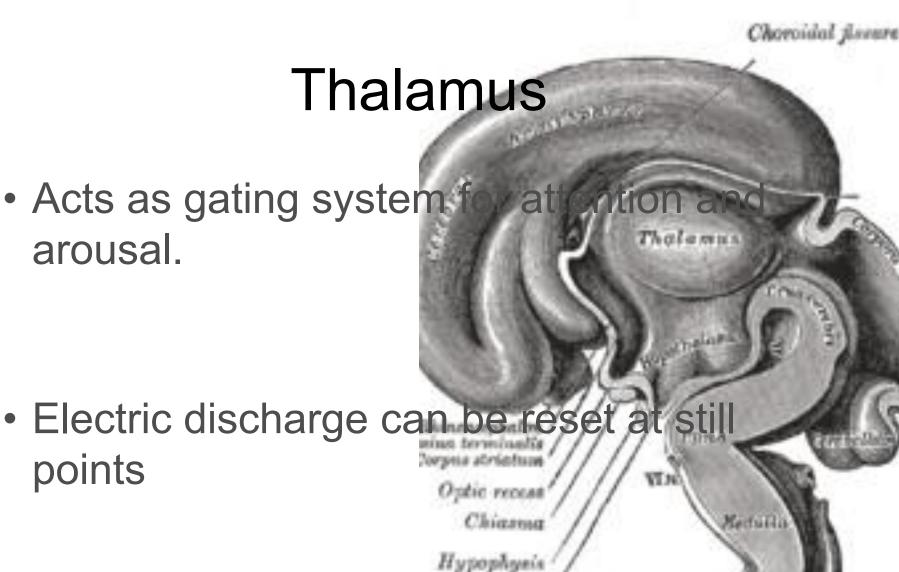
- American Society for Photobiology
- Mechanisms of action of light from molecular biology to cells and tissue
- Low level lasers and LED's
- Treatment from wound healing, detoxification, neuro-rehab, treating inflammation, infection, and DNA repair
- Quantification of the photic energy and the biochemical response: locally

Chromophores

- Cytochromes throughout the skin, tissues, blood
- Photons are absorbed and regulate biological and biochemical reactions such as oxygen consumption, and production of reactive oxygen species (free radicals), and nitric oxide.

NO, Hypothalamus, and the Pituitary

- The pituitary gland receives extensive NO-ergic innervation from the hypothalamus.
- NO modulates secretion of major pituitary stress hormones such as prolactin, luteinizing hormone, CRF, vasopressin, and growth hormone



• Light frequency can set points to stimulate or inhibit sensory and motor systems.

arousal.

points

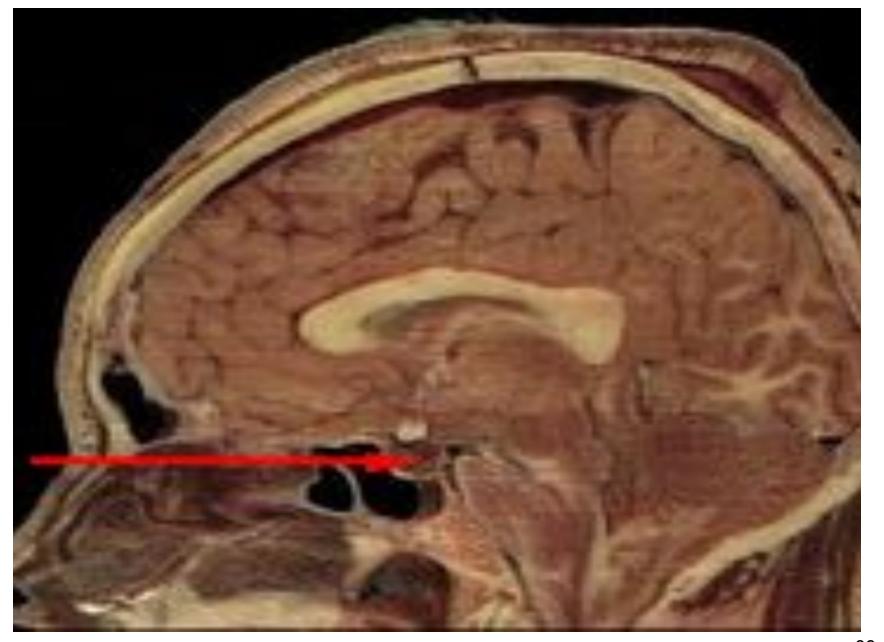


Thalamocortical Connection

Dysrhymia: Top -down vs bottom up, neurological and psychological effects and disorders

Nine major and thirty subnuclei for networking to executive function, auditory, dorsal attention, salience, sensory motor, lateral and medial visual networks

Networks also with basal ganglia and hippocampus with cortical regions



Hypothalamus

Continuous with the pituitary in 3rd ventricle Regulation:

Enteric ANS: GI, digestion and metabolism

Respiration

Heart rate

Emotions, sex drive

Body temperature, sleep cycles

Immune function

Theory

Spitler's 21 principles

The select application of visible light

Frequencies to balance:

Sensory motor systems

Endocrine systems via pituitary

Pineal and hypothalamus

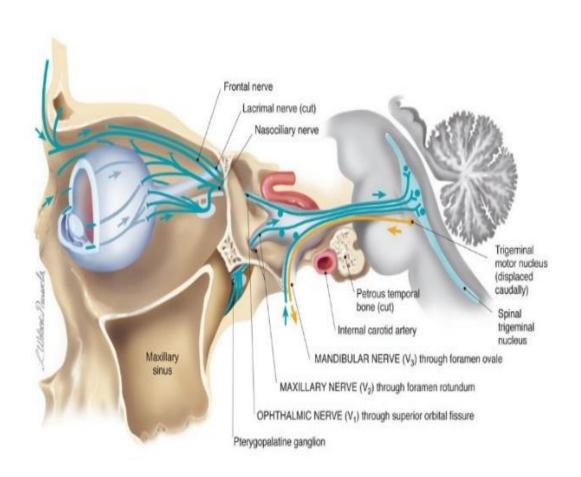
Network Physiology: How Organ Systems Dynamically Interact

 "Network Physiology aims to develop theoretical framework and a system-wide network approach to understand how horizontal integration of physiological systems, each with its own complex structure and mechanisms of regulation, leads to global behavior and distinct physiologic functions at the organism level". *

Structures

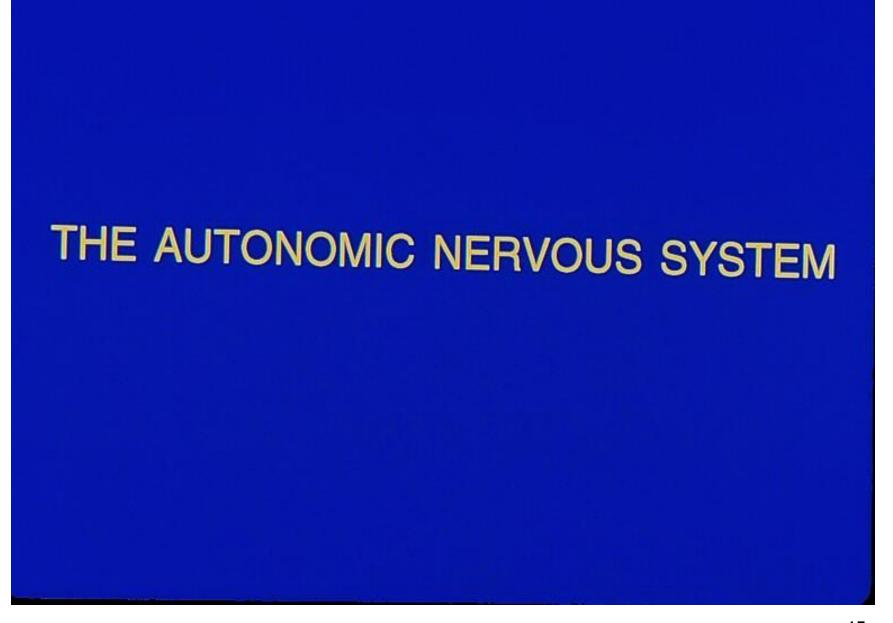
- Structural coupling with environmental stimuli changes connectivity by cybernetic feedback loops driven by auto poieis to create new pathways.
- The environmental inputs trigger change but does not direct it.
- Connectivity can change with every perception such as emerging vision each moment.

Pathways

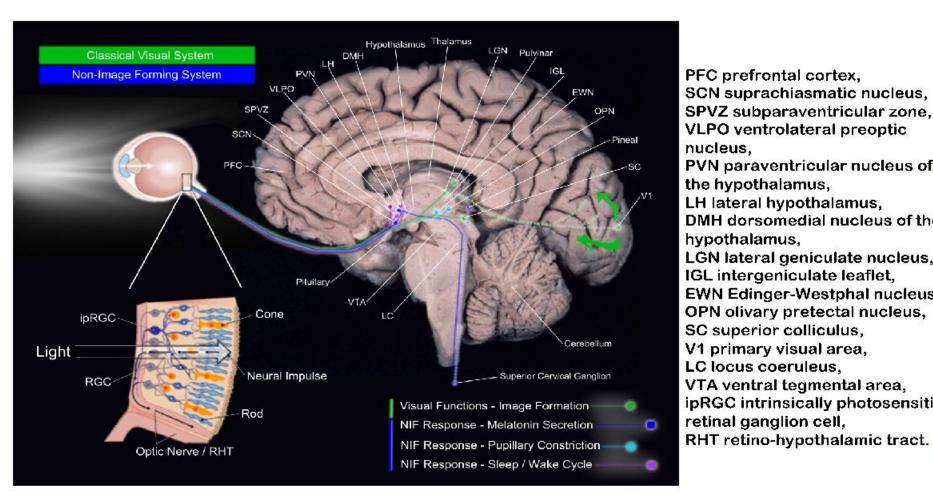


5th Cranial Nerve

- [Trigeminal nerve has relationships with the different systems:
- Reticular activator system (the system that helps us to react to an aggression) RAS
- Limbic system
- Postural system
- Neck muscles, MLF
- Spinal cord, VSR
- Oculo-motor or occlusion

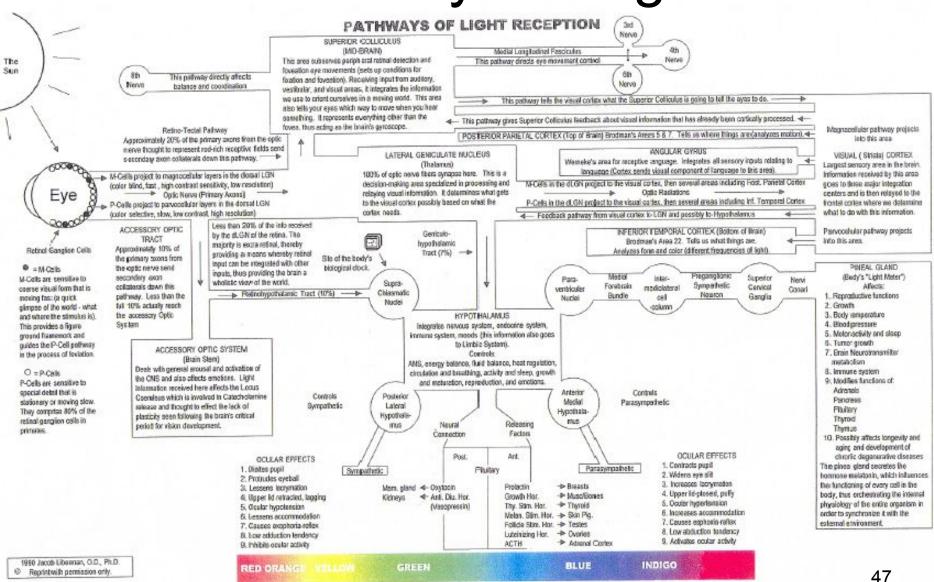


Light-Sensitive Brain Networks of the Classical and Non-Image-Forming Visual System



PFC prefrontal cortex, SCN suprachiasmatic nucleus, SPVZ subparaventricular zone. VLPO ventrolateral preoptic nucleus. PVN paraventricular nucleus of the hypothalamus, LH lateral hypothalamus, DMH dorsomedial nucleus of the hypothalamus, LGN lateral geniculate nucleus, IGL intergeniculate leaflet, **EWN Edinger-Westphal nucleus** OPN olivary pretectal nucleus, SC superior colliculus, V1 primary visual area, LC locus coeruleus. VTA ventral tegmental area, ipRGC intrinsically photosensitiretinal ganglion cell,

Pathways of Light



Polityoys, ved

SYMPATHETIC ACTIONS

DILATES PUPILS INCREASES TEARING INCREASES INTRA-OCULAR PRESSURE DECREASES ACCOMMODATION (FOCUSING) TURNS EYES OUTWARD DECREASES MUCUS, SALIVA AND DIGESTION DECREASES ARTERIAL DILATION **INCREASES PULSE RATE** INCREASES BLOOD PRESSURE INCREASES BLOOD SUGAR

SYMPATHETIC ACTIVATIONS

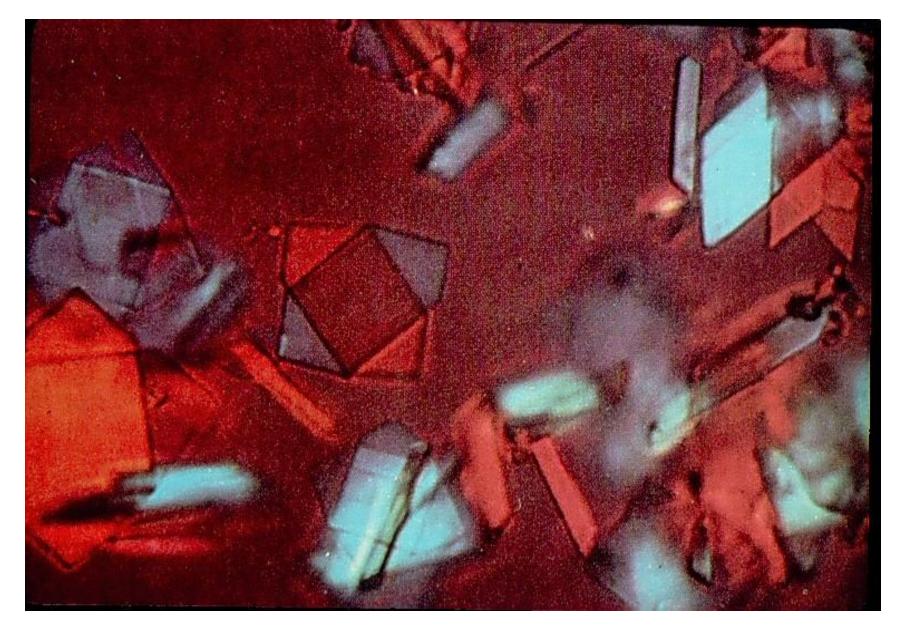
THYROID

ADRENAL MEDULLA

PITUITARY

GONADS

MUSCLES

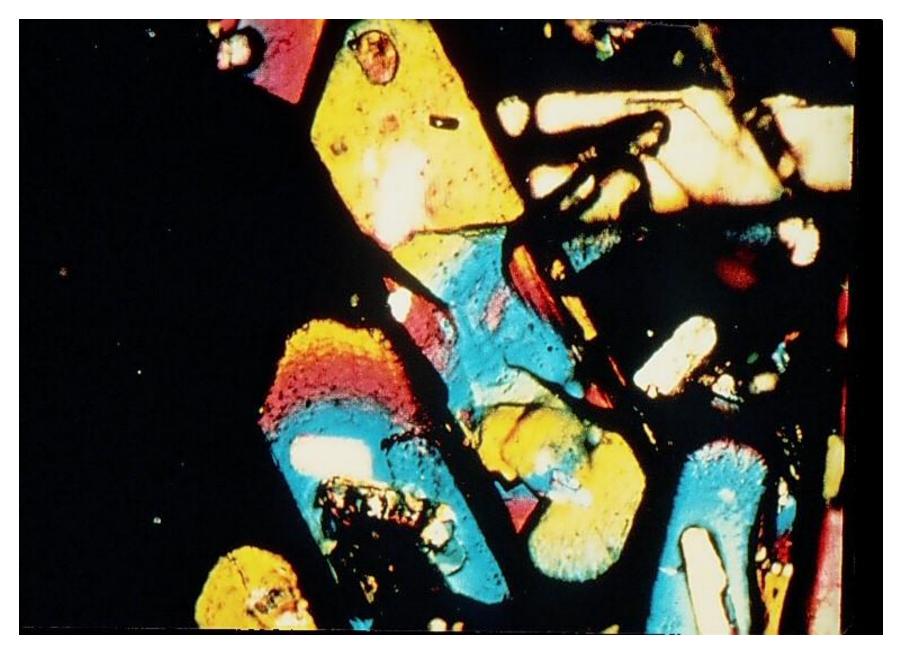


PARASYMPATHETIC ACTIONS

CONTRACTS PUPILS DECREASES TEARING DECREASES INTRA-OCULAR PRESSURE INCREASES ACCOMMODATION (FOCUSING) TURNS EYES INWARD INCREASES MUCUS, SALIVA AND DIGESTION **DECREASES PULSE RATE** INCREASES ATERIAL DILATION DECREASES BLOOD PRESSURE DECREASES BLOOD SUGAR

PARASYMPATHETIC ACTIVATIONS

PARATHYROIDS
ADRENAL CORTEX
DIGESTIVE TRACT
LIVER
PANCREAS
SPLEEN



Autonomic Rhythm

- The ANS system is not antagonistic but complimentary
- It is frequency driven and can be seen in real time with pupil responses and heart rate variability.
- The sympathetic and parasympathetic wax and wane with sensory and motor responses, seeking balance to external and internal stimulus

Parasympathetic	Sympathetic		
Originate in cranial & sacral nerve ganglia (craniosacral)	Originate in thoracic & lumbar nerve ganglia (thoracolumbar)		
Direct blood flow to the digestive tract & support of organ function	Direct blood flow to skeletal muscles		
Direct blood away from skeletal muscles	Direct blood away from the digestive tract & support of organ function		
Support central circulation, venous flow, the heart, & inner-flowing emotions	Support peripheral circulation, arterial flow, the capillary beds (isorings), & outer-flowing emotions		
State of rest & recuperation, eating & sleeping, storage of energy	State of alertness & activity, awake & stimulated, utilization of energy		
Basic ground of being, core of energy, undifferentiated whole	Pathways of flow, channels of energy, discernment of individual parts		
Primary relationship to front of body, pre-axial, flexor, adductor, & internal rotator muscles (Simultan, Condensing Yield—condensing & folding)	Primary relationship to back of body, post-axial, extensor, abductor, & external rotator muscles (Simultaneous Expanding Yield—expanding & unfolding)		
Inner focus, self-orientation	Outer focus, other-orientation		
Perception of darkness, weightedness, & depth	Perception of light, lightness, & superficial		
Affinities to blood, organs, pineal gland, & feeling	Affinities to cerebrospinal fluid (CSF), nerves, pituitary gland, & sensing		

A.N.S. Control: Frequencies for Local and Nonlocal Effect

- 1. Coupled reciprocal mode reciprocal inhibition
- Coupled non reciprocal mode mutual antagonism –
 coactivate or coinhibit
- 3. Uncoupled mode unilateral activity
 - i.e. Sympathetic: increases exophoria, relaxes accommodation

 Parasympathetic: increases esophoria, stimulates accommodation

ANS Actions

- Reciprocal: balance board, build or discharge energy for homeostasis in the face of constant internal and external stimuli
- Unilateral: Poly-Vagal System: The Vagus nerve dampens the sympathetics
- Isolated or sequestered
- Hyper-activation or inhibition to both branches

Body Psychotherapy

- Sympathetic arousal build charge which must be released or opposed by the Parasympathetic
- Body protects itself by muscle tension
- Too much tension reduces breathe, venous circulation, repressed motions: leading to anxiety, anger, fear.
- Over Parasympathetic leads to depression and lack of muscle tone.
- Seen in eye motor function: chronic vs. acute

Repression

- Inhibited sympathetic arousal can become isolated with anxiety left in the nervous system: Autonomic Splitting
- Ultimately leads to physiological and psychological dysfunction and pathology

Autonomic Dyscontrol

- Splitting
- Unstable
- Antagonism
- Hyper-activation or depression

Hyperactive Responses

- Loss of ability to respond to stimuli without excessive reactions: pain, numbness, rigid or flaccid muscles, ADD, ADHD, freeze response
- Splits in mental and motor systems
- Syntonic Phototherapy is in vital in neuro-optometric rehabilitation to stabilize the ANS

Mathematical Model of the ANS

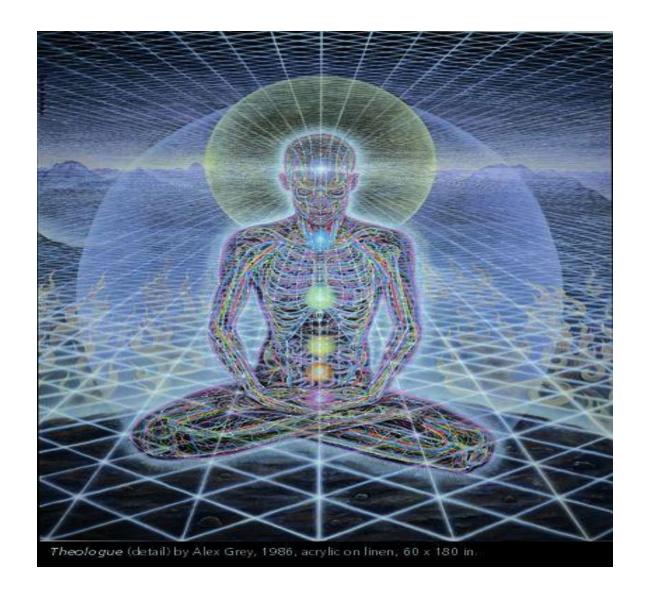
- Virtual Scanning Technology invented by Dr Grakov and elaborated by Dr Ewing
- Technology diagnoses and treats based on visual perception and the reactions within the body to color
- Reactions in the brain to light allows for a mathematical model of the ANS as the main neuro-regulatory system for homeostasis

The Role of Color Vision

- All disorders affect color vision: defects in both the DNA and protein expression at a molecular level releases bio-photons which regulate cellular communication via electron transport chains
- Color perception is used in elaborate algorithms that measure: blood glucose and pressure, temperature, sleep, acidity, digestion, osmotic pressure, posture
- Scans are produced that treat over 100 disorders.

The Complexity ANS Models

- The Autonomics show a complex and layered energetic system
- Balance or homeostasis results from coordination within physiological networks and then co-ordination between a multitude of networks
- The ANS appears to be the chief regulator via the nerve and endocrine organs.



Ocular Function

Eleven frequencies to treat binocular and sensory motor conditions

Visually related, attention and memory disorders

Accommodation and convergence problems

Ocular pathology

Asthenopia and headaches

Closed head injuries

Visual field constrictions and defects

Modern Syntonic Optometry

History: head trauma, fever, ear infections,

toxicity, stress

Pupil: Alpha Omega

Motility: Jerky, erratic

Modern Syntonic Optometry

Analytical: Constricted findings, loss of

sensitivity, low recoveries

Visual Fields: Generalized constrictions of form and

color in kinetic testing, enlarged blind

spots.

The Pupil

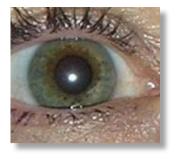
One of the most sensitive measures of ANS activity

- Window to the Soul
- Portal of energy for Reception and Projection
- Portal through which we interact with our world
- Non-verbal Communication and strong emotional indicator.
- Reception of nutrition



Reactions Alpha-Omega Pupil

Part 1



- An Alpha Omega Pupil is the abnormal re-dilation of the pupil during direct, constant light stimulation.
- Unique to the practice of Syntonics
- First suggested as a term by Dr. Paul Johnson in 1934.
- The abnormality is brought to normalcy with phototherapy treatment
- There is an inverse relation between the size of the functional visual field and the length of time of re-dilation of the pupil

Measurement Alpha-Omega Pupil - John Pulaski 2006 -



Observation and Recording of AO Pupil

- Time to release
- Amplitude of release
- Reactions after initial release fluctuations
- Change in response with repeated stimulation
- Sensory reactions tearing, pain, etc



Grading Standardization Alpha-Omega Pupil - John Pulaski 2010 -



GRADE	RELEASE Time	FLUCTUATION	AMPLITUDE
Normal	≥ 7 seconds	Trace	Trace
1+ AO	4-6 sec	Moderate	Mild
2+ AO	2-3 sec	Marked	Mild-Moderate
3+ AO	1-2 sec	Mild-Moderate	Moderate
4+ AO	<1 sec	Mild	Large

The alpha omega pupil function



To administer, the test, a penlight is pointed directly at the pupil of the right eye while the patient fixates a distant non-accommodative target.

Normally when the sympathetic and parasympathetic systems are in balance, the pupil will constrict and maintain that initial constricted size for about 15 seconds if the light is not varied.

With an Alpha Omega pupil the pupil will constrict and then start to dilate back again. The quickness and amount of dilation will depend on how dominant the sympathetic system is over the parasympathetic.

I usually record the size of the pupil before the light is directed at the eye, the size to which the pupil constricts, the number of seconds before the pupil starts to dilate and the size dilated back.

A pupillary exam should include the determination of size, shape and position of the pupils under standardised (light and dark) room conditions for your office

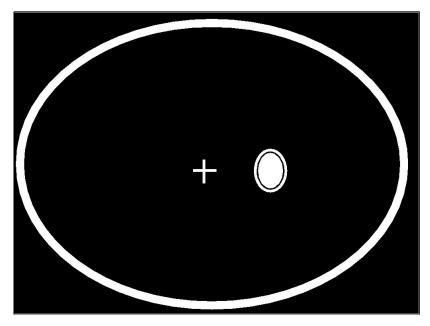
Spitler and Kretchmer

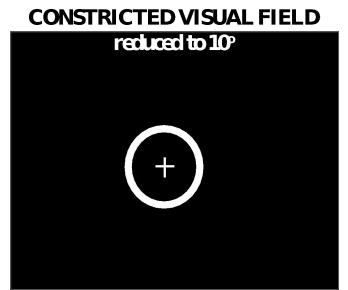
- Asthenic-Pyknic-Syntonic as ANS dominance
- Personality-Facial & Body Signs-Functional Tendencies-Elements-Dominant Frequencies
- Mental and physical dominance
- Balance by activation or inhibition of sympathetic and parasympathetic
- Facial characteristics for action and eyes for the mind
- Facial changes over time: mouth, jaw

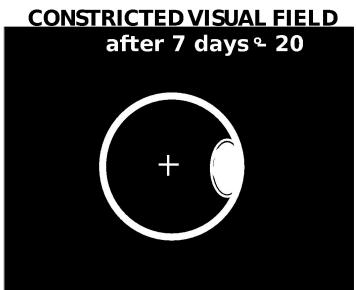
Nascentization

- To disrupt chronic adaptation and disorganize to create new regulation
- To make susceptible or increase sensitivity to the therapy
- Historically put red on non-dominant eye for nonlocal cases
- Use red or blue to break suppression and increase motor responses

NORMAL VISUAL FIELD

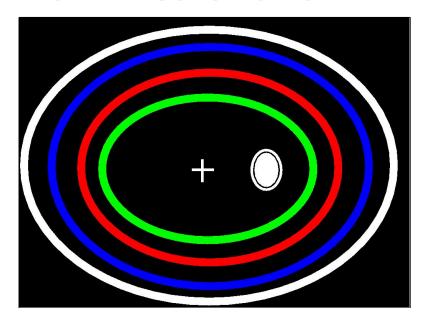


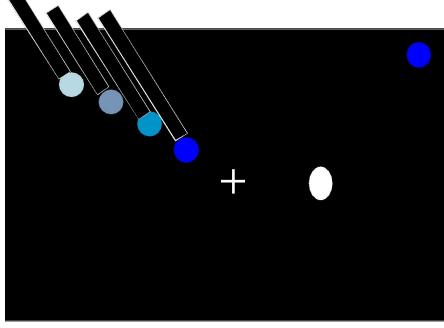




Color Visual Fields

NORMAL COLOR & FORM FIELD





Kinetic Visual Fields

Visual Field on Campimeter



Color Fields

- Measure disturbed function due to stress, trauma, and toxicity.
- Green: focal infection, grief, anger, bitterness, loneliness.
- Red: Systemic or organic disorder, insecurity, overindulgence, abuse of self
- Blue: Heart and Adrenals, Thymus, energetic representation of feeling and emotions, spirit, self knowledge.

Color Fields, Intoxication, and Reading Disability

- Sarah Cobb, Journal Editor, Journal of Optometric Phototherapy
- Dr's Webb and Brombach wrote as early as 1924 of enlarged blind spots in reading disabled children, with slow fixation, word recognition, perception all limited by central field constrictions.
- Toxicity first depresses the color fields, then form fields and spectral sensitivity

Effects of Filters

Red (sympathetic) Sensory stimulant

Orange Motor stimulant

Yellow Intense motor stimulant

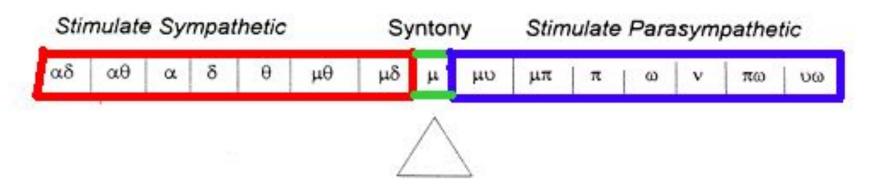
Green Equilabrator for physiological balance

Blue Sensory depressant

Indigo Motor depressant

Violet (parasympathetic) Intense Sensory depressant

Balance Board — general considerations



Red end of spectrum= sympathetic stimulation
Blue end of spectrum= parasympathetic stimulation

RED

STIMULATES SENSORY NERVOUS SYSTEM
LIVER BUILDER AND STIMULANT
INCREASES BLOOD COUNT
INCREASES CIRCULATION
CAUSES EXPULSION OF DEBRIS THROUGH SKIN

GREEN

CEREBRAL EQUILIBRATOR
PHYSICAL EQUILIBRATOR
PITUITARY STIMULANT AND EQUILIBRATOR
GERMICIDE, DISINFECTANT, ANTISEPTIC
STIMULATES REBUILDING OF MUSCLES AND TISSUES

VIOLET

SPLEEN BUILDER AND STIMULANT
DECREASES MUSCULAR ACTIVITY, INCLUDING HEART
LYMPHATIC GLAND AND PANCREAS DEPRESSANT
PROMOTES PRODUCTION OF LEUKOCYTES
TRANQUILIZER

"WHEN THE BODY IS IN A NORMAL CONDITION, IT
MAY BE ABLE TO FILTER OUT FROM THE WHITE LIGHT
(OR SUNLIGHT) WHATEVER COLOR VIBRATION IT NEEDS.
HOWEVER, IF A PERSON IS NOT IN NORMAL HEALTH,
THE NECESSARY COLOR MUST BE SUPPLIED."
- C.G. SANDER, 1926

Disease

- Disease or disharmony is an imbalance between: hot/cold, red/blue, electro+/electro-, the ANS and alkaline /acid
- Color and electo-magnetic therapy can restore these balances

Light Power

- Stimulates inherent healing power
- Reconditions whole eye
- Addresses constitution
- Protects the eye
- Strengthens retina, EOM, photoreceptors, optic nerve

Treatment

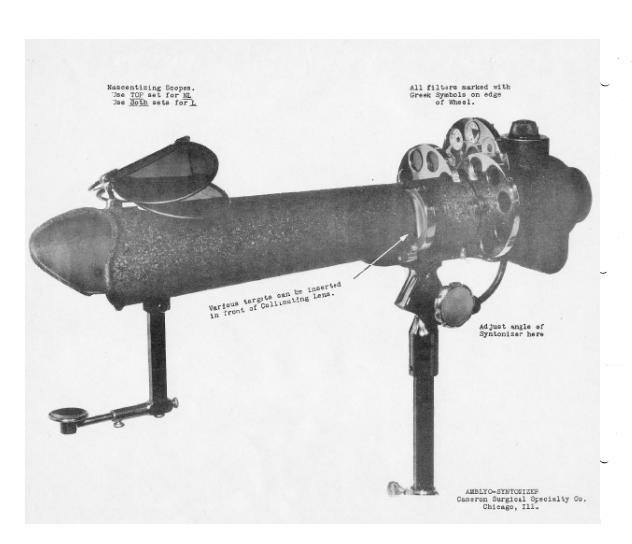
Filter combinations for 20 minute duration

3-5 Times per week

20 Sessions

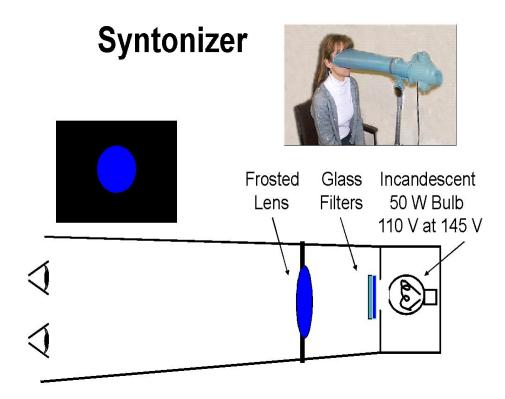
Progress evaluations including analytical tests and fields every 6 to 8 sessions.

Original Syntonizer





The original



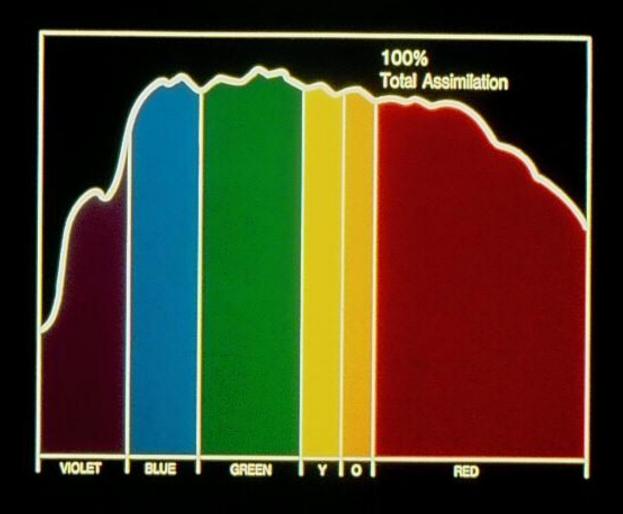
ARNDT'S LAW OF PHYSIOLOGY

"MILD STIMULI WILL EXCITE PHYSIOLOGICAL ACTION,
MODERATE ONES WILL FAVOR IT, BUT STRONG ONES WILL
RETARD THE ACTION OR ABOLISH IT ALTOGETHER."

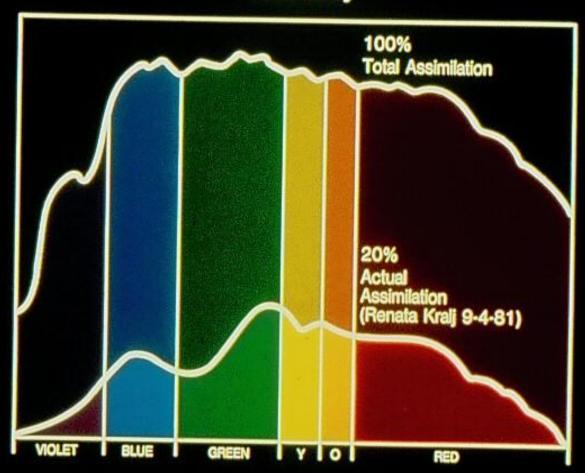
Instruments

- Syntonizer: Built by Cameron in the 1920's
- Downing: Photron Light Stimulator
- Liberman: Spectral Sensitivity Trainer
- Searfoss: Photon Wave
- Ryberg : Monochrome Dome
- Multi-sensory: Bolles, Martel's Sensora
- Syntonizers by Dr.'s Grebevksi and Curtis

Spectral Assimilation

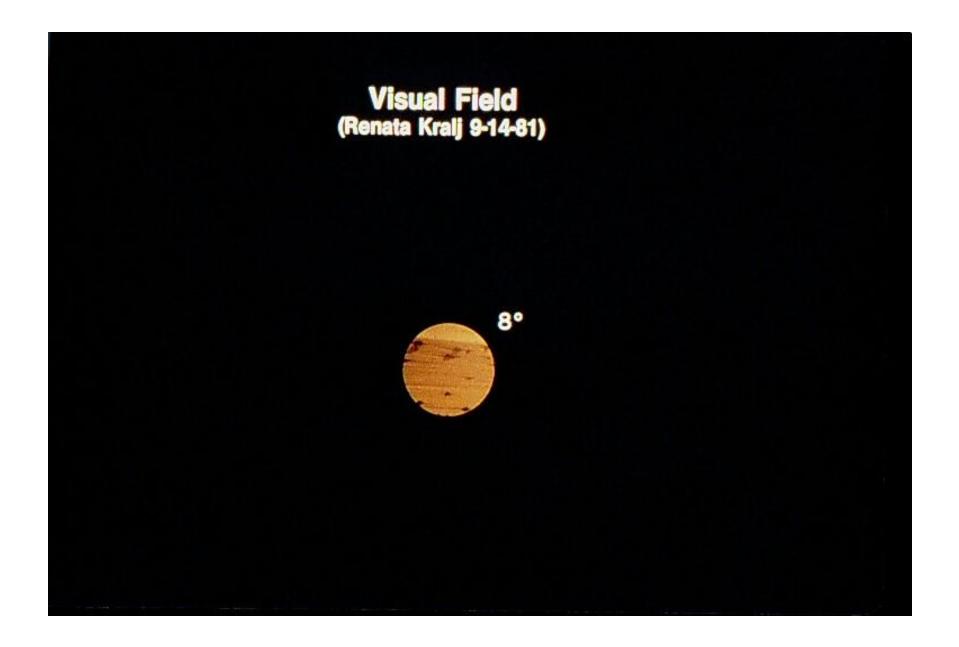


Spectral Assimilation Deficiency



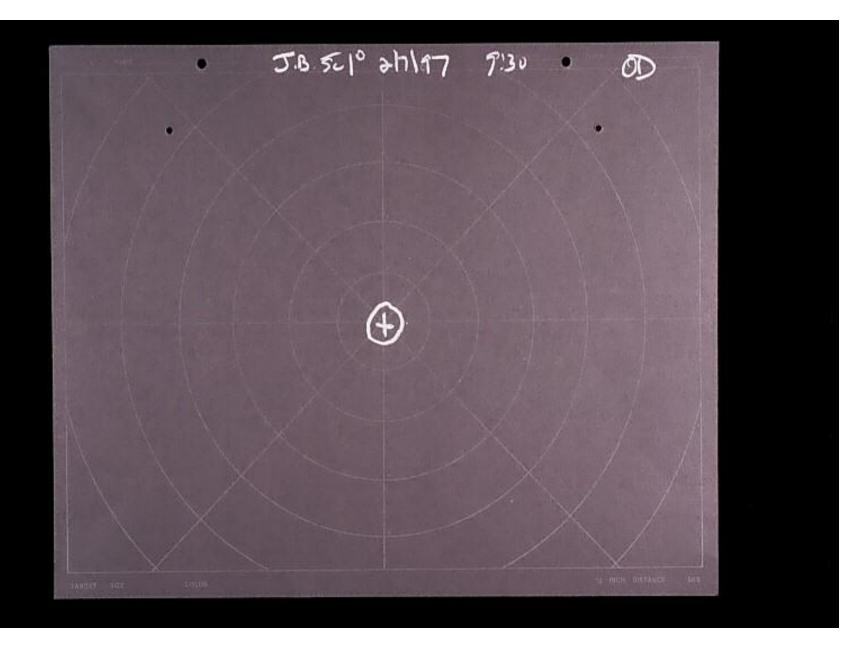






Case illustration

- Female child age 6 who was failing in school and could not learn to read.
- Severe hyperactivity and very aggressive
- A history of toxic exposure by mother during pregnancy
- History a continual head banging on a daily basis
- Diagnostic exam revealed very constricted visual fields, poor fusion,tracking and accomodation



Treatment

- Treated with 10 minutes of ruby light followed by 10 minutes of yellow green light 3 times per week for 20 treatments.
- Ruby in Syntonic therapy is an emotional stabilizer.
- Yellow green is a detoxifier and physiological stabilizer

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Outcome

- Visual fields have expanded and normalized, visual skills WNL
- The hyperactivity was gone and she began to read and school performance was up to grade level
- She began gymnastics with great enthusiasm
- Parents were thrilled to have their daughter be a loving and gentle child

BASIC SYNTONIC SYNDROMES

"Lazy Eye Syndrome"

(Convergence Excess)

Red-Orange Alpha/Delta αδ

amblyopia, eso, poor accommodation

"Chronic Syndrome"

Yellow-Green Mu/Delta μδ physiological, toxic, neuroendocrine, chronic imbalance, allergy

"Acute Syndrome"

Blue-Green Mu/Upsilon μυ recent head trauma, high fever, inflammation, anoxia, swelling, headache, monocular diplopia

"<u>Pain Reliever</u>"

Indigo Upsilon/Omega υω pain, headaches, asthenopia, exo

"Emotional Fatigue"

Ruby Alpha/Omega αω poor coping, mood swings, αω pupil, frustration, adrenal fatigue

Two New Syndromes (Collier)

"FIGHT-OR-FLIGHT SYNDROME"

OMEGA-N WN

Extreme fatigue or hyper-irritability. Most frequently seen in children with Learning Problems, Social Problems, ADHD, ADD, and Stress-Related Gross & Fine motor problems.

"HYPER-HYPO" SYNDROME

PI-OMEGA Πω

Hyper- or Hypo- phoria or tropia at far and/or near (often only at near). Look for head-tilt. This individual may also exhibit extreme fatigue or hyper-irritability.

Syntonic Syndromes

Mu Upsilon / Blue Green Syndrome (Acute):
Pain swelling, needing palliation, parasympathetic

Mu Delta / Yellow Green Syndrome (chronic):

Glandular imbalances, toxemia, needing physiological balance

LEMON

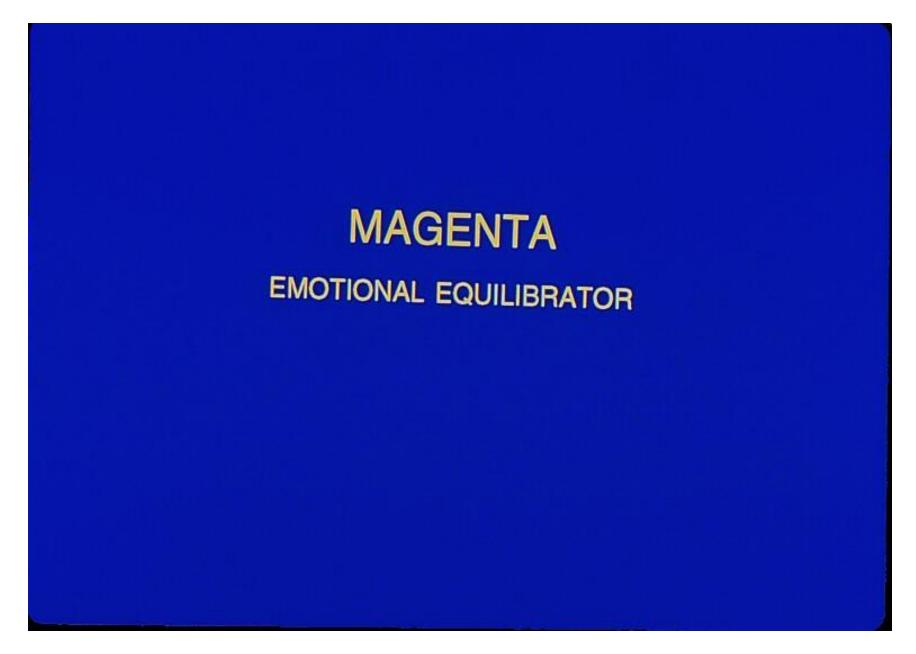
"CHRONIC ALTERNATIVE" PROMOTES HEALING IN PERSISTENT DISORDERS DISSOLVES BLOOD CLOTS **EXPECTORANT BONE BUILDER BRAIN STIMULANT** THYMUS BUILDER AND STIMULANT MILD DIGESTIVE SYSTEM STIMULANT

Syntonic Syndromes

Alpha Omega / Red Indigo Syndrome (emotional Fatigue):

Stress and emotional trauma

Alpha Delta / Red Orange Syndrome (Lazy eye):
Esotropia amblyopia, requiring higher sympathetic arousal





Mu-Delta (μδ)Syndrome - Chronic Syndrome

- Description: for an individual with chronic health problems due to glandular or organic imbalances, toxic conditions or a past traumatic event.
- Symptoms include: general fatigue (780.7), vision system loses stamina and speed, reduced peripheral vision, asthenopia (368.13), headache (784.0), orbital pain (379.91), photo-phobia (368.13), transient blur (368.8), weight loss.
- Diagnostic factors include: constriction of the visual fields for form and/or color (368.45), alpha-omega pupil (adrenal exhaustion), esophoria (378.41), low recoveries on ductions (especially base in), embedded vision pattern, esotropia (378.00), convergence excess (378.84), accommodative insufficiency (367.5) and excess (367.53), reduced oculomotor skills (794.14). Acidity in aqueous, reduced red/ green fields, interlacing fields, reduced blue field indicating liver involvement (toxaemia), calcium deficiency, under-function-pale, flaccidity, acid pH.





Mu-Upsilon (μυ) Syndrome - Acute Syndrome

- Description: for an individual with acute problems relating to recent head trauma, anoxia, stroke or high fevers. This person needs palliation and is often suffering from headaches, hypersensitivity or pain. This syndrome requires depression of function or parasympathetic activation to promote healing.
- Symptoms include: diplopia (binocular and monocular 368.2), headache (784.0), inflammation or "itis", transient blurred vision (368.12), asthenopia (368.3), orbital pain (379.91), abnormal posture (781.9), vertigo (780.4), motion sickness (994.6) and excess alkalinity.
- Diagnostic factors include: high exophoria (378.42), exotropia (378.10), convergence insufficiency (378.83), enlarged blind spot (368.42), constriction of the field (368.45), visual field defects such as sector losses or monocular diplopia in the field (368.4), accommodative insufficiency (367.5), deficiency of smooth pursuit movements (379.58) and alpha-omega pupil (794.14).





Alpha-Delta (αδ) Syndrome -Convergence Excess Syndrome

- Description: for an individual who is cross-eyed or has amblyopia.
 This person may be parasympathetic dominant, exhibit over-flexion; body and eyes turned in.
- Symptoms include: reduced acuity in one eye, uncoordinated movement (781.3), poor depth judgement, head tilt/turn, diplopia (368.3), Loss of peripheral vision, tunnel vision.
- Diagnostic factors include: esotropia (378.00), amblyopia (368.00), esophoria (378.41), suppression of binocular vision (368.31), field constrictions (368.45), abnormal retinal correspondence (368.34), deficient vergence abilities (368.33), subnormal accommodation (367.5), excess calcium in ocular media, low thyroid (mental sluggishness, listlessness, slow pulse, weight gain, low metabolic rate).





Alpha-Omega (αω) Syndrome -Emotional Fatigue Syndrome

- Description: for an individual tending toward emotional exhaustion, mood swings, over stress, negative emotional affect, visual stress, frequently seen in children. This individual may also exhibit extreme fatigue or hyperirritability.
- Symptoms include: photophobia (368.13), transient blurred vision (368.12), asthenopia (368.13), abnormal fatigue (780.7), headache (784.0), dizziness (780.4), frustration, allergies, asthma, fluid retention.
- Diagnostic factors include: Alpha-Omega pupil response, low breaks and recoveries in ductions, especially adduction (368.33), fatigue exophoria (378.42), adrenal exhaustion, pelvic or sexual tension, reduced ocular motor skills (794.14), subnormal accommodation (367.5) in myopia, constriction of visual fields (368.45), constriction of blue color field, heart involvement, hyperthyroid (mental) hyperactivity, weight loss, rapid pulse, tremors, high metabolism).



Affect Regulation in the Origin of the Self by Alan Shore

- The neurobiology of emotion
- The ANS and its neuro hormones wire the chemical events that mediate behavior
- The frontal orbital cortex is command center with the ANS coupled with dual limbic pathways: poor ANS regulation results in compromises the immune function, peripheral vision and brain electrical coherence, P.T.V.S.



Pi-Omega (πω) Syndrome – Hyper-Hypo Syndrome

- Description: for an individual tending toward emotional post traumatic with head-tilt component and social exhaustion, mood swings, over stress, negative emotional affect, visual stress, frequently seen in children, males after trauma or high stress circumstances and females with hormonal complaints and irregular menstruation's. This individual may also exhibit extreme fatigue or hyper-irritability. There is always a vertical phoria component involved, it can be for far or/and near.
- Symptoms include: photophobia, transient blurred vision, asthenopia, abnormal fatigue, headache, dizziness, vertigo, motion sickness, frustration, allergies, hormonal disorders, auditory exclusion, tunnel vision, shaking.
- Diagnostic factors include: Hyper- or Hypo phoria for far and or near, often only for near,
 Alpha-Omega pupil response, low breaks and recoveries in ductions, can be both or
 specifically low in abduction or adduction, fatigue exophoria, fight esophoria, reduced
 oculo-motor skills, subnormal accommodation, constriction of visual functional fields.
 Enlarged, (would you also have displaced and tilted?) blind spots, mostly different on
 each side. If this is the case, consider a problem or adaptation of the cervical spine. Very
 high or very low NPC, poor eye-movements; pursuits, saccades (over- or undershoots). A
 vertical and horizontal mid-line shift on the visual spacial projection star. Often a full
 vision screening is not possible, due to pain and or headache.





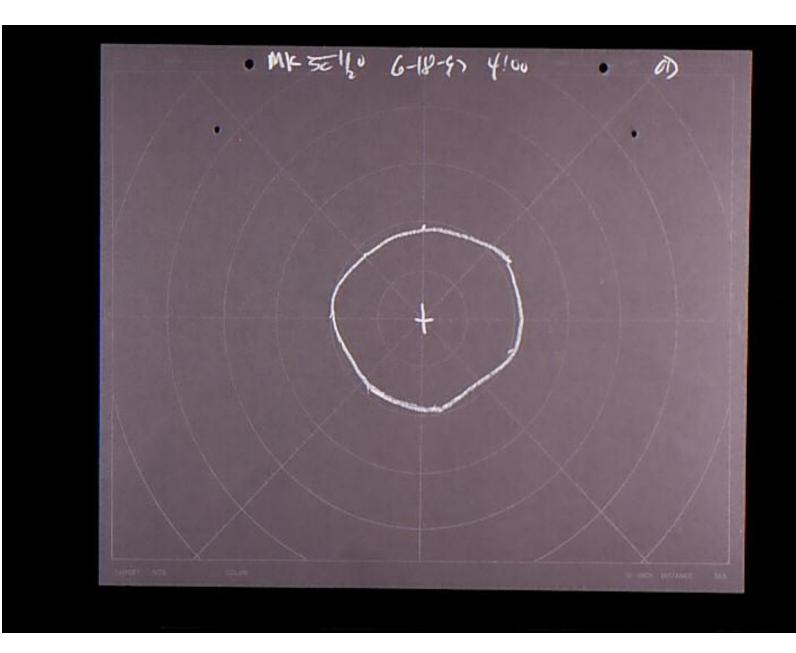
OMEGA-NEURASTHENIA (ωN) SYNDROME -FIGHT-OR-FLIGHT REACTION SYNDROME

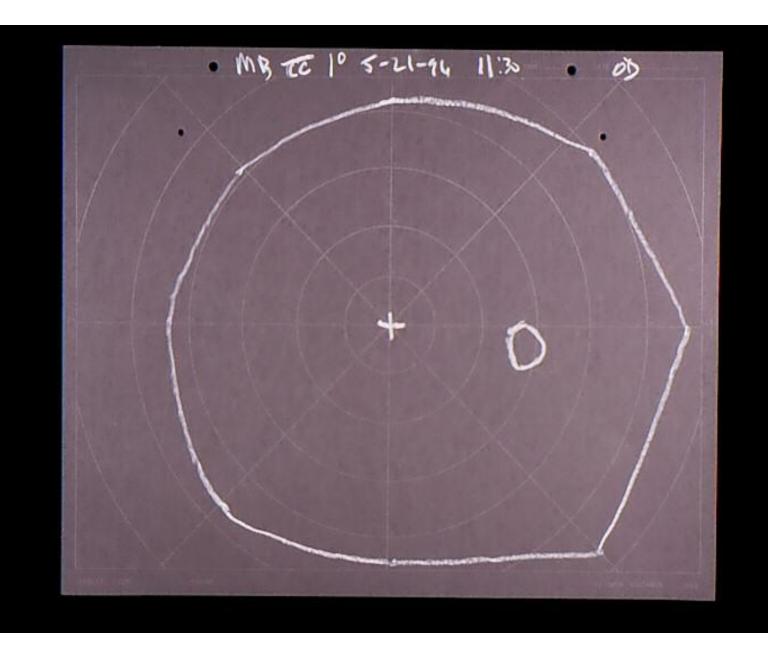
- Description: for an individual tending toward emotional and social exhaustion, mood swings, over stress, negative emotional affect, visual stress, frequently seen in children. This individual may also exhibit extreme fatigue or hyper-irritability. Mostly children with Learning Problems, Social Problems, ADHD, Concentration Problems, Gross & Fine motor problems often caused by stress or in a stress environment.
- Symptoms include: photophobia, transient blurred vision, asthenopia, abnormal
 fatigue, headache, dizziness, frustration, allergies, asthma, fluid retention, voice
 change, aggressive behaviors characteristic of externalizing disorders, such as
 conduct disorder and delinquency, argumentative behavior (fight), or withdrawal
 behaviors, tend?? and befriend behavior, substance abuse, television/computer
 viewing (flight). Polyvagal reaction, Auditory exclusion, tunnel vision,
 acceleration of instantaneous reflexes, shaking.
- Diagnostic factors include: Alpha-Omega pupil response, low breaks and recoveries
 in ductions, can be both or specifically low in abduction or adduction, fatigue
 exophoria, fight esophoria, pelvic or sexual tension, reduced ocular motor skills,
 subnormal accommodation in myopia, constriction of visual fields, constriction of all
 the functional fields less than 10° or extremely large fields 25° due to Parvo
 incompetence and Magno problem. Enlarged blind spot or even not measurable. Very
 high or very low NPC, poor eye-movements; pursuits, saccades (over- or
 undershoots), poor scanning. No structure, grasping (left open) and organisation on
 the visual spacial projection star. Often a full vision screening is not possible. Very
 dark reflex with cognitive nearpoint retinoscopy.

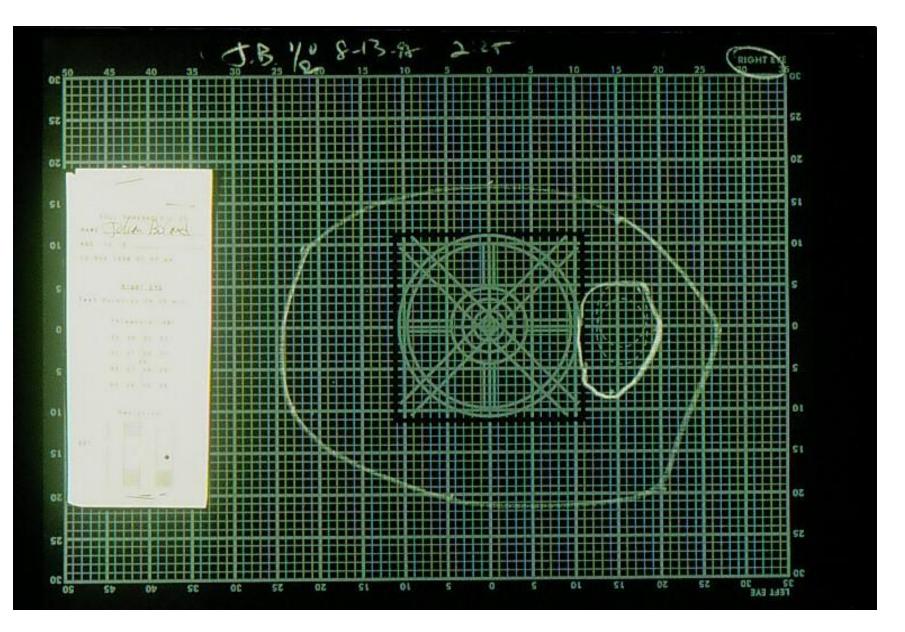


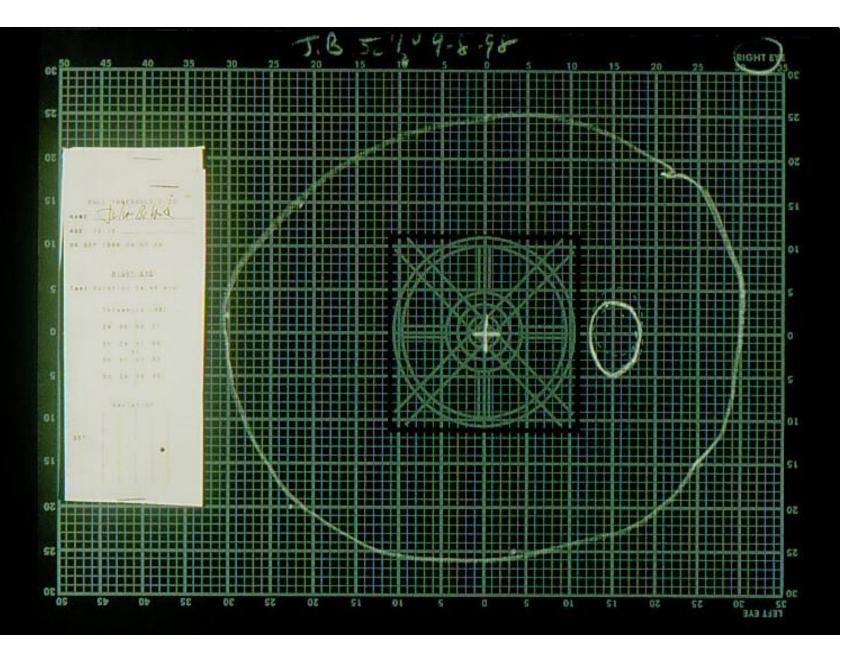
Delta(Yellow) or Theta(Orange)-Omega(Indigo) The Motor Balancer

- Motor stimulant and motor depressant
- Relaxes spasms, eases circulation, lessens pain
- Depresses vaso-motor central grey
- Relaxes ciliary or iris which may cause pain
- Delta for Asthenics, theta for Pyknics
- May act as a stimulant or depressant depending on which one is dominant
- Used often with TBI cases, can be made stronger with Delta-N

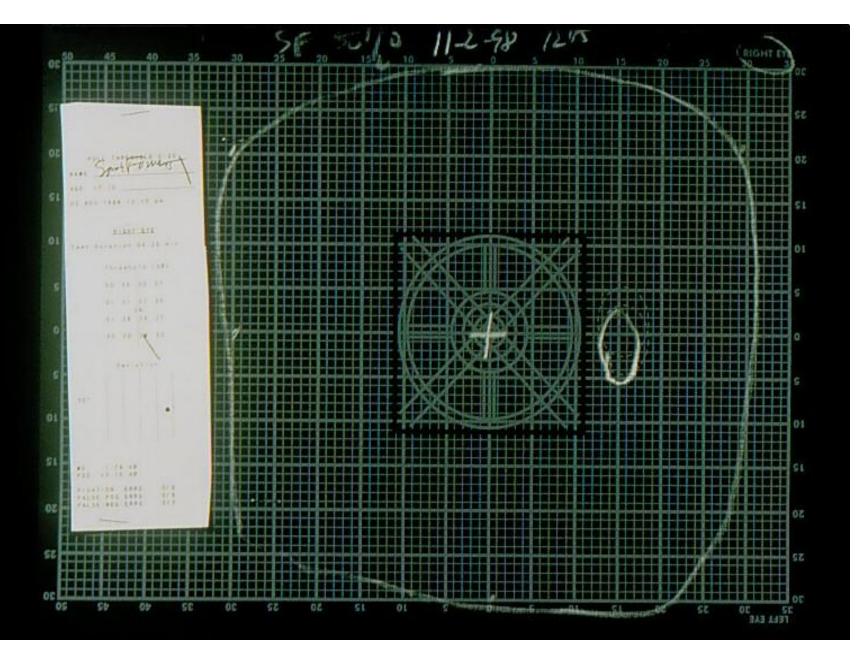








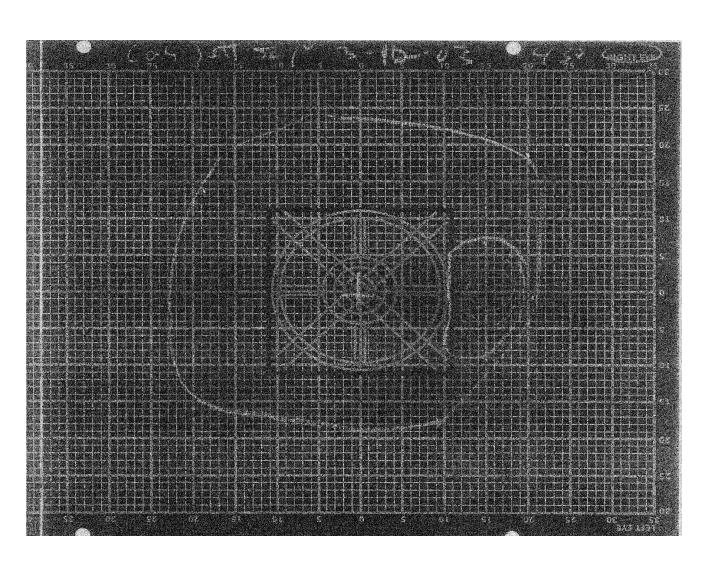




Cases

- CJ, Age 8, reading and writing problems
- Hx: blur f/n, diplopia at near, ear infections
- Dx: 20/20, npc 6"/12", A/O#4. eso f/n,pra
 - -100, nra +100, field defects, ocular
 - -motor deficits as seen in Visagraph
- Tx: ruby(10), yellow-green(10)

Visual field: CJ



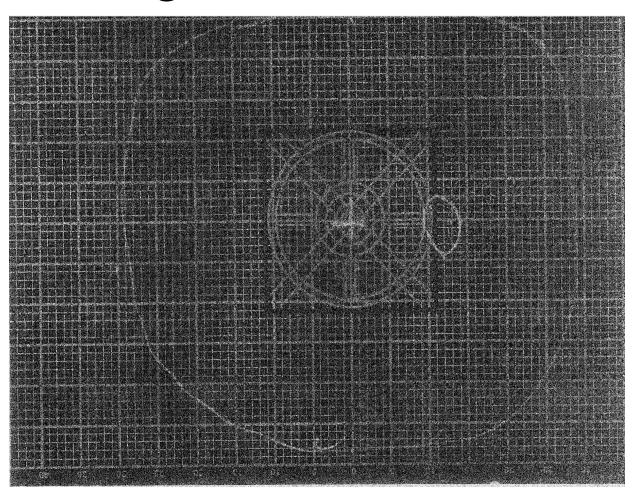
Visagraph: CJ

c:\winvisa\rec\JEC-15-0.rec

Page 1 of 6

Reading Profile Visagraph version 4.3 Grade/Goal Grade 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Left Right Norms Fixations/100 words 305 313 174 Regressions/100 words 139 40 124 0.32 Av. Span of Recognition (words) 0.33 0.57 Av. Duration of Fixation (sec) 0.27 0.30 Rate with Comprehension (words/min) 69 115 Grade Level Efficiency 10 Level of Text Read 2 Directional Attack Difficulty 44% Countable lines in text Rate adj. for Rereading (words/min) 263 Lines found 4 Comprehension Questions Correct 60% Saccades in Return Sweeps 4 Cross Correlation 0.779 Anomalies (Fix/Regr/Both) 8/10/23 Subject information Name: jett corey Grade: Filename: JEC-15-0.rec Class: Born: Sex: M Recorded: 03/12/2003 18:16 School: freeville Directory: c:\winvisa\rec Examiner: larri Text information Countable part statistics >amer_eng\t--2--15.txt No of lines: 7 Filename: 50 Title: Firehouse 2-15 No of words: Av. word length: YYNNNYNY No of questions: 10 4.0 Norms used: TAYLOR.NOR Correct answers: 6 Recording information Duration Standard Deviation : Total recording time: 57.27 133 ms Countable time: 43.45 No. Saccade Start Diff. > 17 ms: 18 Artifact time right eye: 2.95 (7%) Events with Multiple Regressions: Artifact time left eye : 2.95 (7%) Mean Regressions in Multiple Events: Lines found: Lines partially reread (> 30%): 17 Lines completely reread : Comment:

Progress Exam: CJ

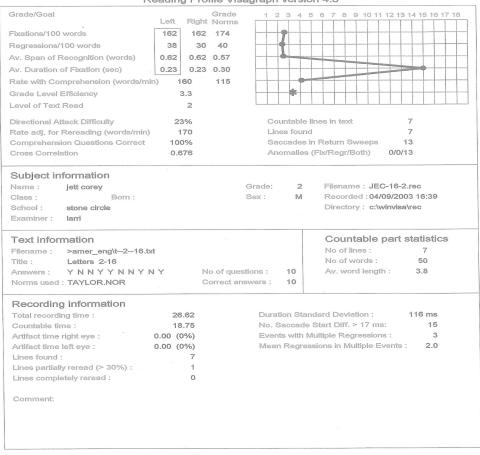


Visagraph 2: CJ

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Page 1 of 4

Reading Profile Visagraph version 4.3



Progress Exam: CJ

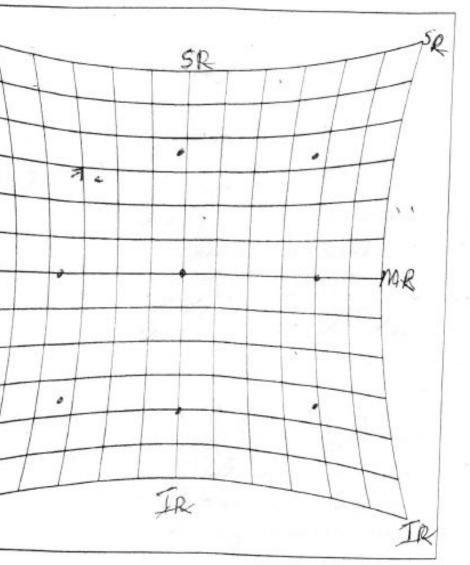
- Slight exophoria F/N, fusion WNL,
 Versions full and smooth, Accomodation:
 -250/+225.
- Reports improve reading and writing performance
- Fixations /100 words went from 313 to 162, regressions from 139 to 38, sapn of .32 to 62, comprehension 69wpm to 160

Luciano

- Hx of 4 concussions during football games/practices
- 6 vists with Rx including Dynamic Integrative Vision Therapy (Syntonics, SVI, EOM stim, dynamic balance),
- Difficulites with reading and reading comprehension
- H/A with photophobia
- Blurred vision at near with alpha-omega 3
- Findings: esophoria at near with significant accommodative dysfunction.

Hess Screen Score Sheet

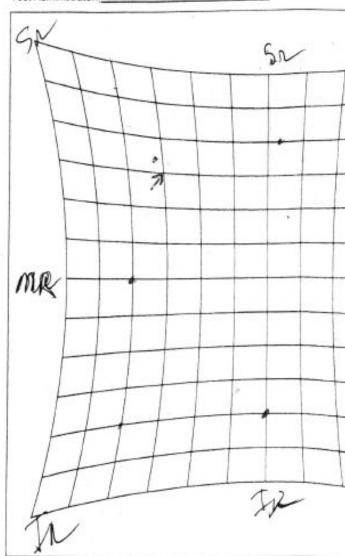
Dunbar Luciano	Field of os
3/24/17	
r	green our DD



Hess Screen Score

Patient Name:	Luciano	Dunbar
Date:	3/24/17	

Test Administrator:



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(DB-3D) e Vision, Kyr Per Poisso			No I Seen I Left In Occ	Ere		T		I R	L see	T	· 8		B **		1	T. L.	R 300%		T 1035		R 105	30
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(DB-6D)	+ rely		Ļ	mly •		+ 0) *	. 0	, 0	0	0	+	×		+6)"						
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(DB-14A) or Peterpolen Far Polen:			63					99				56			CORR		L					
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3 (DB-16) le Vision, r Eye Year Painti	D 1	D 0%	I. Non.	D 10%	\$ L 50%	6 D 30%	T D 80%	L sogs	D No.	1. 1.	D See	C Miles	13 L 50%	H L NS	15 D 100%	16 D 100%	17 G 102%	18 D 182%	19 L 100%	D IONS	n D 1856	27 L 108%
4 (DB-17) to Vision, Eye Sear Point!	LI	t D 25	1 D 10%	4 D 40%	5 L 30%	6 D sogs	T L sops	8 D 50%	9 D 70%	III D 10%	II L 80%	L Roya	13 G 90%	D WS	15 L 100%	D 100%	17 L 102%	18 D 182%	15 L 100%	00 G 103%	21 D 100%	22 L 1895
OTES.	-																					

OTES:

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Test 3 (DB-9) Lateral Posters (Far Post)	i	,	15.14 II Numb	en Or		15	14		13	12		11
Test 5 (DB-4K) Finding Far Point	0	5		• Ф		•		widelp	0	0	Feur, ser read self	
Test 41/2 (DB-1D) Usable Vision, Both Eyes (Far. Point)						I.		2 R	T 84%	1.		
Test 5 (DB-3D) Usable Vision, Right Eye (Fat Reint)			No I Seen I Left Is Our	Eyn.		1		R 30%	L ass.	T	I Z	3
Test 6 (DB-2D) Carble Vision, Lift Eye (Far Point)	No D Sees U Right Is Occi	lations Eye lations				II And		1 L 15	R 84%	R		5
Test 7 (DH-6D) forespic (Fig Point)	+ 100	إ	Ļ	mly •		+ (9	+ () [10	+
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Trac resent								91				56
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Test 9 DB-14A Color Perception (Far Peter) Test 10 (DB-98) Letted Procest (Near Point) Test 11 (DB-5K) Footin (Near Point) Test 12 (DB-15) Eably Vision.	D loss i	1 L 10% 3	Stands	ens On	a L	0 D 30%	Free at a second	e, widely pursted	o i	0	0 n	H L

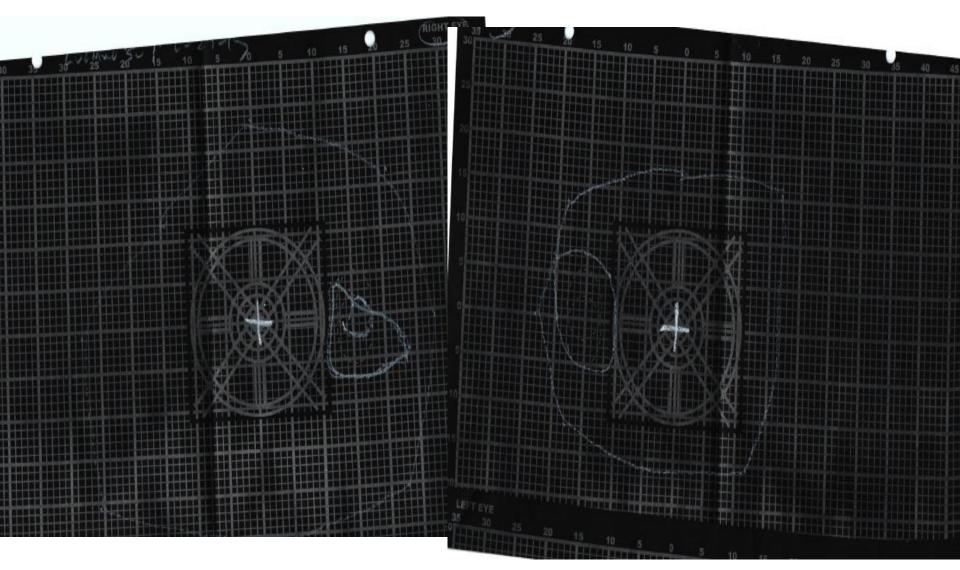
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Right eye eye

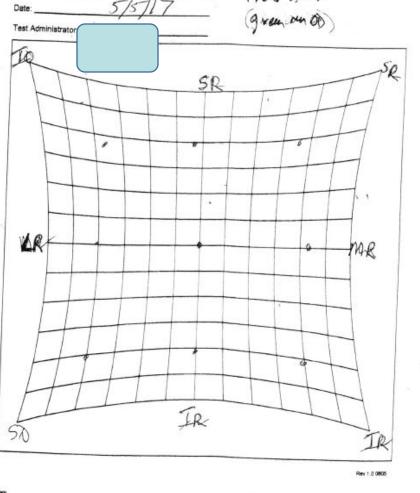
2/27/17

Left



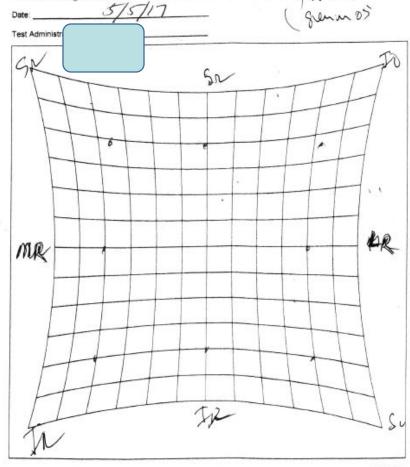
Luciano

- Decreased H/A to min
- Able to see and read road signs
- Improved reading comprehension with school work
- Binacular coordination and fusion are normal for far and near
- Accomodative function restored to normal



chmond Products
00 Silver Ave SE
suquerque, NM 87108
5-275-2406 FAX 810-885-8319

P/N 911537

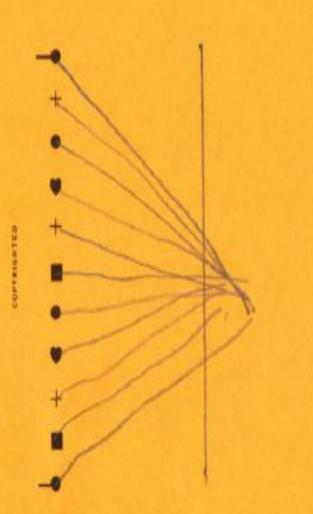


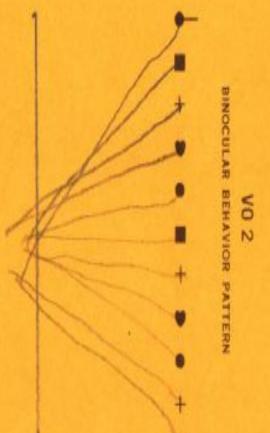
Rev 1.0 0905

From Richmond Products 4400 Silver Ave SE Albuquerque, NM 87108 505-275-2406 FAX 810-885-8319

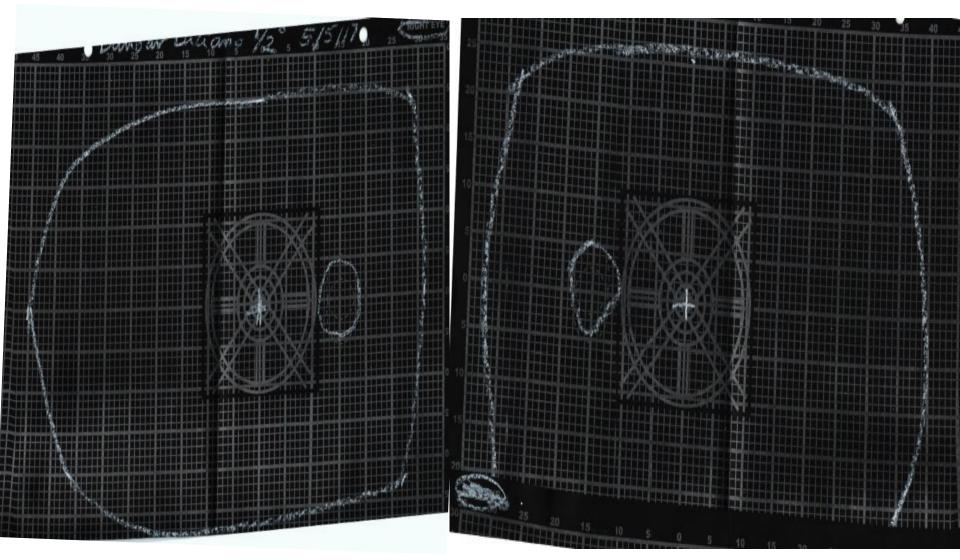
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Luciano 5/5/17





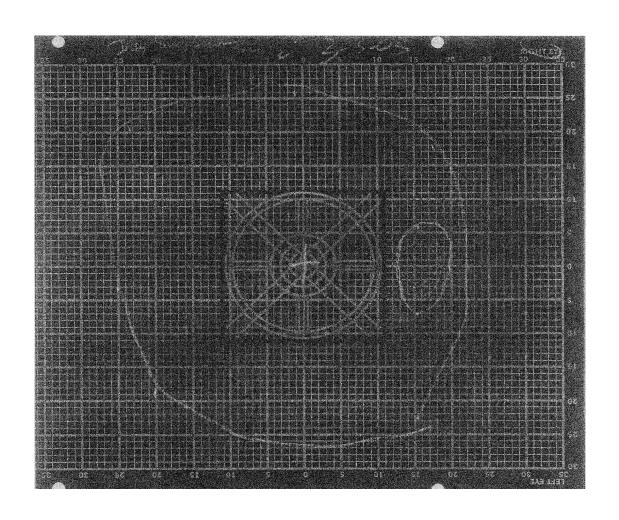
Right eye 05/15/17 Left eye



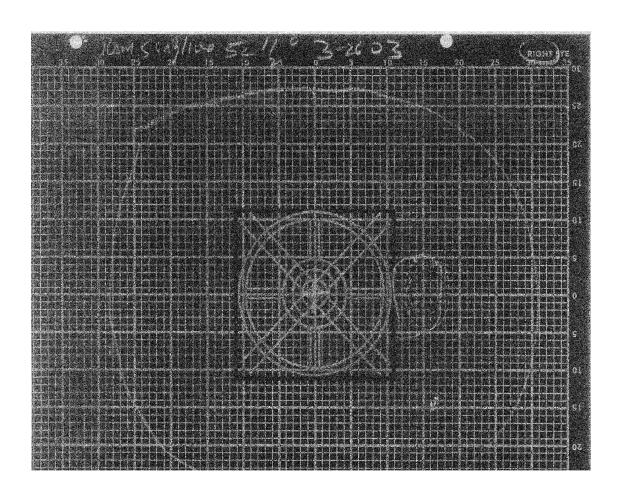
Patient JS

- Hx:age 9, headaches in school,poor tracking, reading problems, loss of place head injury age 2
- Dx: alpha-omega 3, exophoria, poor accommodation: -1.25/ +2.75, field defects, poor visagraph findings
- Tx: indigo(10) and blue-green(10)

Visual Field JS



Progress Field: JS



Visagraph 1:JS

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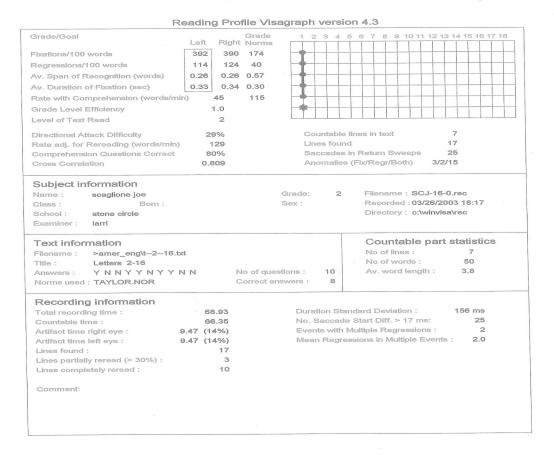
Page 1 of 10

Reading Profile Visagraph version 4.3 Grade/Goal 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Right Norms 497 174 Fixations/100 words 504 Regressions/100 words 185 170 40 Av. Span of Recognition (words) 0.20 0.57 0.20 Av. Duration of Fixation (sec) 0.34 0.34 0.30 Rate with Comprehension (words/min) 115 35 Grade Level Efficiency 1.0 Level of Text Read 2 Directional Attack Difficulty Countable lines in text Rate adj. for Rereading (words/min) 52 Lines found 9 Comprehension Questions Correct 90% Saccades in Return Sweeps Cross Correlation Anomalies (Fix/Regr/Both) Subject information Name: scaglione joe Grade: Filename: SCJ-15-1.rec Class: Sex: Recorded: 03/03/2003 16:47 School: aroton Directory: c:\winvisa\rec Examiner: larri Text information Countable part statistics Filename: >amer_eng\t--2--15.bdt No of lines: Firehouse 2-15 No of words: 50 Answers: YNYNNYNNY No of questions : 10 Av. word length: 4.0 Norms used: TAYLOR.NOR Correct answers: Recording information Total recording time : Duration Standard Deviation : 217 ms 111.23 52 Countable time : 85.78 No. Saccade Start Diff. > 17 ms: Artifact time right eye: 6.05 (7%) Events with Multiple Regressions: Artifact time left eye : 6.05 (7%) Mean Regressions in Multiple Events: Lines found: 9 Lines partially reread (> 30%): Lines completely reread : Comment:

Visagraph 2: JS

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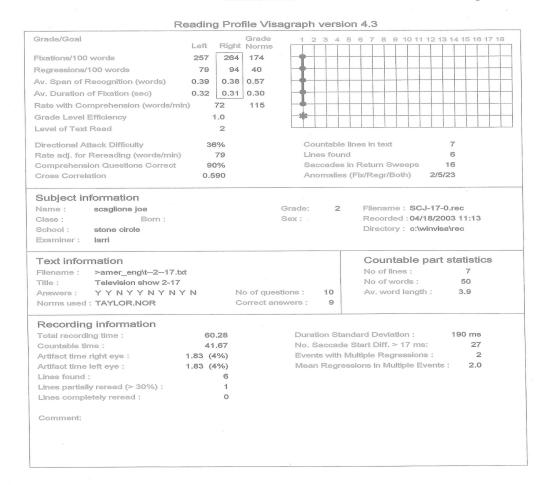
Page 1 of 7



Visagraph 3:JS

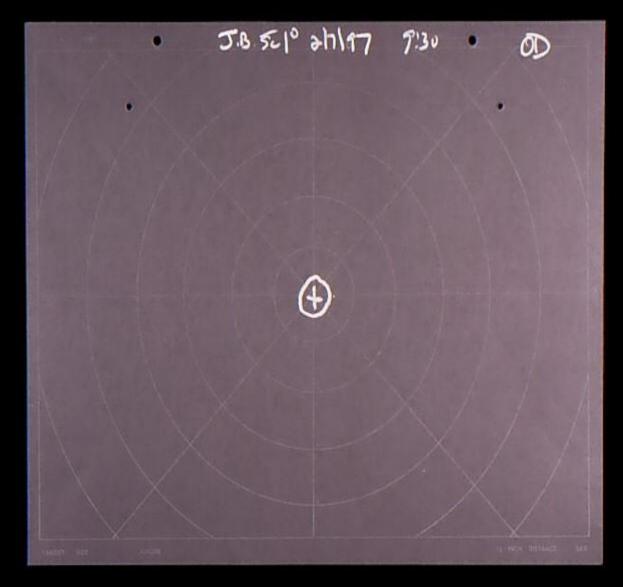
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Page 1 of 7



Progress Exam: JS

- Fusion WNL, Smooth versions, no headaches, Accomodation -3.50/ +4.00
- Fields WNL
- Visagraph: improved from 504 fixations /100 words to 257, regressions from 185 to 79, rate of comprehension from 35 to 72 words per minute.



7/11/97 5210 940 JB.

RV Aft 9 HX) Liptopia, STrasions Left XOT Alpha Owes Popt hypersone pl- 10+1+0 pl - Sitteto 2/15 plan of Thermon 27 sessions of Irdigo 10 + Blue Green 10 5 XO Do Dilopia, hyperserving deevery Supporting / 36/10 3×0 22/10 30/7 +471-22T

J. LIBERMAN Syntonic Effect on Children with Academic Problems 1986

STANDARDIZED TEST RESULTS BEFORE & AFTER 20 SYNTONIC TREATMENTS Syntonics group vs. control group

- ♦ Visual field area increased 2,916 % 14 %;
- Visual memory improved for

Unrelated words by 50 months vs. 13 months

Abstract symbols by 21 months vs. 3 months

◆ auditory memory by 24 months vs. 15 months

The effects of syntonic colored light stimulation on certain visual and cognitive functions. Liberman J., Journal of Optometric Vision Development 17, June (1986).

J. LIBERMAN: Syntonic effect on children with academic problems 1986

TEACHERS & PARENTS OBSERVATIONS OF SYNTONIC GROUP IMPROVEMENTS

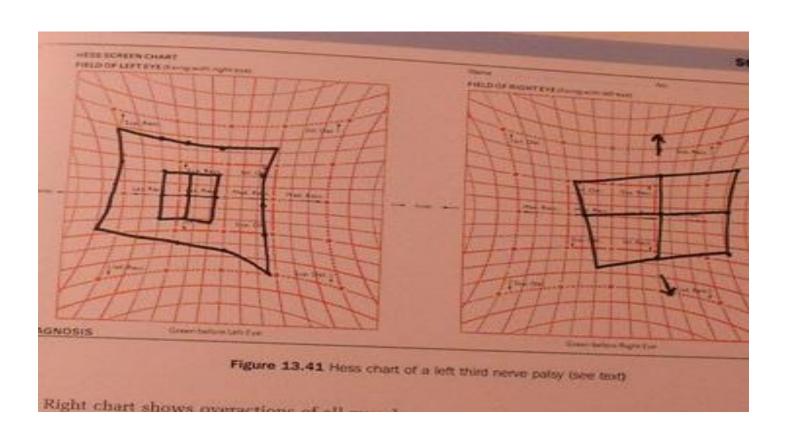
- Emotional recovery, less tension and hyperactivity,
- Greater ability to handle criticism and confrontation
- Academic scores (75% of subjects) and handwriting (40%).
- Some subjects using Ritalin for hyperactivity were able to discontinue its use.

Liberman J. "The effects of syntonic colored light stimulation on certain visual and cognitive functions," Journal of Optometric Vision Development 17, June (1986).

Focal Syntonics

- Application of Syntonic colors at the insertion point in each intra-ocular muscle and to influence each cranial nerve.
- This also results in shifting the cranial bones, dura matter from the occipital bones to the base of the spine.
- Postural shifts and restoration on balance is frequently seen

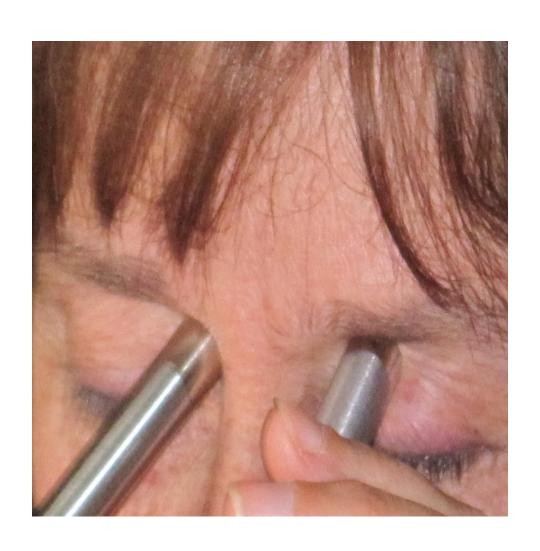
Hess Test





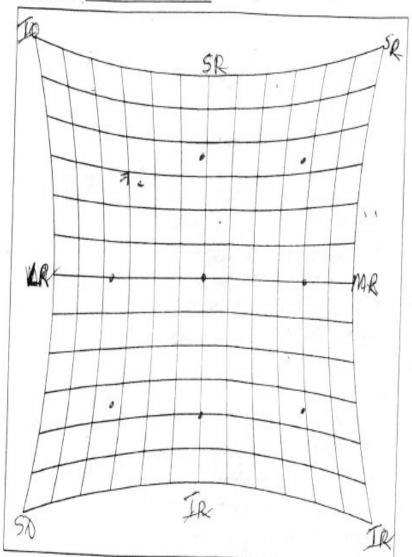
Date 29-12 frell us Test Administrator: ____ SIV W LR

Right SO and Left SR



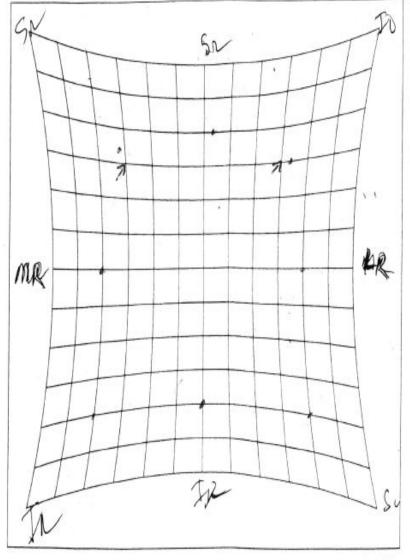
Hess Screen Score Sheet

Patient Name:	Luciano	Field of os
Date:	3/24/17	<i>p</i>
Test Administrator:		green on of

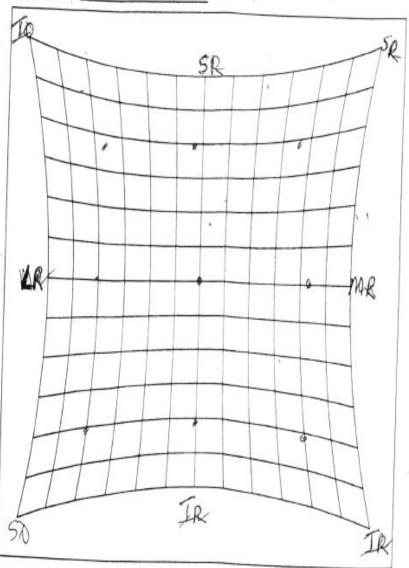


Hess Screen Score Sheet

Patient Name:_	Luciano	full of
Date:	3/24/17	(genus)
Test Administra	tor	

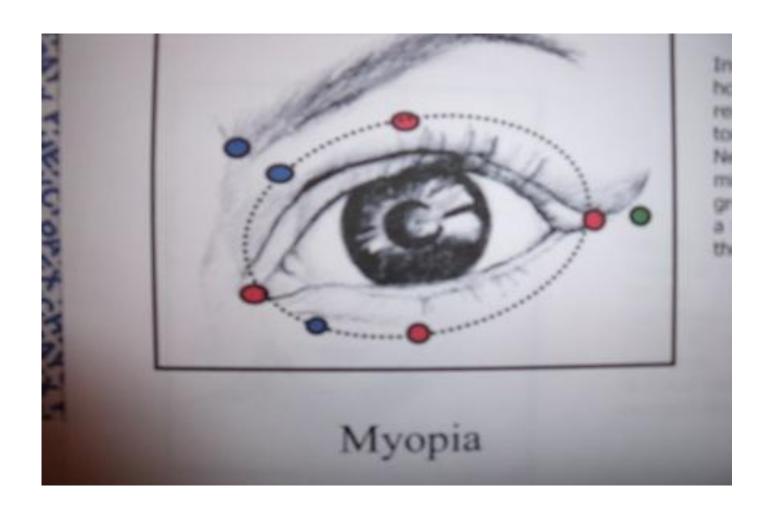


Patient Name: Luciano Field of os. Date: 5/5/17 Test Administrator: 9 rem on on



Hoss Screen Score Sheet Luciano Patient Name: 52 KR MR

Common Points for 30 seconds



Reading References

- The Syntonic Principle, Harry Riley Spitler, D.O.S., M.D., 1941
- The Blue Book, a basic introduction to Syntonic Optometry from CSO: www.cso.org
- Conference tapes and videos produced by DigiVision Media

