Symmetric Prescribing KISS 2022 **OPSIS**

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Optometric Primitive Reflex

- Primitive reflexes are, healthy, natural, inborn, fundamental patterns
 of behaviour that are most easily observed early in the process of
 development.
- These reflexive behaviours provide a beginning from which we learn to act with meaning in our world.
- Although primitive reflex patterns of behaviour remain intact and available throughout life, they are not readily observed once appropriate learning has taken place, and newer, more useful strategies are available to the person.



Optometric Primitive Reflex



- As we are first learning to be optometrists, we learn to carefully measure the optical state, first of a schematic eye, and then, of live patients.
- The assumption is that if we can measure this optical state with enough skill, that the result will be clear glasses that will be best for our patients.



Optometric Primitive Reflex

When in doubt, measure the clearest possible lens and prescribe it.





Baby Steps

- If are to go beyond our own baby steps as optometrists, we can benefit from considering real baby steps—the process of human development.
- The refractive conditions we see, as well as other aspects of visual posture we measure or observe are products of the human developmental process.





No one of the major fields of behavior motor, adaptive, language, and personalsocial— is normally devoid of visual content or visual controls. So interfused are vision and action system, that the two must be regarded as inseparable. To understand vision, we must know the child; to understand the child, we must know the nature of his [or her] vision.

Gesell, Arnold <u>Vision - Its Development in Infant and Child</u>

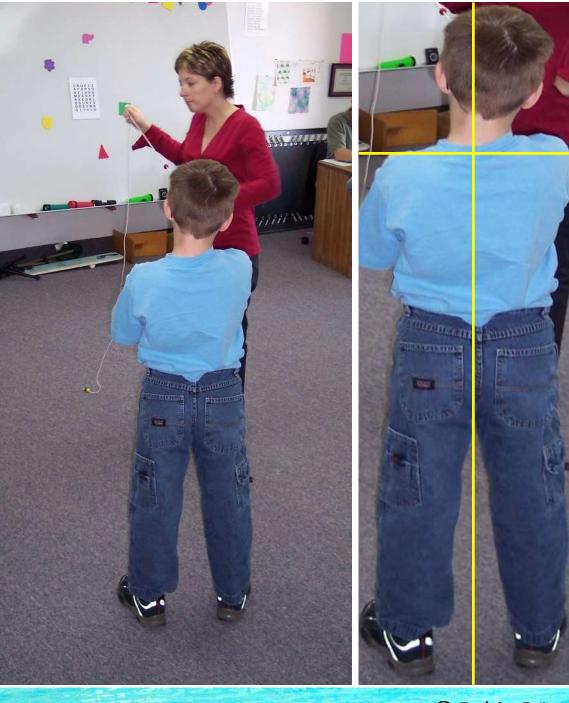




- Bodily growth is inherently a balanced bisymmetric process.
- The child's body, or bodily systems, grows along the lines of stress induced in it by various activities, in order to reduce those stresses.

Darrell Boyd Harmon Vision, Growth, and Development 1948 OEPF





The child and his eyes reveal themselves conjointly in outward patterns of behavior.

Gesell, Arnold Vision - Its Development in Infant and Child



All behavior tends to assume characteristic forms. A behavior pattern is simply a definable formed response to a specific situation.

From Gesell, Vision, Its Development in Infant and Child

Our understanding of the young child would be improved if we could realize that his problems of development are in their essential quality like those of early infancy.

From Gesell, The First Five Years of Life



Our understanding of the human race would be improved if we could realize that problems of development are in their essential quality like those of early infancy.

- Asymmetries in demand will be reflected in asymmetries in behavior.
- Asymmetries in behavior will be reflected in asymmetries in the physical structure.
- Examples of asymmetry include: postural anomalies, over or under reaction, hypo or hyper tonicity, myopia, anisometropia, astigmia, strabismus, and hyperopia greater than +1.00.



If you put him under a bodily distortion, where the geometry of the task is skewed from the straight rectilinear relationship between the spatial and bodily coordinates, he will organize the visual performance and the visual movement pattern in accordance with that stress geometry.

Characteristically he will express that skew or torque in the external visual mechanisms (the eyes) and will develop those conditions which we have observed and have called ocular defects, astigmatism, anisometropia, myopia, as a combination both of the near demands and probably some predisposition biochemically and biophysically to meet certain types of adaptation.

A.M. Skeffington Functional Optometric Philosophy



Beyond Baby Steps

- The refractive condition develops toward bringing the organism and/or the resources of the organism to balance with the task at hand.
- The most obvious pressure away from symmetry is a drive to center nearer—to concentrate resources into an area of interest/need up close.
- If the concentration of visual resources at near becomes habitual, myopia is often the result.
- Another common visual sign is photophobia/asthenopia when the organism is presented with light that be neither used nor organized.



Beyond Baby Steps

- Ocular defects, such as astigmatism, anisometropia, adverse high hypermetropia, myopia, and squint, are the end results in structure of adverse changes in process.
- The manifest ocular defects are all varying forms of adaptation to the same underlying problem.
- The refractive, or other visual condition is developed in order to solve a visual problem.

Italics from Robert Kraskin—VT in Action Serries 1 No. 4 Supplement #2 OEP 1965



Subjective Prescribing

- Optometrists—We all want our patients to do better, and we are well pleased to prescribe lenses that provide what we consider to be better performance right now.
- Often the lens that produces the immediate improvement in comfort or performance is one that matches the patient's current visual condition/adaptation.
- The lens that provides the most immediate improvement is not necessarily the lens that will produce the best performance in the long term, no matter how satisfying that prescription might be.



Asymmetric vs Symmetric Prescriptions

What is an asymmetric prescription?
Any prescription designed to either match the patient's current asymmetric visual state, allowing them to perform as if they were in symmetric rapport with the world around them, or a prescription designed to limit the amount of light born information available.

- Tints
- Binasals
- Occlusion
- Minus
- Excess Plus
- Anisometropia
- Cylinder



Asymmetric vs Symmetric Prescriptions

The downside of the asymmetric prescription is that the original problem, which the current visual adaptation emerged to meet, tends to remain in place.

The visual adaptation will tend to re-emerge in some fashion, often more of the same, if the stress continues.

- Tints
- Binasals
- Occlusion
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- Excess Plus
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- Cylinder



Asymmetric vs Symmetric Prescriptions

What is a symmetric prescription?

A prescription designed to allow the person to operate in a balanced rapport with their environment—usually designed to reduce the load on the visual process, establishing a vector towards more efficient behaviour.

A prescription designed to uniformly expand the space within which the patient acts. Low Plus



Low Plus?

- Low plus is the amount of plus that can be used by a particular patient in order to move "outward".
- An appropriate low plus lens will almost certainly allow a patient to work better up close.
- e.g.,
 - Presbyopia.
 - Computer glasses.
 - Convergence Insufficiency.
 - Stress relieving lenses in the classroom.



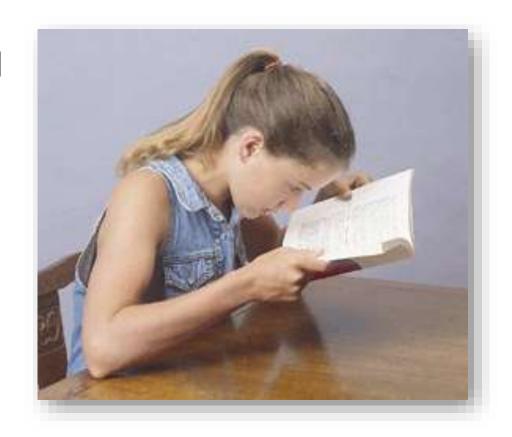
Skeffington

- We believe that every part of the visual mechanism is accessible to change.
- We believe that the fundamental value of a convex [plus] lens is how it relocalizes in space.
- We believe the lenses we put on people are to enable the organism in space.

Restricted Environment

Undue repetition of the same action or pattern of action can lead to bodily adaptations in order to more nearly suit the predominant pattern of behaviour.

What Skeffington called the biologically unacceptable, socially compulsive near centered task.





What can we learn from a peanut butter jar?





- Not all asymmetry is the result of too great a load.
- Some may be the result of injury or restricted movement.



- Not all asymmetry is the result of too great a load.
- Some may be the result of injury or restricted movement.
- Yet the same principles of development apply.



What makes dreams impossible is our failure to dream them.





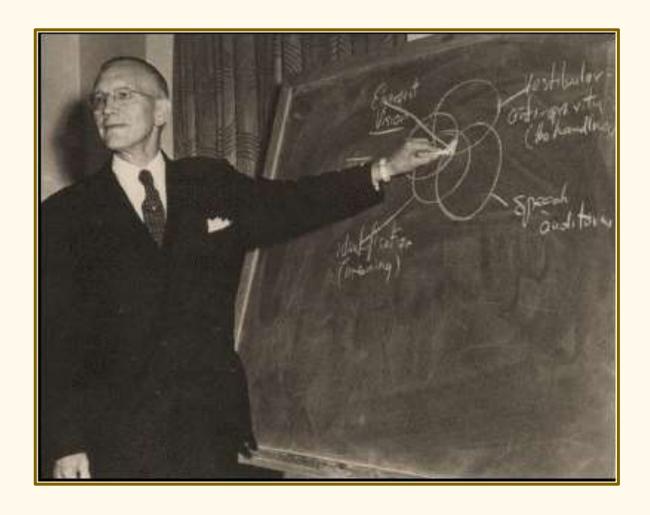
Visual Errors

- Bruce Wolff said that visual errors are usually errors of omission.
- A visual error occurs when we do not appropriately select what is available to us from the broad spectrum of radiant energy that surrounds us.
- This leads to instabilities and distortions in our ability to act on the world we live in.
- The instabilities and distortions in our actions lead to corresponding distortions in posture that we may observe as refractive conditions or visual misalignments such as strabismus.

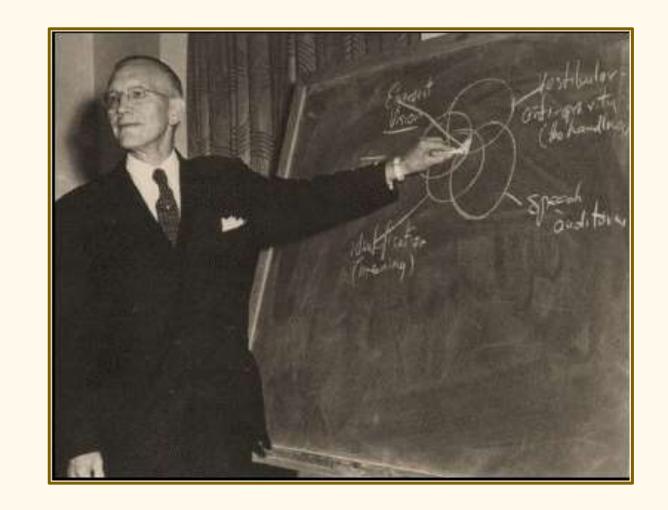


We do not believe the visual process is separated from that biochemical and biophysical organism. We believe that fundamentally, biochemically and biophysically, the maintenance over periods of time of the socially compulsive visually near centered task will set up what is fundamentally an avoidance reaction. We believe that the organism's drive, as a simple organism, would be to get out of there and get away from it. Since he cannot, in our culture, he is going to warp the ocular machinery in his effort to do so.

We believe that when the stress is taken off by giving him additional degrees of freedom, if not already too deeply embedded in change in structure, the organism will do as any organism will do, which is tend to revert to the normal [balanced posture].



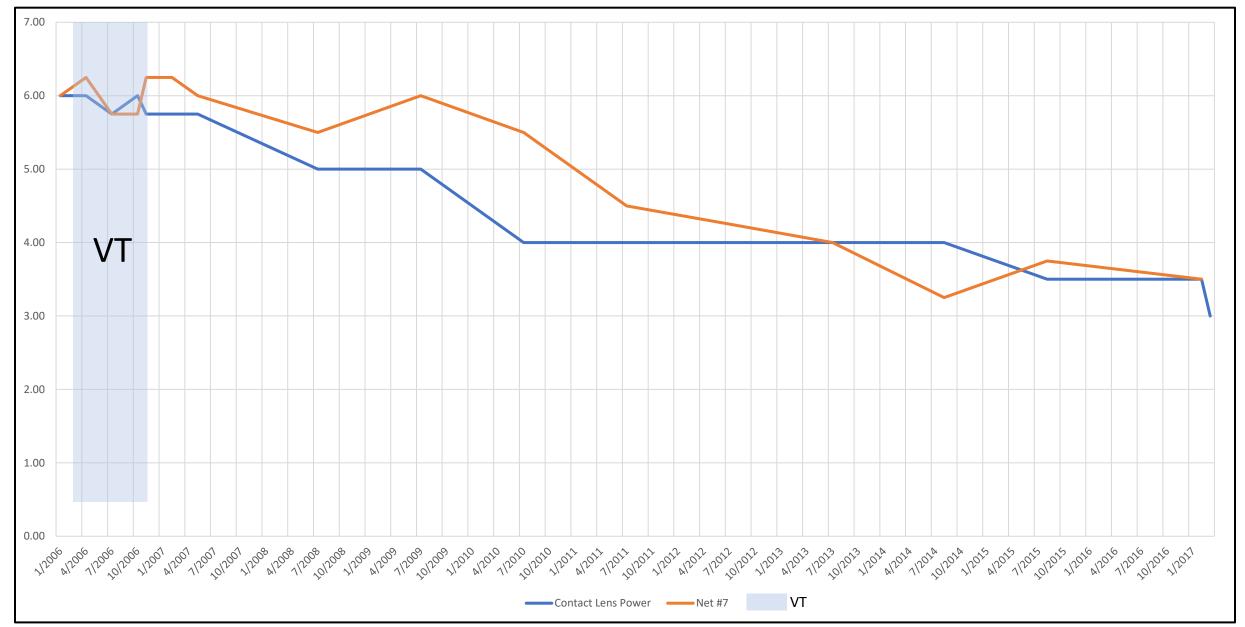
- •Given a chance, any organism tends to revert to a norm.
- •We measure how much latitude we have, the degree of freedom remaining, what potential of shift is available to us with our plus lens measurements.
- •We put that plus lens on him.





- Joey came to us in 2007 at 11 years old.
- He owned and sometimes wore +6.00 spectacles.
- He was a 35 D ET.
- Now in 2021, his #7 is +3.50, and he is wearing +2.50 O.U. with straight eyes, stereopsis, and is an electronics engineer. (Last seen Jan/2022)

10+ Year Refractive Plot for Joey who came in w max plus



Why Does Plus Work?

- Plus, in terms of how I prescribe, is relative to the current adaptive state.
 - Hyperopia.
 - Myopia.
 - Asymmetric refractive adaptations such as astigmia and anisometropia.
- Each of these is a bit different because the patient has adopted a different way of limiting the visual process in one area to gain in another.
- The person has come to balance with the needs of life in their own way in order to either withdraw from or remain in contact with elements of their world.



Why Things Change

- Behaviour changes in order to come to balance with the environment.
- If a pattern of behaviour persists, the structure of the organism will change to come to balance or symmetry with the behaviour.
- The organism will adapt along the lines of stress to meet the stress.
- The manner of adaptation will vary according to culture, genetics, and opportunity.
- The primary goal of our intervention is to provide the healthiest stressfree outcome.



Why Things Change

We design our intervention to establish a vector in development toward more symmetric efficient visual behavior.

A person organizes based on the light they receive through the lenses they wear. If we want to develop a symmetric organization, we must use our lenses to promote movement towards personal symmetry.



Retinoscopy

The more the retinoscope is used to observe the visual performance of an individual, the more the observer will come to respect and appreciate the dynamics of the total visual system, and all of the influences the total organism will bring into the visual act. – G.N. Getman





Retinoscopy

This is the weapon of a Jedi Knight.

Not as clumsy or random as a blaster;

An elegant weapon for a more civilized age.

Obi-Wan Kenobi





Retinoscopy

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Obi-Wan Kenobi





Why Things Change

- Visual distress and visual adaptations typically develop at near.
- So do visual solutions.
- We can use the spot retinoscope to find the ranges of acceptable plus for near on an individual dynamic basis.



- •Given a chance, any organism tends to revert to a norm.
- •We measure how much latitude we have, the degree of freedom remaining, what potential of shift is available to us with our plus lens measurements.
- •We put that plus lens on him.

