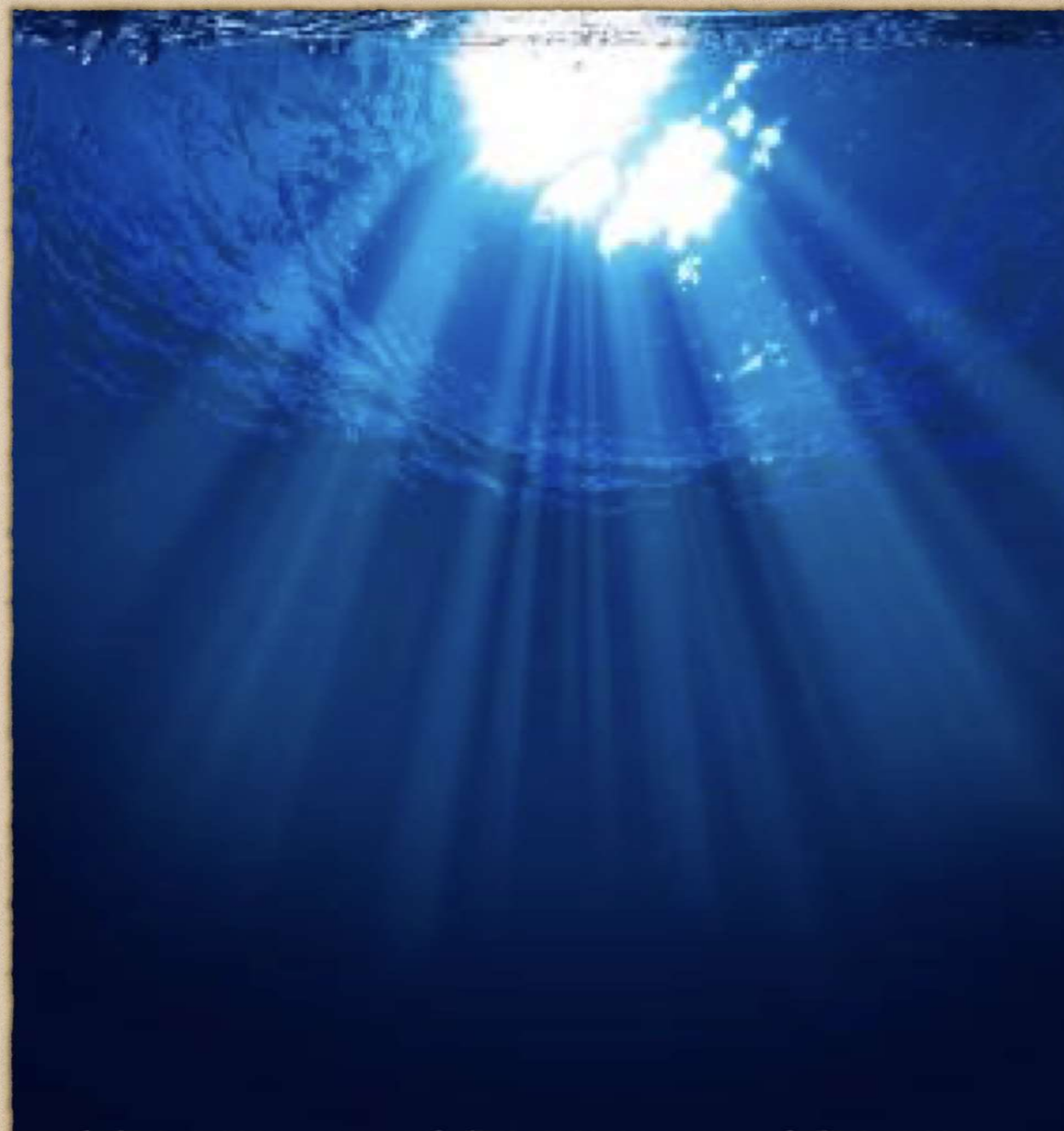


OUR NEW VISUAL
WORLD

DR MARIA ASPROGERAKAS

WHEN YOU LOOK
LONG INTO AN
ABYSS, THE
ABYSS LOOKS
INTO YOU....

FREDERICK NIETZSCHE



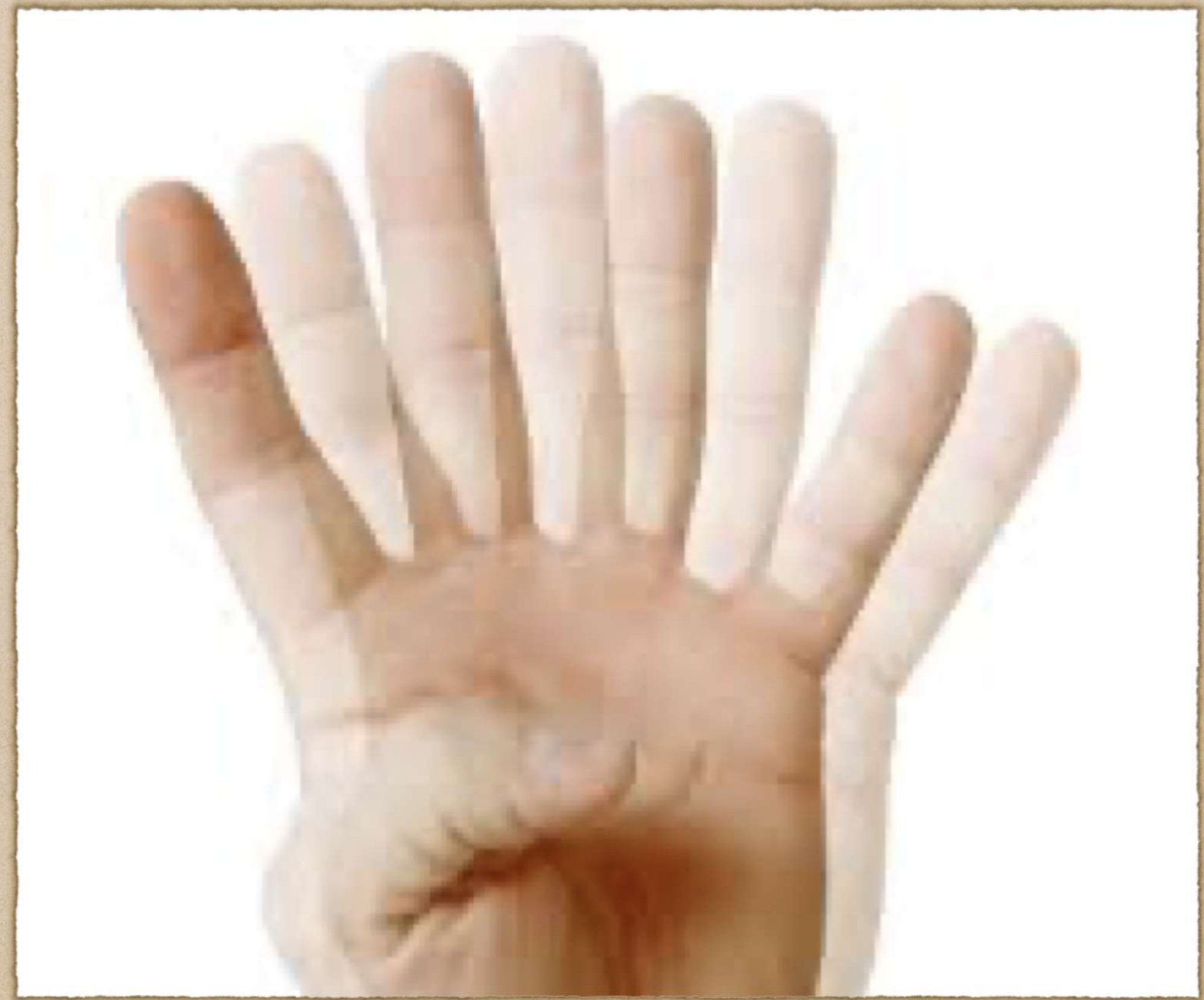
Why philosophical?

Facial Palsy

- Being essentially non binocular for six weeks created an enlightenment
- First.... Discomfort level are high with any new condition
- Loss of various aspects of innate visual compilation Including stereopsis, visual field, visual imagery gets distorted

Abrupt facial palsy or injury due to car accidents may cause decompensation

- No CSBV
- Increase in asthenopia
- Loss of a balanced visual compilation



RETHINKING VISUAL COMFORT

- CSBV considered goal in optometry ... clear single binocular vision
- Concepts to be conquered ... efficiency in reading maybe better with monocular viewer, no issue with diplopia or eye movement issues combined with convergence to add to loss of place issues
- Concept of examining or recording analytical findings should be binocular not monocular thereby conquering the concepts of monocular occlusion during analytical

- The consistent near work associated with reading causes a cumulative exposure that may cause an increase to nearsightedness
- Monocularly is overrated for reading.....since many of us have said or implied that increased near work adds to the use abuse theory and monocularly takes convergence out of the picture
- Best readers are monocular?

- Binocularity is considered the simultaneous employment of both eyes
- Cyclopean view is the splinter skill created over time to decrease asthenopia and create a monocular viewing individual
- Question is HARC beneficial?



Brock String

is a vision therapy tool that gives immediate feedback whether a patient is using both eyes when focusing near and far!

Focusing Far →

← **Focusing Near**

A diagram on a purple background illustrating the Brock string's function. It shows two pairs of eyes represented by red circles. In the 'Focusing Far' diagram, the eyes are looking at a green bead at the top, and the lines of sight converge at that point. In the 'Focusing Near' diagram, the eyes are looking at a red bead at the bottom, and the lines of sight converge at that point. A yellow bead is positioned between the two eyes in both diagrams.A diagram showing two eyes on the left looking at a red bead on the right. The lines of sight converge at the red bead. A yellow bead is positioned between the eyes and the red bead.

2. Look at the red ball nearest to the eye until you see the phenomenon shown in the figure.

A diagram showing two eyes on the left looking at a yellow bead in the middle. The lines of sight cross at the yellow bead. A red bead is positioned to the right of the yellow bead.

3. Look at the yellow ball in the middle until you see the image shown in the figure.

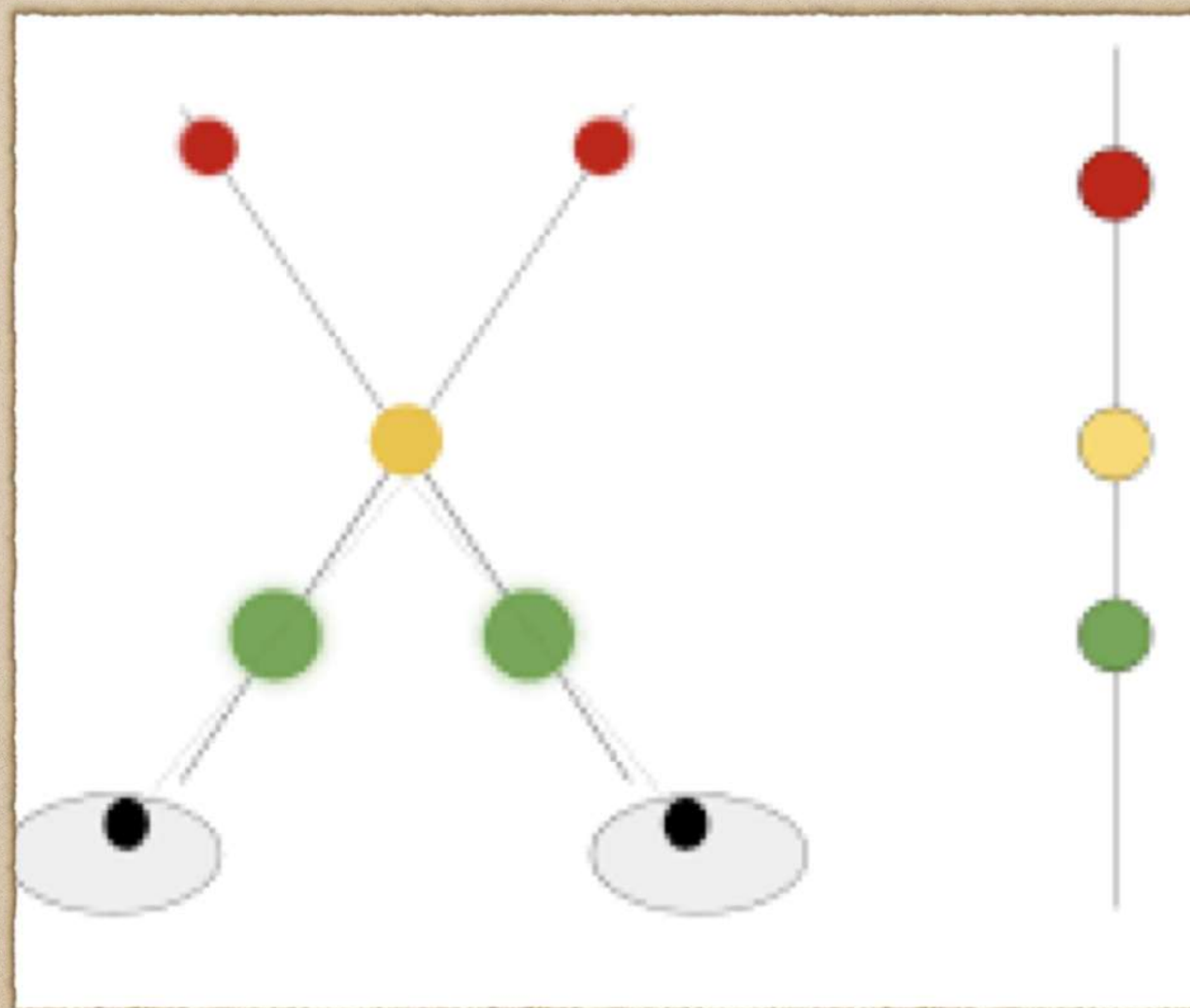
A diagram showing two eyes on the left looking at a green bead on the left. The lines of sight converge at the green bead. A yellow bead is positioned between the eyes and the green bead.

HARC....

- Harmonious Anomalous Retinal Correspondence (cyclopean viewing eye)
- Unharmonious ARC when using BS you see two strings and nothing quite makes sense (usually told to leave alone)

HARC

- Harmonius ARC was considered a splinter skill when there is diploma due to an eye turn (the mind told the brain that there is one strings not two as seen by the eyes so it fused the images)



Now revisit and ask again

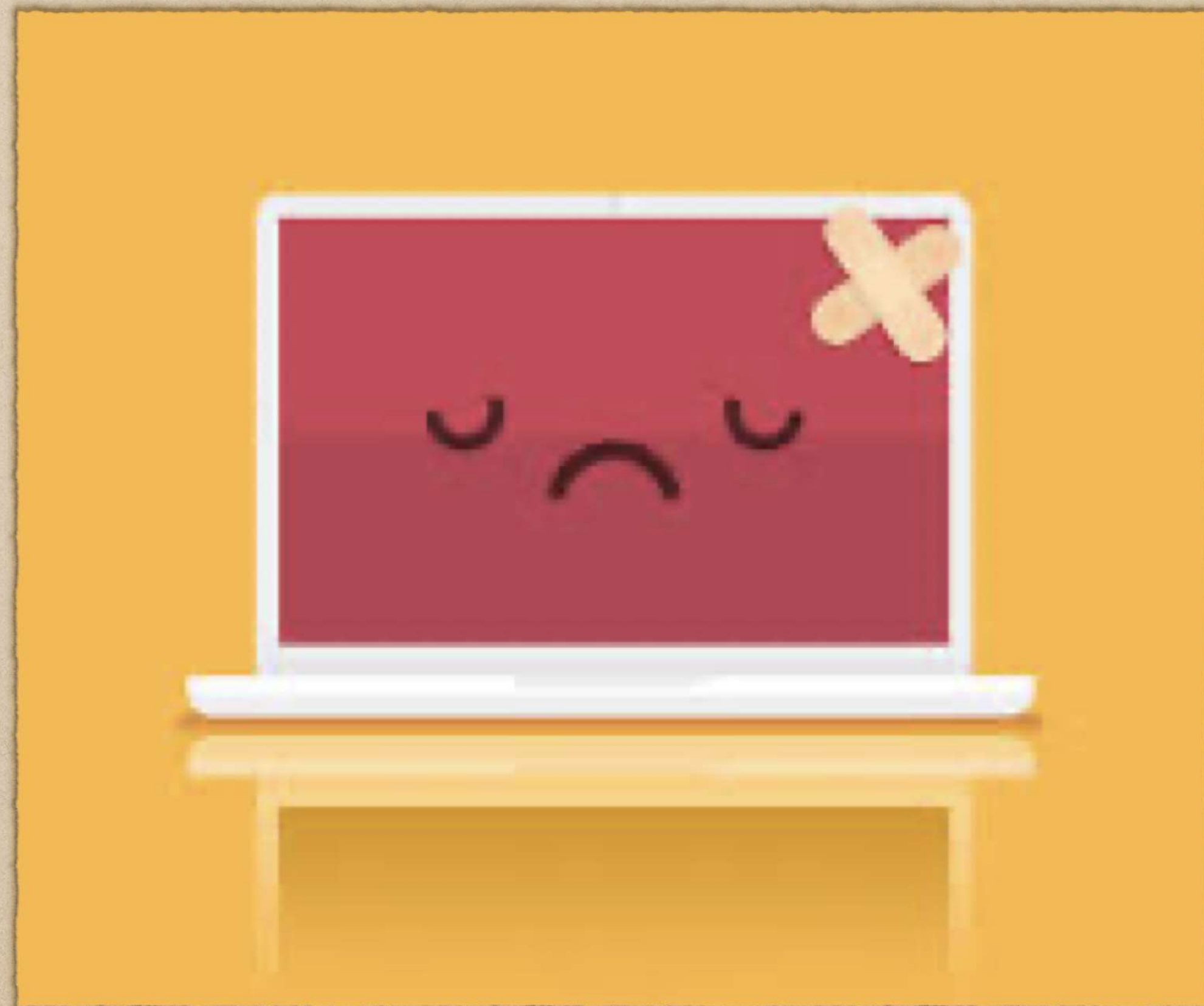
- Is HARC beneficial?
- Who is it helping?
- Should we leave it alone?
- Is it a sign of strong mind or strong visual compilation?

Concepts that we come to follow with no question suddenly don't make sense

- Concept of visuoscopy in eccentric viewer to monitor optimal view point of fixation in an effort to increase acuity?
- Concept of compensating lenses after monocular testing
- Areas of parafoveal seem to include skewed astigmatic findings
- Thus many practitioners give spherocylindrical equivalent compensating lenses in an effort to increase observe clarity

Patching

- Favorite treatment lets patch the eye so patient is forced to use the weaker eye
- Well that takes someone who can barely function and make them worse
- Occlusion only works when some activity is given with it
- Consider MFBF

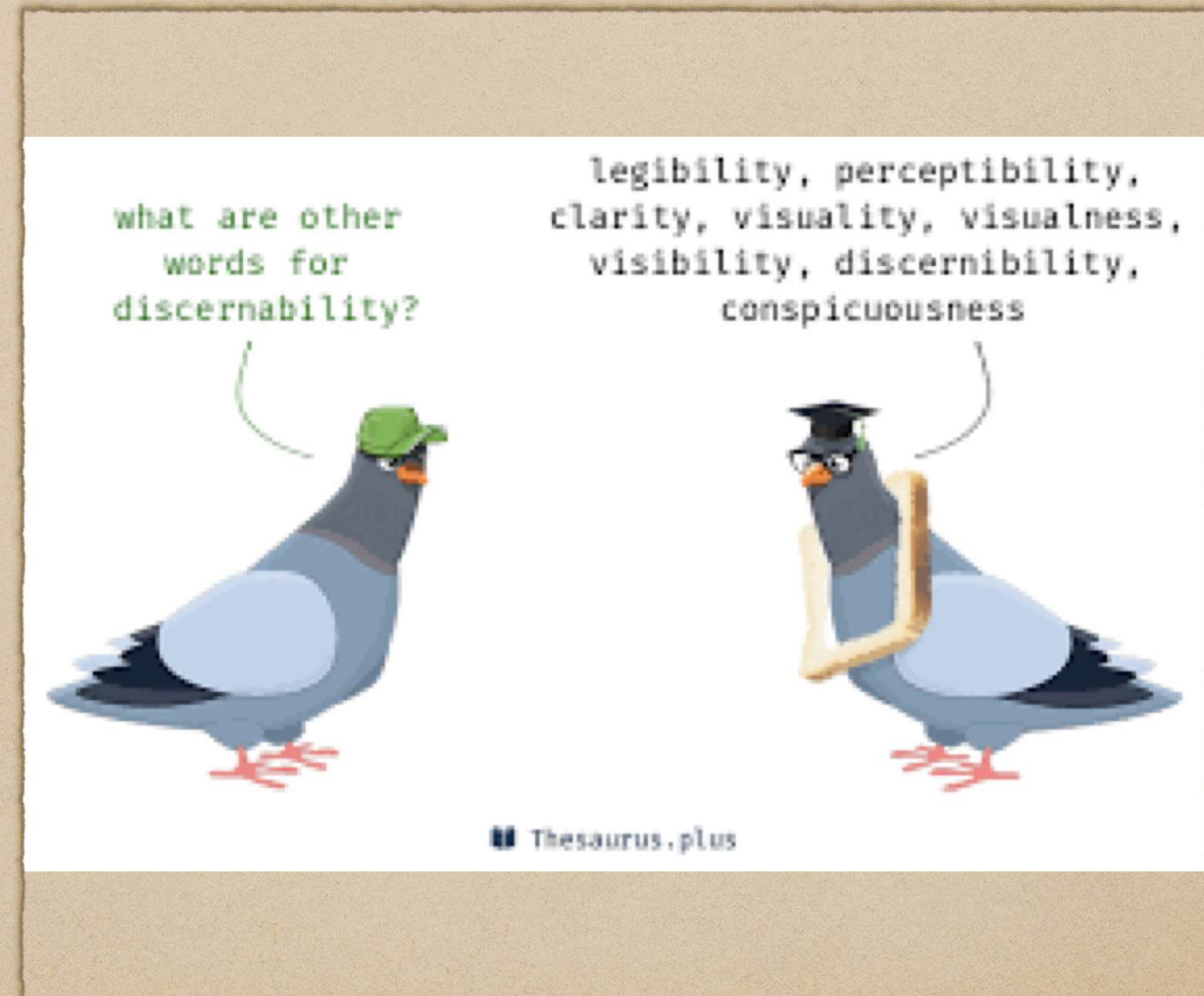


Being nonbinocular due to patching and/or occlusion secondary to any organic origin

- Creating environment that increases discomfort
- Abrupt loss of binocularity
- Loss of stereopsis, abrupt change led to no compensation from splinter skills since no time to create them
- Decrease in observable visual field may lead to creation of facial turn to compensate for primary gaze and extreme left and right gaze
- Loss of comfort and increased asthenopia

Visual discernability

- What many call acuity
- Can be increased when using tactics including compensating lenses
- Occlusion with minute tasks to increase discernability



Visual discernability

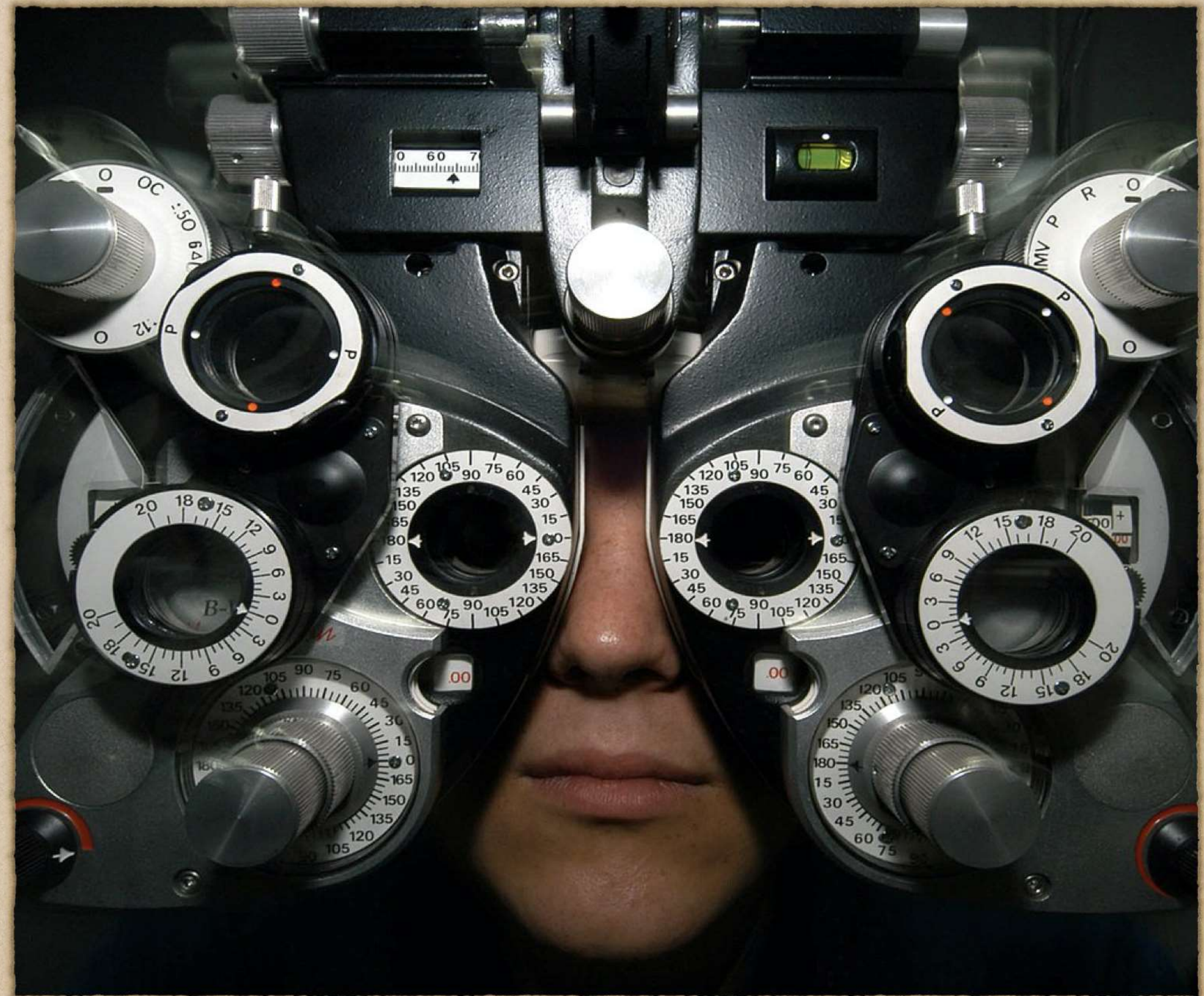
- Discernibility : the ability to make things distinct or the distinctness that makes perception easy, legible, distinct, sharp
- Better term than visual acuity
- Versus discernibility which is to be able to be perceived by a sense
- We are discussing an ability of the body to view or discern (which is an organic process)

What should we be asking

- Rethink all we do
- If you do full analytical ... consider free space so no proximity cues to drive any convergence
- If you do retinoscopy ... Consider not occluding the companion eye and doing multiple distances
- If you do visuoscopy ... more information is gained when patient is viewing binocularly

Phorometric readings

- Proximity cues
- Convergence cues
- Accommodation cues
- Dark room adds to issues



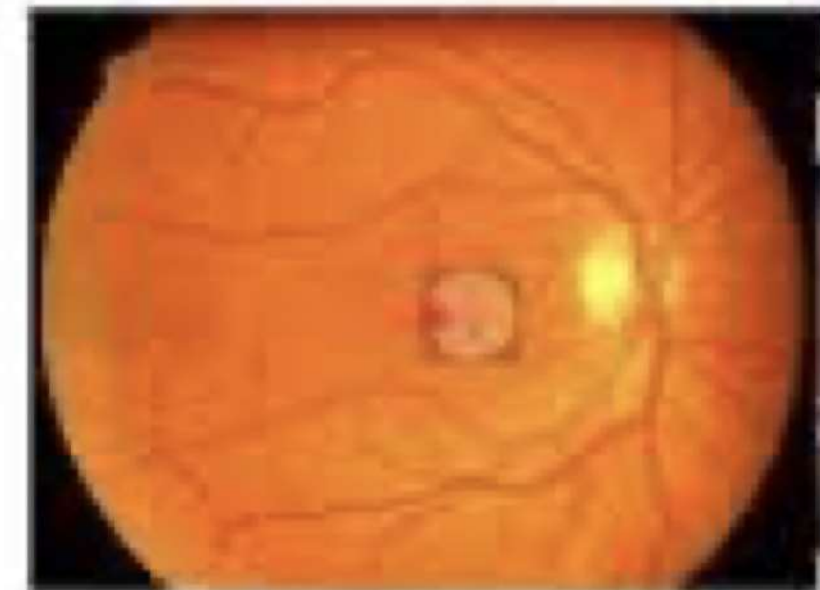
Visuoscropy revamped.....

- Nearness another issue
- Degrees away adds to astigmatic readings off axis dependent on the degree away from foveal point and the angle it is in (note back of eye is round so parafoveal point adds to cyl)
- Consider sperocylindrical equivalent in compensating lenses

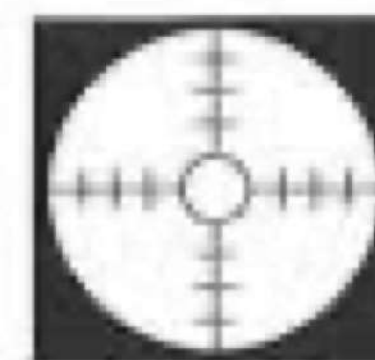
2) Visuoscropy

Each target notch typically corresponds to 1pd or approx 0.5 deg.

Note the direction, magnitude and stability of the fixation



3 different ophthalmoscope visuoscropy targets



3rd of nasal EF in right eye

Rethinking

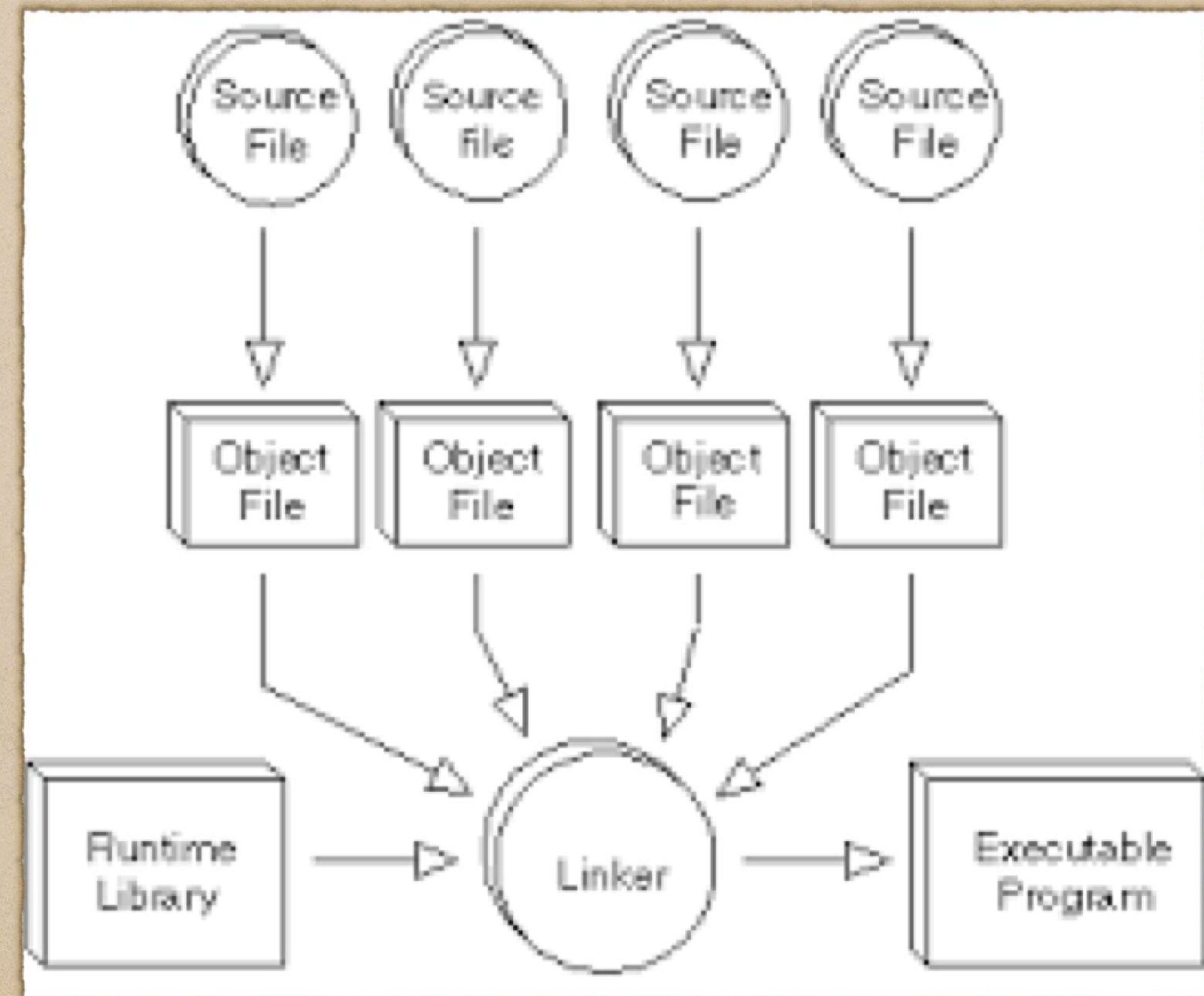
- During analytical No occlusion, just try to have a MFBF view
- Fixational disparity testing includes measuring any deviation in an MFBF environment
- Visuoscopy and eccentric fixation viewing adds to any off axis astigmatic findings
- Spherocylindrical findings given instead of chasing refraction findings

Visual Compilation

- What is this new term ?
- Can it encompass our view of vision ?
- Compilation : the act or process of producing something by assembling information collected from other sources

Visual compilation

- What we call vision
- Includes mind body (actually brain body feedback loop) concepts
- Includes mind (higher thinking and feedback loop)
- Includes psyche and visual gestalt



Vision

- Visual discernibility (motor level ... information gathering)
- Visual discernability (includes brain... information interpreted)
- Visual discernability + mind = Visual compilation
- Visual compilation + psyche = VISION

Rethinking only makes us better

- Studies
- Processes
- Thoughts
- Definitions
- Rethinking



Thoughts