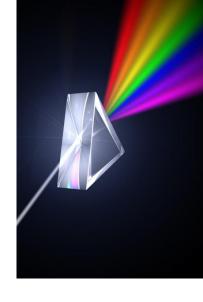


Andrew Linnell

Content

- Newton (1642-1727) and Goethe (1749-1832)
 - Why is the sky blue?
- The Human Being and Color
 - Soul Experience
 - Legends
 - Light and Dark
 - Lily and Red Rose
 - Microcosm of the Macrocosm
- Colors in Nature, in Art
- How Do We See?
- Mystery of Color what is really going on inside?



Legend of the Battle of Dark & Light

Manichean view of the Mission / Meaning of Humankind:

- The Spirits of Darkness wished to storm the Kingdom of Light. They came to its borders for the attack. They were, however, able to achieve nothing. Now they were to be punished by the Kingdom of Light.
- But in the Kingdom of Light there is only good. Thus the Demons of Darkness could only have been punished through good. Therefore the Spirits of the Kingdom of Light took a portion of their own kingdom and mingled it into the Kingdom of Darkness.
- Thereby a leaven, so to speak, came into the Kingdom of Darkness and a kind of vortex arose. Death became pulled into the vortex, whereby it consumed itself. It now carried within itself the seed of its own destruction. There then arose from the Kingdom of Light the Archetypal Man of the human race who must mingle with the Kingdom of Darkness and overcome it.
- Genesis: Darkness first, then light [keep this in mind return to it]

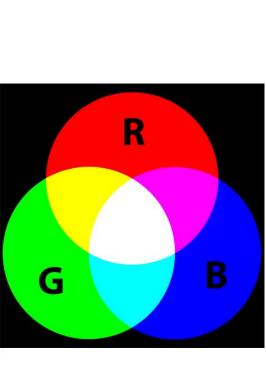


Making and Mixing Paints

- Carbon leads to reds all the way to yellow
- Oxygen leads to blues and then to green
- Yellow from sunflower's blossom (light)
- Blue from chicory's root (darkness)
- Mixing paints is mixing darknesses

Mixing Colored Lights

- Mixing colored lights is, well, mixing lights!
- RGB (Red, Green, Blue)
- CMY (Cyan, Magenta, Amber)



Current Scientific Light Theory

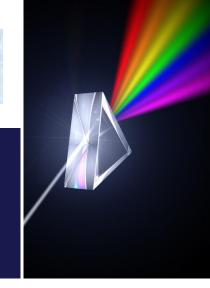
380 V	450	B 495	G 025	Y 8 O 8	R	750
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Color	Frequency in THz	Wavelength in nm
Violet	668-760	380-450
Blue	606-668	450-495
Green	526-606	495-570
Yellow	508-526	570-590
Orange	484-508	590-620
Red	380-484	610-750

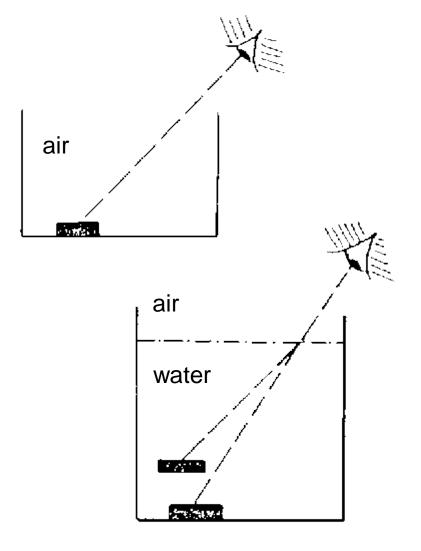
Ultra-violet has chemical effect on substances while Infra-red has heat effect Visible range: 380 trillion Hz for the lowest red to 760 trillion Hz for the highest violet – is this equivalent to one octave?

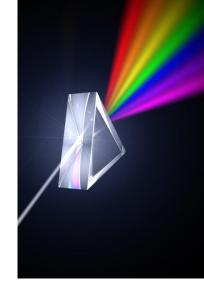
Newton and Goethe

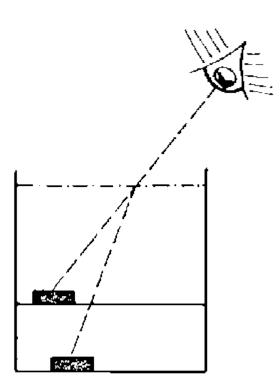
- From the sun comes "white" light in which all 7 colors are contained
- A prism refracts the path, separating colors
- Light is invisible
- Color arises through the interpenetration of light & dark
 - "A boundary is necessary to produce colors"
- Why is the sky blue?
 - Illuminated atmosphere is in front of darkness (outer space)
- Why is the sun yellow?
 - "Mild" darkness is in front of the light
- Why are sunset clouds red?
 - "Strong" darkness (cloud) is in front of the light



What is Refraction?

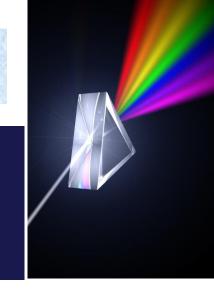






Newton and Goethe

- Quantitative: frequency and wavelength
- Darkness as absence of light, a null
- Darkness offer no resistance to light
- Qualitative aspects of color
- Darkness as active, confronting light and entering with it into a mutual interaction
 - Similar to North and South poles of a magnetic field
- "The eye has the light to thank for its existence. Out of indifferent animal auxiliary organs, the light calls forth an organ for itself of its own kind; and thus the eye forms itself in connection with the light for the light, so that the inner light can come to meet the outer light" -- Goethe

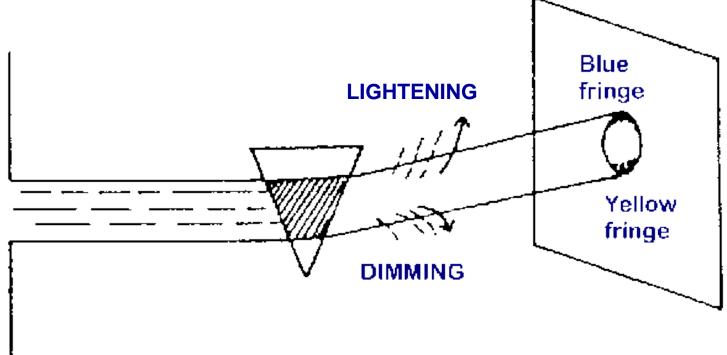


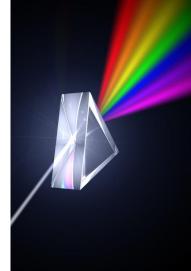
Newton and Goethe

- Light has various wavelengths = colors
- Light is a stream of particles that behaves like a wave (or a wave that "collapses" into photon)
- The eye, optic nerve, and brain are constituted in such a way that they translate a colorless process of movement into a color
- Senses: a matter of indifference to object
- Light is an ether and is thus invisible to our physical eyes
- Light behaves like waves but in a 3-D field
- Something can be perceived in the plant and animal which is not accessible to mere sense observation
- The 'spiritual eye' perceives formative forces, wholeness



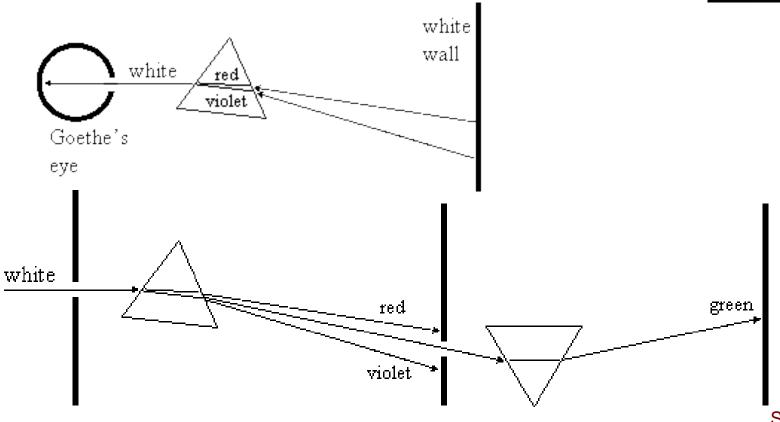
Lightening and Darkening thru a Prism





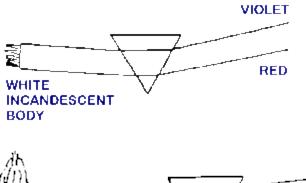
Double Prism, Experimentum Crucis

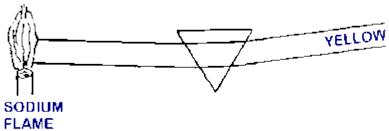
- Can we recombine the colors to get white?
- Angles prevent all so we create a slit for the middle color, green, and only green emanates

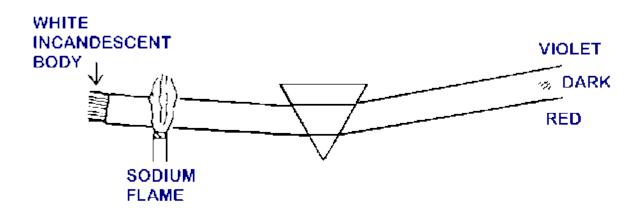




Subtraction by Addition

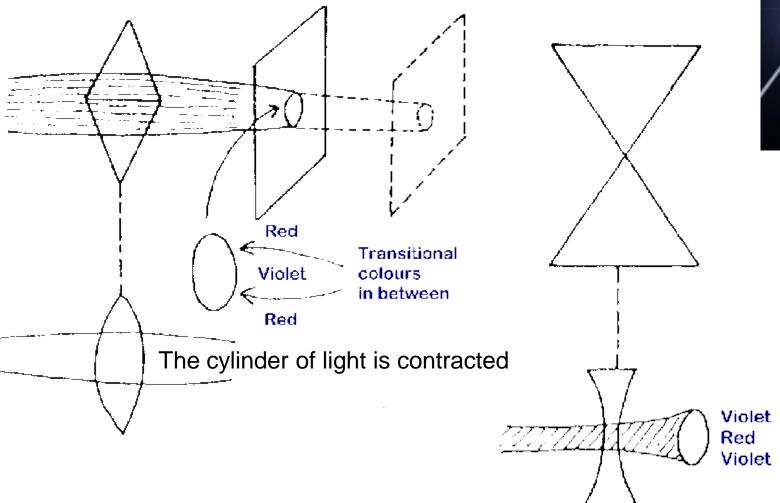








Other Prisms



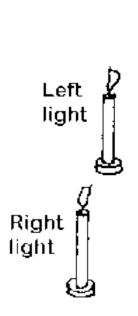


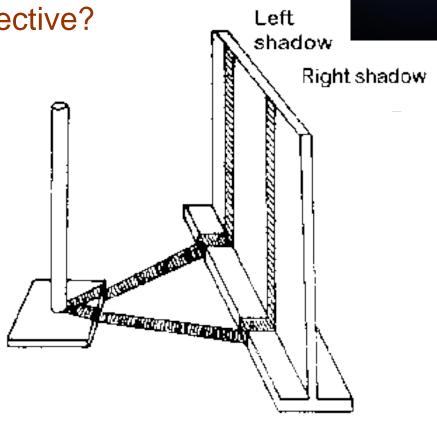
The cylinder of light is expanded

Shadow Colors

Shadow color will be the complementary color of the colored glass

Is this objective or subjective?





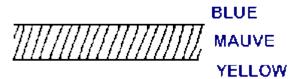
Black 'Beam' Spectrum

 Black paper with a luminous strip in the middle – look at this through a prism



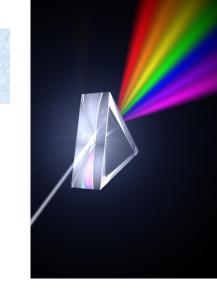


 White paper with a black strip in the middle – look at this through a prism



The Human Being and Color

 Deer in the headlights: seeing into brightness weakens receptivity; seeing into the darkness increases receptivity



- Every impression upon the eye remains for a time within
 - Stare at a color for a while and look away what color is seen?
 - Color of shadows, color adjusts to light/dark nearby
- Does color affect our soul's mood?
 - Yellow (happy)
 - Blue (serious)
 - Red (active)
 - Green (contentment)
 - Juxtapositions of colors

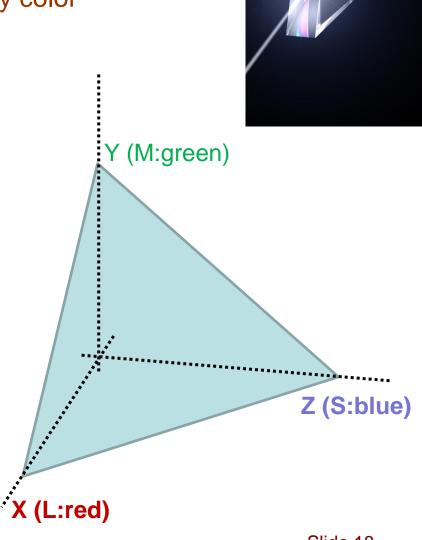
Colors in Nature

- What animals have brilliant colors? Patterns.
 - Birds, butterflies, air-animals
- What part of a plant shows colors?
 - How does this relate to the human? Astrality.
- Transparency Turbidity
 - Turbid contains both existing brightness and darkness
 - Something bright, seen through something turbid, appears yellow
 - Something dark, seen through something turbid, appears blue
 - Increase turbidity, yellow becomes red
 - Decrease turbidity, blue becomes violet
 - When blue and yellow mix, green arises
 - When blue which has been intensified to violet mixes with yellow which has been darkened into red, then purple arises



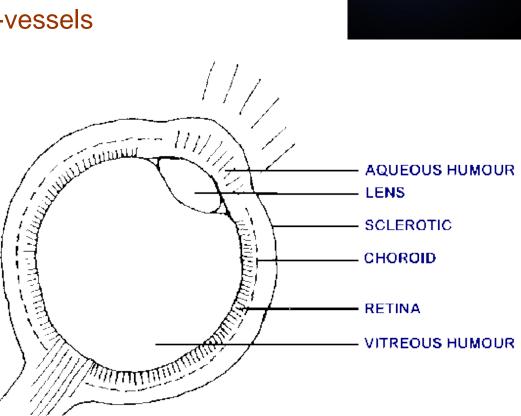
How Do We See Colors? Science:

- Three cones: S, M, L for each primary color
 - S: blue
 - M: green
 - L: red
- Red is 670 nm, where both the M and S cone absorption levels are virtually zero
- L peak absorption near monochromatic yellow
- At yellow M cones also absorbing
- Royal purple should be invisible, it "joins" high to low frequencies



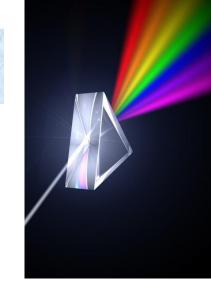
How Do We See?

- The eye is an active organism
- The cornea and sclerotic are of a bony, cartilaginous consistency
- The choroid, contains blood-vessels
- The fluid that is between the lens and the cornea through which the light first has to pass, is like any ordinary liquid taken from the outer world
- In the vitreous humour there is decided vitality there is life
- Retina full of rods & cones
 - 3D excitations



Mystery of Color

- How do we see red?
- Red light destroys blood and nerve in eye
 - Quickly revived, revivification gives health
 - Why bulls attack red
- Blue light chemically affects nerve in eye
- Growing/healing associated with darkness
- CO2 accumulation leads to paleness, unhealthiness
 - Remedy for paleness: calcium carbonate allows for C retention
- Oxygen leads to redness, healthiness
- Light (thinking) sucks up O2 to the head
- Body's O2 rays up to the stars becomes a mirror of sky
 - Microcosm : Macrocosm



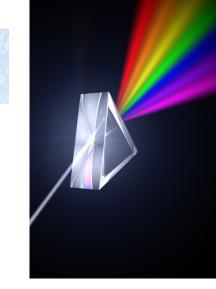
Color and the Soul

- With a physical color, the soul experiences not only the sense impression, but through it, it has a soul-experience
- When through the eye the soul perceives a yellow surface, this soul-experience is different from what it is when it perceives a blue surface



Mystery of Color and the Human Aura

 Three aspects of color phenomena can be distinguished within the aura radiating and surging round a person



- There comes to expression in the aura what a man has made of himself in the course of his incarnation
- The three members: body, soul, & spirit come to expression in one's aura, interpenetrating each other
 - Colors that bear more or less the character of opaqueness and dullness though transparent in comparison to colors seen with our physical eyes, mist-like
 - 2. Colors consist of those that are light itself, a space of light
 - 3. Colors have a raying, sparkling, glittering character, mobile

Three Aspects of One's Aura

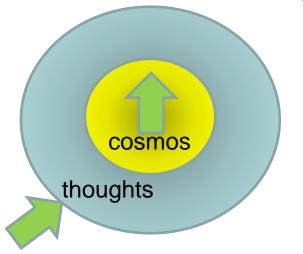
- 1. Undeveloped life of impulse: desires, lusts, timidity, from egotism to natural motherly-love
 - From muddy colors to rose red
- 2. Conceit, pride, ambition to clear thinking and understanding life
 - From browns (conceit) to clear yellow (thinking) or green (life) or rose-red (benevolence) or blue (piety)
- 3. (Higher development) last remnants of personal egoism in form of desire for honor then orange to clear yellow (divine thinking) or green (love for all) or blue (self sacrifice for others)

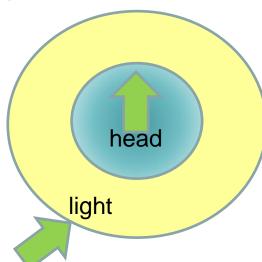
From Theosophy Chapter III: The Three Worlds: Section 6: Thought Forms and the Human Aura

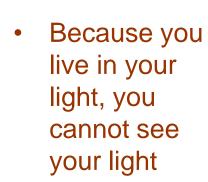


Thoughts and Color with Clairvoyance

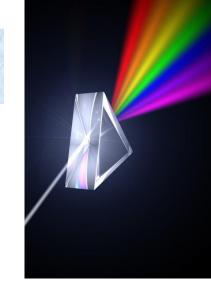
- Cosmos seen from inside is filled with light
- Seen from outside, it is filled with thoughts
- Human head seen from inside is thoughts
- Seen from outside, it is light





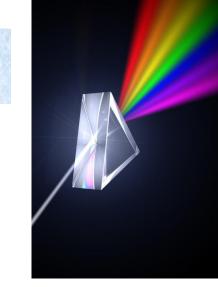


- Our thoughts are that part of us that comes from the past
 - What was once will becomes thought in new incarnation and appears as light
- Where there is light, there is thought
 - World beauty shines in the light as the world dies away



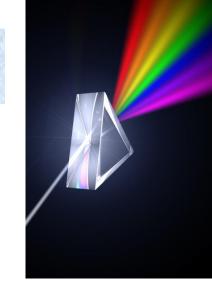
Will and Color with Clairvoyance

- Will becomes substance; will is matter
- On the inside, matter is will
- When one delves into the nature of will, one discovers the true nature of matter
- And in delving into matter one finds will, one finds the germinating world
- In the cosmos wisdom
- In the radiating but dying away
 beauty
- In the future world strength
- The future world arises in darkness in will/matter.
- The past radiates in the beauty of colors
 - Plant blossom as expression of its past
- In Light is the meaning of divine revelation
 - Death is through the light



Light, Dark, and Heaviness

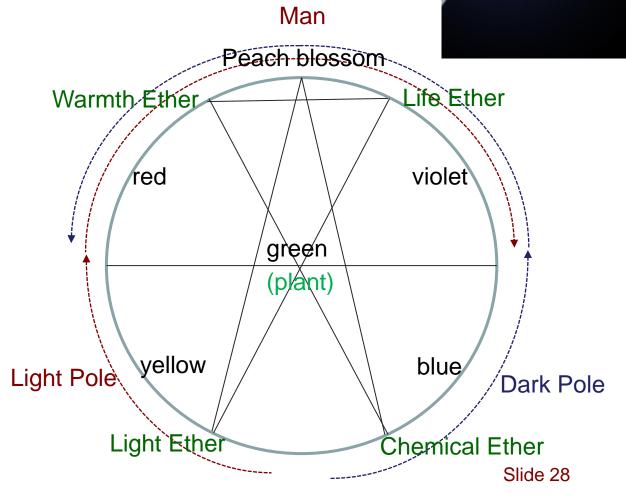
- What's the opposite of light?
 - Most will say dark
 - Like N & S poles of a magnetic field
- But what does light DO?
 - It radiates out (like yellow which is the luster of the spirit)
- The opposite actually is heaviness, gravity
- What arises when we mix Lucifer, the light bearer, and Ahriman, the prince of darkness?
 - Color! Human Soul
- What happens when light and heaviness are combined?
 - Can they be combined? Mystery



Ether	State	Form	Spatial Force
Warmth	Plasma, fire	Spherical	Expansive
Light	Gas, air	Triangular	Centrifugal
Chemical	Fluid, water	Half-moon	Centripetal
Life	Solid, earth	Square	Suctional

In the illuminated world, when ether x predominates, then y:

Ether	Color
Warmth	Red
Light	Yellow
Chemical	Blue
Life	Violet



Background to Image and Luster Colors



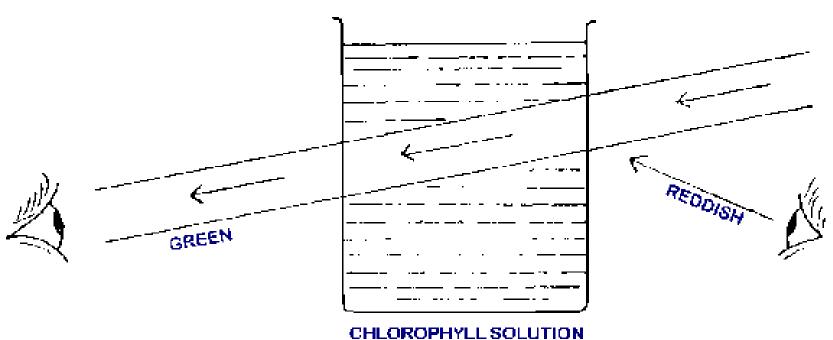


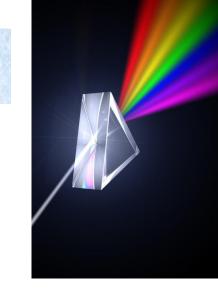
Image and Luster Colors

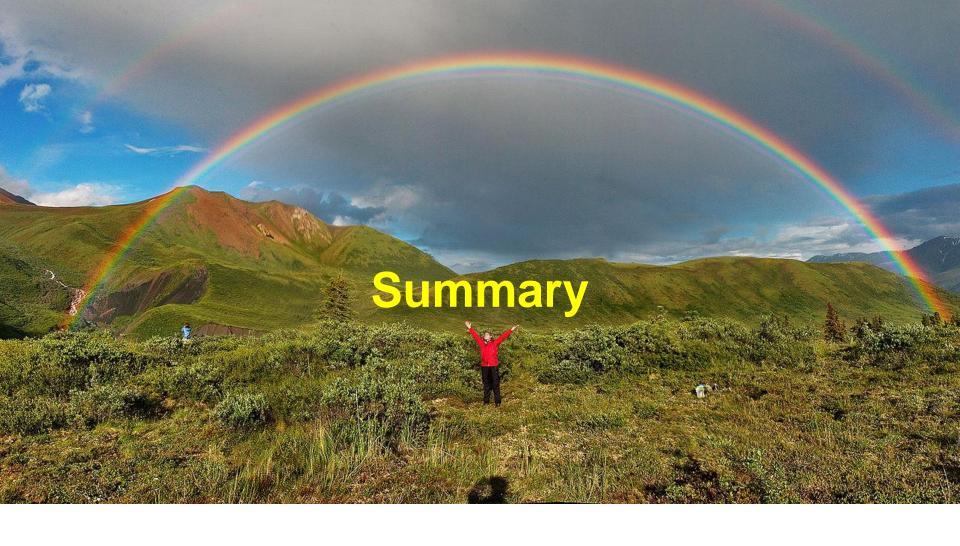
 What color is the image that the living has of the spirit?

Shadow source	Illuminant	Image
Spirit	Lifeless	Black
Soul	Spirit	White
Living	Soul	Peach-blossom
Lifeless	Living	Green

 What color shines from the spirit?

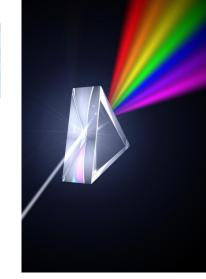
Shining source	Luster	Gesture
Spirit	Yellow	Radiate out
Soul	Blue	Look inward
Living	Red	Uniform
Lifeless	Violet? (none?)	?





Summary

- Creation began with the Elohim
 - First, those who did not finish Old Moon (dark being)
 - Later came Elohim who could glow (light being)



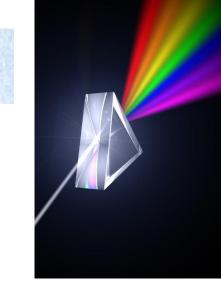
- The Human Being is a mixture of creation by both Elohim
 - Soul is a mixture of Light and Dark
 - Aura colors are visible as the mixture of light and dark
- Human Being as microcosm of macrocosm
 - Plant as "upside-down" human without passions, without travel
 - Plant-blossom colors as chaste expressions entering soul realm
 - Mammal colors: predominately brown, black, and white
 - Land-animals
 - Patterns
 - Rich colors of air-animals and salamanders (some reptiles)

Summary

In Him is Life. Life is the Light of Men.

And the Light shines in the Darkness of soul,

And the Darkness has not comprehended it.



Through our living thinking may Christ knock at our door. When Christ is invited to enter us, he comes to know us.

- When we can say, no longer I but Christ in me,
- When we can say, no longer my blood but Christ's blood flows in me,
- Then our souls shall glow from the Love within us
- Then the Darkness shall come to comprehend the Light
- And we shall commence the work: from flesh to Word.

Acknowledgement

Thanks to <u>www.rsarchive.org</u> from where I sourced the pictures from Rudolf Steiner's Light Course.

