

Neurolighting[©]

ELEMENTI DI PSICOLOGIA DELLA LUCE

ELEMENTS OF LIGHT PSYCHOLOGY

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PSYCHOLOGICAL AREA





Neurolighting®

NeuroLighting®

3 NOVEMBER, 2015 • LESSON AT:



POLITECNICO
MILANO 1863

A new method of psychological analysis of light to support Light Art Creation and Lighting Design.



NL is based on the study of the reactions of the human Neurophysiological System and Psychic Apparatus to light stimuli.

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Light talks

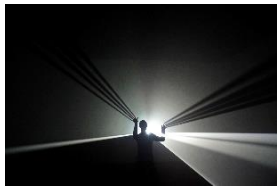
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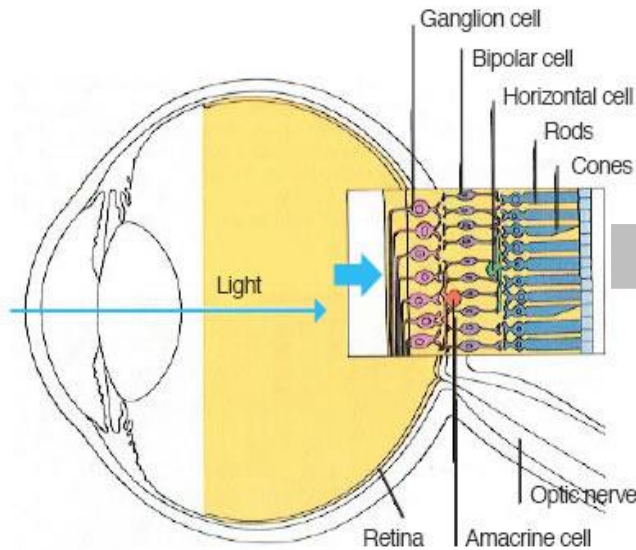
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LIGHT PERCEPTION

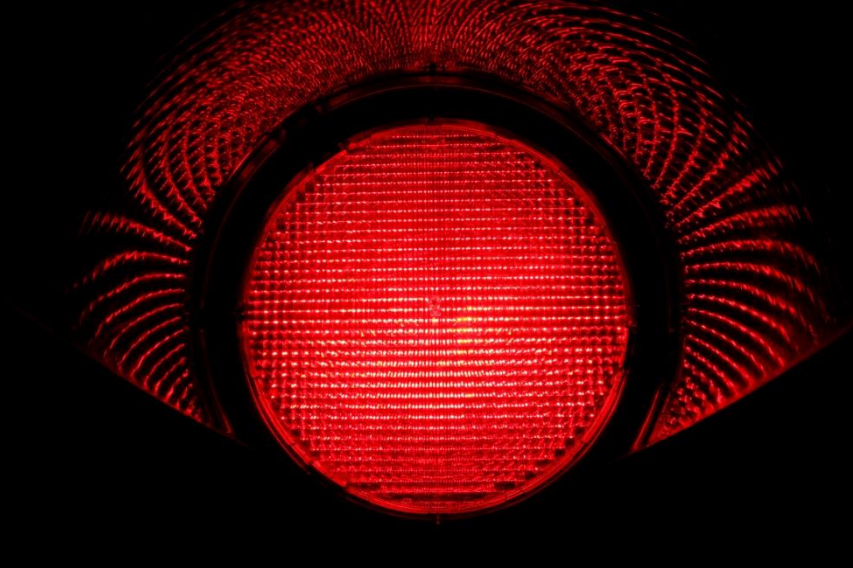


Light is caught by the eye

Light signals are transmitted to the brain as electrical signals

Brain receives light information as an electrical phenomenon



	Phototransduction	
125 million Photoreceptors		Neurotransmitters are released
Light signals are converted into electrical signals		Emotions and Behaviors are induced by light
Opsin Light-sensitive Proteins		Light talks to Brain and Psyche
	Optogenetics	



	Interaction L/B	
Light as a Cognitive Map		Light-based Techniques
Light as an Emotional Driver		Emotional and Behavioral Conditioning
Light as a Gestaltic Device		Light as a Subliminal Language
	Olistic Approach	





**Light as a
Cognitive Map**

**Light as an
Emotional
Driver**

**Light as a
Gestaltic
Device**

Fabrizio Plessi: Liquid Lights



Llaüts + Lights

2014: Ludwig Muzeum, Koblenz, Germany

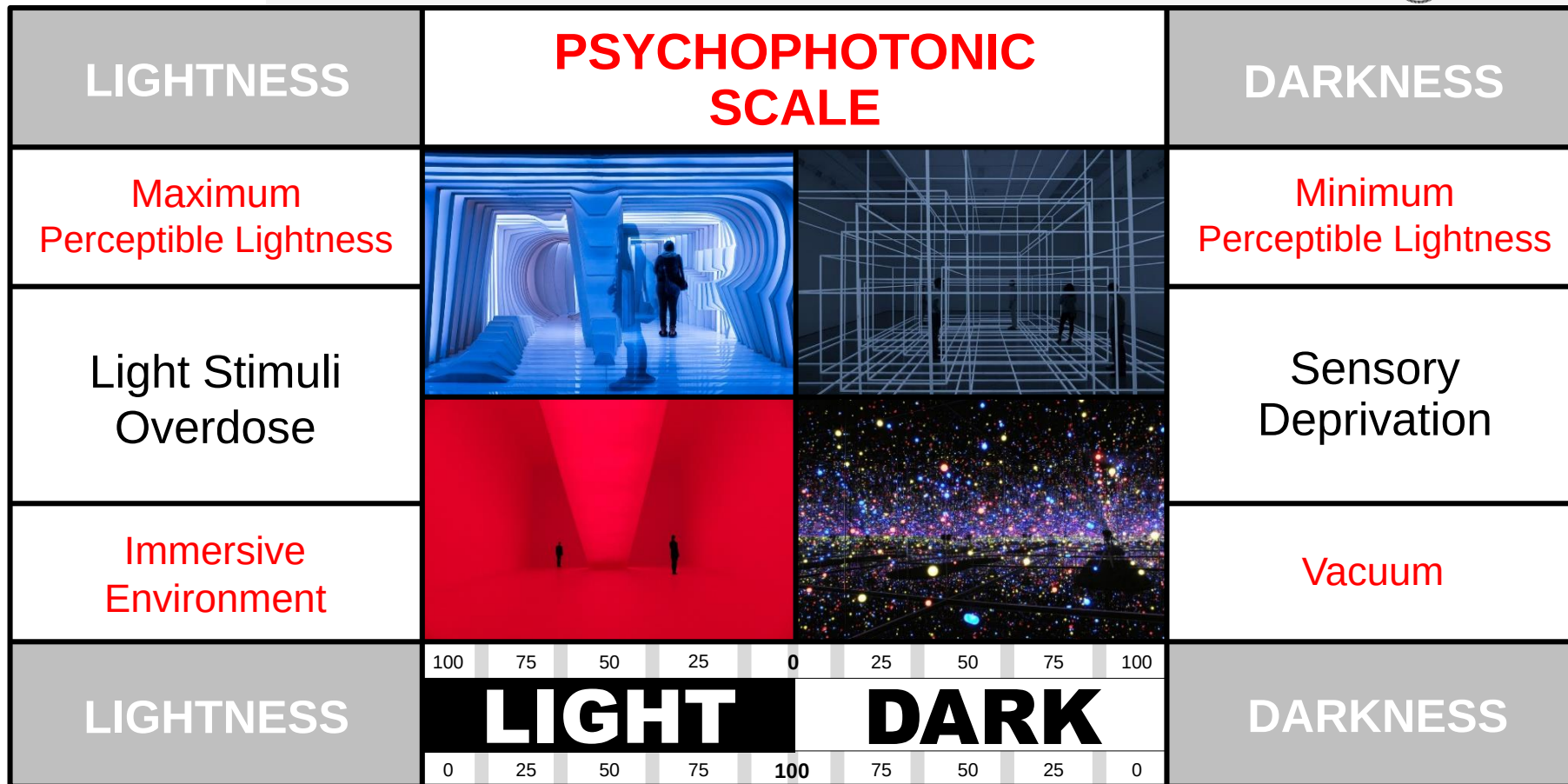


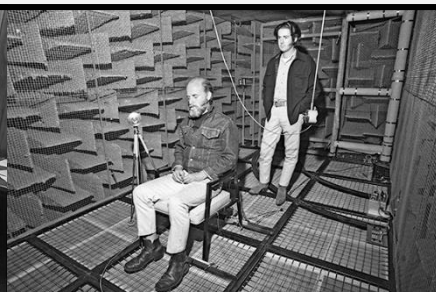
2015: Arsenale, Venice, Italy
2011: Llotja, Palma de Mallorca, Spain





INSIDE	PSYCHOPHOTONIC GRAMMAR AND SYNTAX	OUTSIDE
Intensity		Environment and Location
Colour		Layout and Spatial Orientation
Typology		Design, Shape and Structure
INSIDE	Artist/Designer ► Light Stimulus Building Viewer/Perceiver ► Light Stimulus Perception	OUTSIDE





Psychology of
Perception

Altered States
of Consciousness

James Turrell
Robert Irwin
Edward Wortz

Psi-Conductive
States

Perceptive
Deprivation

THE GANZFELD EXPERIMENT

1 9 6 9





Absence of depth field		
Sensing Spaces		
THE GANZFELD EFFECT		
Skyspaces Horizon Lack		
Fullness of Emptiness		





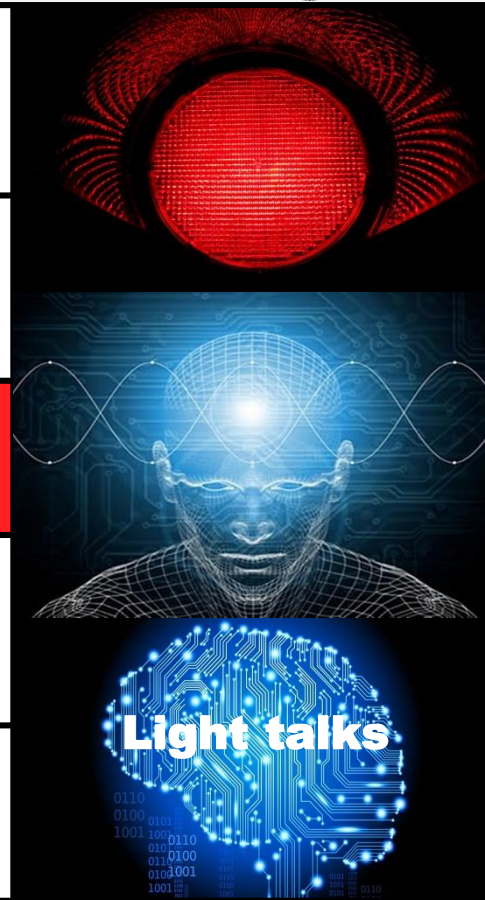
LIGHT SENDS BIOCHEMICAL
MESSAGES TO OUR BRAIN

LIGHT INFLUENCES HUMAN
BEHAVIOUR AND EMOTIONS

CONCLUSIONS

THROUGH LIGHT MANIPULATION
WE CAN CHANGE THE MESSAGE

LIGHT ARTISTS AND DESIGNERS
CAN MAKE TALKING THE LIGHT





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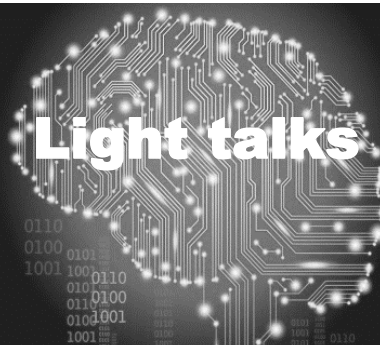
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