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Poetics of Light – Truth and Reality of Knowledge

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Light makes our surroundings visible to us. Vision plays a substantial role in how we access our environment and make sense of it. Yet, the understanding of light vision suffers from the discrepancy between physical and perceptual facts. This contribution guestions the rationale of how knowledge and truth are generated. Language may often not be adequate to activate and guide all of our senses whereas artworks, especially light art, may evoke thoughts and demonstrate experiences (of perceptual processes) that open up reflective attitudes on reality's subjectiveness. In this essay, the original physical artwork can only be displayed as a representation. Printing light as images is in itself an experiment in knowledge production, a subjective experience. The imagery maps the light and colour effect of the artwork and invites the viewer to trace the installation's experience as well as to try out the after-image effect and optical illusion, examining knowledge along the way.

- #light art
- #afterimage

#optical illusion

#seeing

#perception

#experience

Light and colours are curious phenomena. In 1840, Johann Wolfgang Goethe had already discussed in his *Farbenlehre* (1840) that sometimes our sensory apparatus makes us see colours that are not there. When we close our eyes after looking at a bright yellow circle, we "see" a purplish circle; our perceptual apparatus creates an after-image effect in complementary colours. In reality, the light and colour we perceive don't exist. Does that mean that they are not true?

Rationally generating knowledge is independent of sense experience based on reason. Reflecting on light and colours may reveal to us that knowledge is not about discovering, accessing and measuring the intrinsic structure of the universe, but is about creating versions of understanding which, ultimately, we consider to be "true". Therefore, the truth of what we perceive may be a personal narrative initiated by an artwork and completed by the spectator. The poetics of light – that interplay of what is there and what is made by our sensory system – reminds us how art involves more than making what is visible to the eye.

"Light" is derived from the Old English leoht, meaning luminous, and is based on the Indo-European leuk-, meaning to shine or to see (Classen 1993). Since classical Greece and further elaborated in medieval times (Raizman-Kader 2006), considerations of light have distinguished the two concepts of lux and lumen. Unfortunately, this precise linguistic and conceptual differentiation has been lost over time but should be reconsidered. Lumen refers to the physicality of light, the movement of light rays in waves and particles; it describes the essence of illumination, what we physically perceive.

On the other hand, lux describes an internal, sensorial and psychological process of perception involving vision and sight. It denotes a subjective experience of light and its effects, such as the perception of colours, shadow and light qualities (Ronchi 1970). When discussing light, we ought to be aware of the implications of this distinction.

Seeing light is a neuro-biological process. Light waves hit the light-sensitive retina at the back of our eyes where photo receptors respond to the signal and forward the information to our brains. How we in turn process, perceive, and understand light information goes beyond neuro-biological functions and moves into sensual affect and cultural apprehension. The psychologist James Gibson contends that the brain process following vision - our perception of the visual world - is a phenomenal experience. He also points out that we never see light itself, but only the effect it has on the surfaces of in our environment (Gibson 1950). Similarly, Ola Eliasson and Tor Nørretranders (2015) argue that "the only thing we do not see is light. We never see light as light, but always as something else: as something out there." We perceive conceptions of our environment. We interpret what we see based on many factors including our sensual affect as well as our knowledge of what we have learnt through cultural fabrication so far.

Poetics of Light is a continued consideration of the artwork Your Rumination (2019) which was inspired by the aurora borealis phenomenon found at Norway's arctic circle. This electrical phenomenon creates perceivable reddish or greenish schlieren of light in the night sky. Your Rumination initially recreates this colour experience as a spatial light installation, which has now been transferred as a cropped photograph into a visual narrative of abstract landscape tableaux. These tableaux invite us to question our knowledge through and of light, of what we are actually seeing. We may not see light objectively as lumen, but we can perceive and appreciate its subjective poetics as lux, which may be its only truth after all.



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Bibliography

Classen, Constance. *Worlds of Sense: Exploring the Senses in History and Across Cultures*. London: Routledge, 1993. p. 68.

Elíasson, Ólafur, and Tor Nørretranders. *Light! On Light in Life and the Life in Light*. Klampenborg: Forlaget Tor.dk, 2015. p. 21.

Gibson, James J. *The Perception of the Visual World*. Boston, MA: Houghton Mifflin Company, 1950. p. 51.

Raizman-Kedar, Yael. "Plotinus's Conception of Unity and Multiplicity as the Root to the Medieval Distinction between Lux and Lumen". In *Studies in History and Philosophy of Science* Part A 37, no. 3 (1 September 2006): pp. 379–97.

Ronchi, Vasco. *The Nature of Light. An Historical Survey.* London: Heinemann Educational Books, 1970. pp. 261–84.

von Goethe, Johann Wolfgang. *Goethe's Theory of Colours*. London: John Murray, 1840. §57.

Bio

Dr. Cornelia Erdmann is a German researcher and visual artist based in Hong Kong since 2006. With a background in fine art (MFA Public Art and New Artistic Strategies, Bauhaus-University Weimar, Germany) as well as in architecture (Dipl.-Ing. Arch, Bauhaus-University Weimar, Germany) she blurs the boundaries between creative disciplines, exploring modes of narrativity connecting subjective realities and objective spaces. Light is an integral medium of her research and practice. She specialises in site-specific installations and public art works that are found in private and public collections, and at light art festivals around the globe.







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