

RECENT WORKS WITH LIGHT

**Adrien Lucca
2018**



ART & LIGHT IN THE CONTEXT OF MY RECENT WORKS

[...] the most obvious impact of the yellow light is the realization that perception is acquired [...] the sudden feeling that our vision simply is not objective, is brought to our awareness and with that our ability to see ourselves in a different light.¹

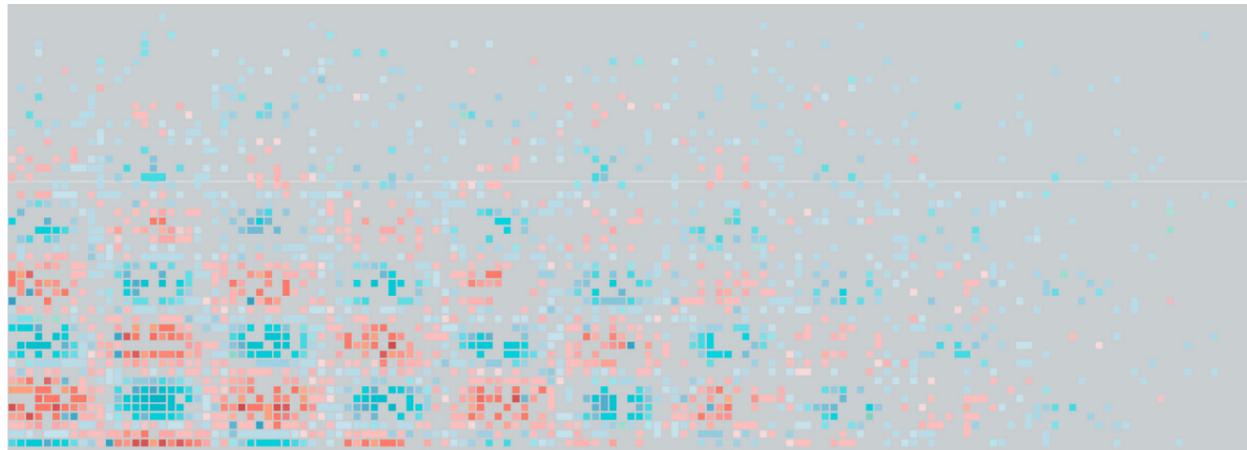
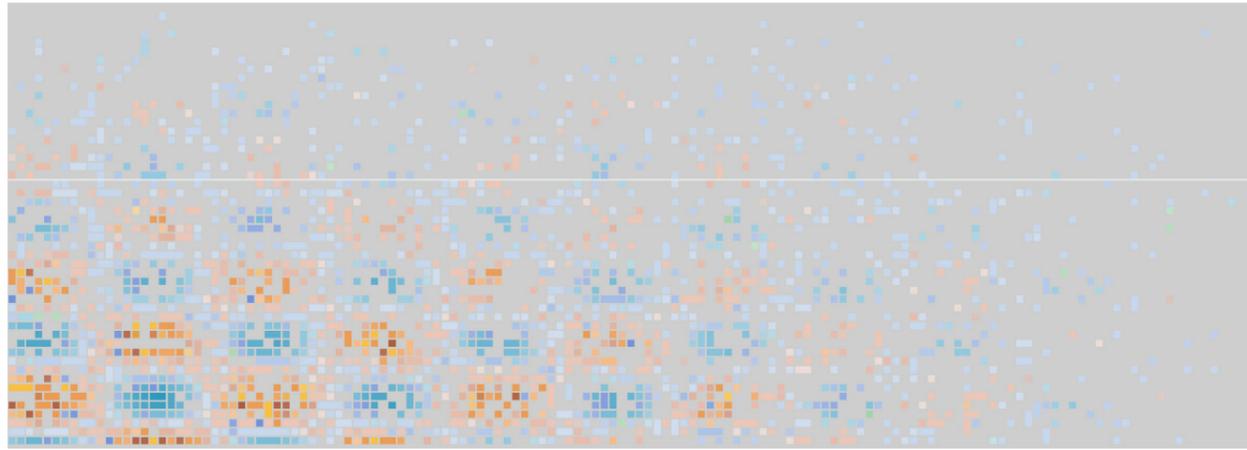
Light is invisible in two ways: because it is only through its interactions with matter – that redirects light in our visual field – that light is becoming visible; and because our brains use light to see the objects around us. Usually, we do not observe the light itself (what the objects diffuse or reflect) but the objects and the colours that light make visible. In the context of light art however, one is forced to ask how light itself can be made visible: how can light become the center of the attention? And how can we visually experience and explore the very nature of light itself?

In my recent works, I tune the spectrum of artificial light sources and surreptitiously create counter-intuitive visual experiences with this technique. This science-based artistic practice requires working in collaboration with engineers in the lighting industry. In 2017, I presented at *ETE78* (Brussels, BE) and *RIB* (Rotterdam, NL) the first prototypes of *Special white light*: a “colour-blinding” or “hue-shifting” artificial light that mimics the warm-white color of classical light bulbs, but has very unusual color rendering effects on coloured objects. This is especially true for yellow objects: a glass of blond beer illuminated by *Special white light*² becomes pink, a yellow flower becomes red-orange and lemons appear pale yellowish-white. Remarkably, achromatic objects do not change: white walls, grey and black surfaces remain of the same colour.

Left page: Adrien Lucca, exhibition view: *Lamp prototypes having a colour-blinding effect*. The two coloured papers in the back are normally yellow and pale green, RIB art space, Rotterdam, 2017

¹ Olafur Eliasson, *Some Ideas About Color* in: Olafur Eliasson: *Your Colour Memory* (Glenside, 2006), p. 76

² The first prototypes were developed in collaboration with GVA Lighting, Inc. (a Canadian LED light systems manufacturer). They are now part of *Microkosmos* (2018), a permanent light/paint installation in Brussels, BE (see pp. 18-19).



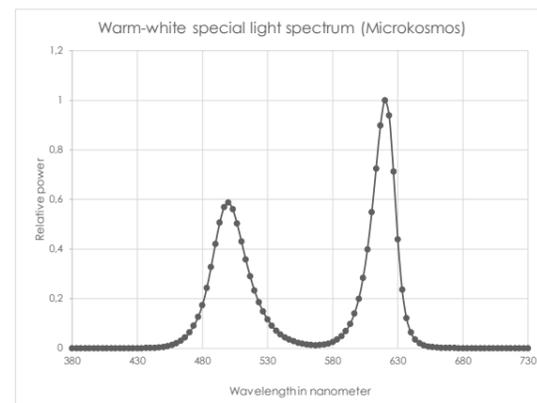
a.



d.



b.



c.

Microkosmos (2018) - permanent light/painting installation in Brussels, BE. This piece is situated in a courtyard. At night, the artificial lights interact with the wall painting, and with every object in the space.

a. (Up) the wall painting illuminated by daylight; (Down) the wall painting illuminated by special white light

b. Prototype of a Special warm-white fixture produced in collaboration with GVA Lighting, Inc. (Canada)

c. Spectrum of the special warm-white light produced by the prototype

d. photographs of the installation during the day and at night, illuminated by special white light





More recently, I have developed my own special light technology by combining classical LED systems with “phosphors”, the high-tech fluorescent powders used in plasma TVs, fluorescent light tubes and “phosphor-converted LEDs”. I have created similar unusual color rendering effects with precisely-tuned cold-white artificial light. New prototypes have been presented in my solo exhibition: *A White Room Without Yellow* (April 2018) at LMNO Gallery in Brussels, and in the metro station “Maashaven” in Rotterdam, NL, where a permanent installation is currently being produced³.

In 1997, Olafur Eliasson created the famous piece *Room for one colour* where a group of identical low-pressure sodium lamps (re-branded “monofrequency lamps” by Eliasson) saturate an empty room with their monochromatic warm-yellow light. In this room, a strange phenomenon happens: all colours disappear, leaving only shades of black, grey and yellow at the surface of the objects, including the spectator’s bodies.

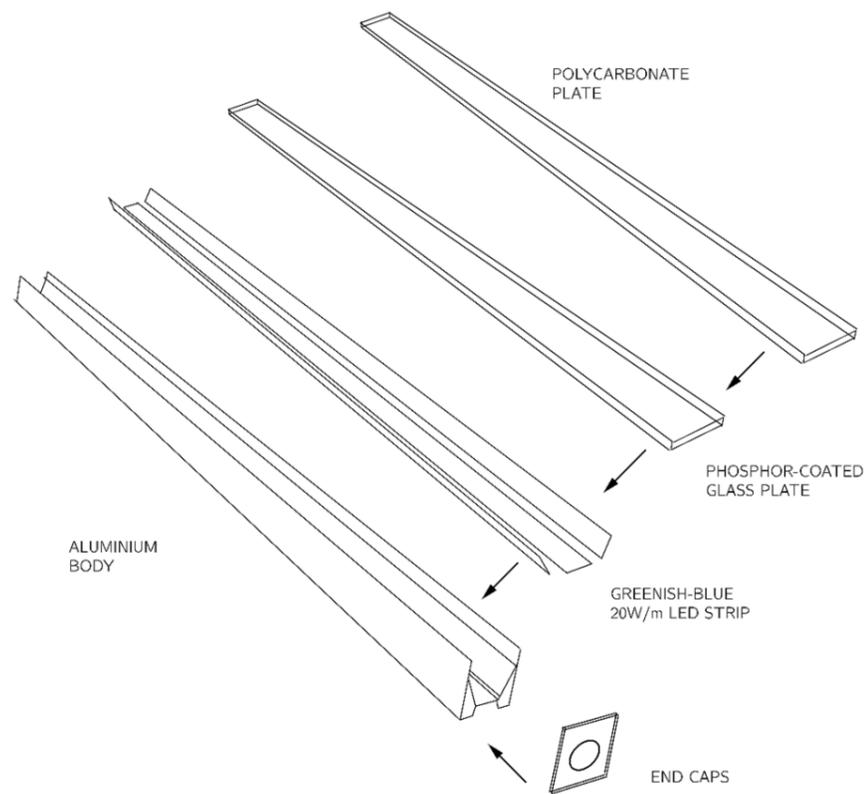
20 years after Eliasson piece, my most recent experiments with light refer to the ubiquitous and counter-intuitive visual effect in *Room for one colour*, an effect that Eliasson achieved using low-pressure sodium technology, a standard type of coloured light. In my work, on the contrary, ***the light is not coloured – it is white!***

The special white light that I am developing is therefore playing a less obvious game, acting as if it were post-producing reality, as if a digital colour filter was applied by a software in real life. By doing so, my latest works consider light as a primary physical force having precedence on matter and as an energy which seems to fill-up the space, that physically interacts with matter, with our visual system and with our brains.

³ The project is entitled *A corridor where reality is post-produced reality*, is produced in collaboration with *Sculpture International Rotterdam*, a non-profit organization that promotes contemporary art in the public space.

(Left page)

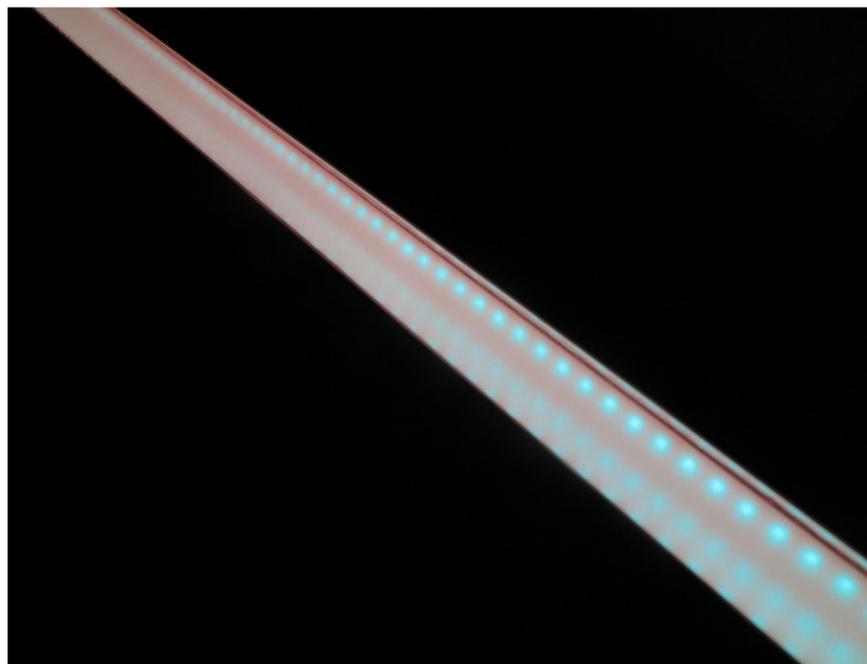
Screen captures: Adrien Lucca, *Special cold-white light VS Blond beer*, YouTube video, 2018



a.

Technical documents related to the lamp prototype:
60W Special cold-white light fixture, version 1 (June 2018)

- a. assembly drawing;
- b. photograph of one unit turned off;
- c. photograph of the phosphor plate in operation;
- d. custom-made 485nm blue-green LED strip;
- e. photometric data (measured in my studio);
- f. spectral data (measured in my studio);
- g. power supply unit



c.

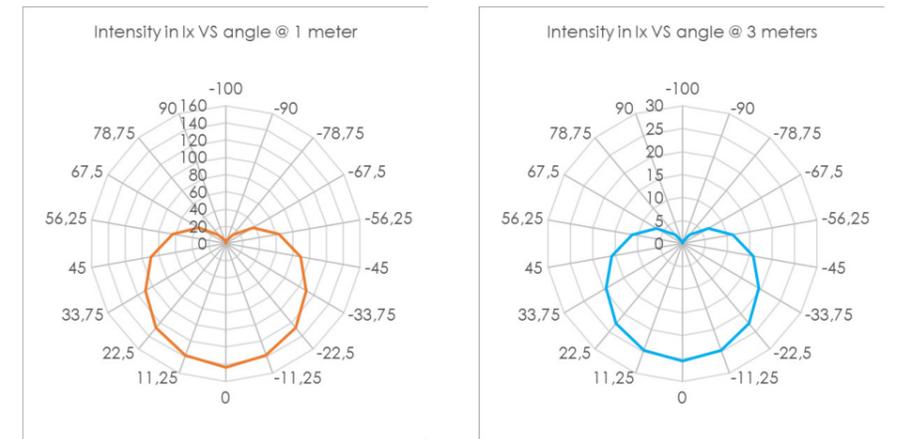


b.

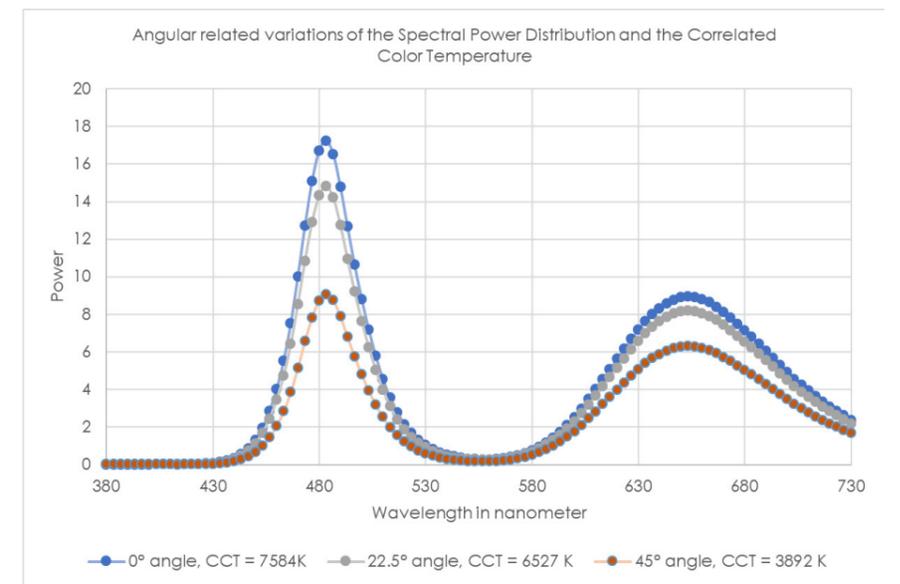


d.

e.



f.



g.





Above: Adrien Lucca, exhibition view: *A White Room Without Yellow*, LMNO Gallery, Brussels, April 2018 - photo by Philippe Degobert

In *A White Room Without Yellow* (2018), the special cold-white light that is coming from custom-made LED light fixtures is creating an unprecedented situation: 28 identical yellow paint samples attached to the walls, illuminated by special cold-white light in one room and by classical white light in the adjacent room, appear completely differently. The appearance of yellow paint samples in the main room is transformed: they turn orange, red, brown, light pink or beige. The visual manifestation of the colour yellow in the main room is physically impossible because of an invisible and counter-intuitive mechanism related to the physical composition of the light itself, an effect that feels like “magic” to the visitors.



Illustration of the special rendering effect of Special white light:

Test chart, Cadmium yellow n°6, 2018
 Illuminated by Special white light

Test chart, Cadmium yellow n°6, 2018
 Illuminated by Daylight

SOLO EXHIBITIONS

- 2019 * *The Yellow Lab*
The White House Gallery, Lovenjoel, BE
- 2018 * *A White Room Witout Yellow*
LMNO Gallery, Brussels, BE
- 2017 * *White light researches/demos/demons*
RIB art space, Rotterdam, NL
- * *Mémoire d'atelier sur trois projets*
ETE78 art space, Brussels, BE
- 2016 * *Wave Patterns*
LEVY.DELVAL, Brussels, BE
- 2015 * *Adrien Lucca – travaux imprimés récents*
IKOB – International Art Centre East Belgium, BE
- 2014 * *Taches de lumière – colorimetric prints*
C-BOX, La centrale électrique, Bruxelles, BE
- * *Adrien Lucca*
Elaine Levy Project, Brussels, BE

PUBLIC ART

- 2019 * *A yellow-less corridor – where reality is post-produced reality*
Permanent light installation, Maashaven metro station, Rotterdam, NL
- 2018 * *Dentelle de lumière – allégorie de la recherche*
Permanent glass installation, Academia Belgica, Rome, IT
- * *Microkosmos*
Permanent light/wall painting installation, Het Huys, Brussels, BE
- 2017 * *Soleil de minuit*
Permanent glass installation, Place-D'Armes metro station, Montréal, CA

AWARDS, NOMINATIONS

- 2018 * Nominated for the prize “ADAGP Révélation Jeune Talent Livre d'Artiste”, MAD Artist's book fair, Paris, FR
- 2012 * Prize “Fondation Henri Servais”, Art Contest 2012, Bruxelles, BE
- * “Prix du gouvernement de la Communauté française de Belgique”
Prix Médiatine, Bruxelles, BE

My tools can be brushes, pigments, paper, glass, measuring instruments, digital cameras and printers or else: equations and mathematical models. I will however reject any idea that does not find a tangible expression into a material, instrumental and visual reality. I will therefore not use any material or technology unless I can objectively characterize what it does in terms of light and colour.

Since 2009, following the above mentioned rules, I have developed my artistic practice around the topics of geometry, light, color, physics and perception. I worked extensively with light-matter interactions using natural and artificial light, colour pigments and glass. Besides studying what artists have done with colour and light in the past, I sought to have access to scientific information about light and colour science through seminars, books and the internet. I learned color science on my own and I have set up a home-laboratory where I use chemistry, spectrometry, electronics and computer programming for artistic purposes.

The light technology available today is very different from what was available at the end of the 20th Century. Thanks to the recent development of high-power blue, colored and phosphor-converted LEDs, many things that were only theoretically possible a few years ago are now technically accessible. *THE WHITE LIGHT EXPERIMENT* will be an attempt at using this state-of-the-art light technology to touch the very foundations of our visual universe and to give an insight into the future of light-based art.

Adrien Lucca (1983, France) studied in Brussels at the École de Recherche Graphique and was a resident at the Jan Van Eyck Academie in Maastricht (2010–11). His work refers to many theories and practices of use of light and colour. White light in particular is a recurrent theme in the artist's work, from the drawings of the D65 studies (2011–14) where he started to use color science, pigments and artificial “daylight” to make artworks, to *Microkosmos* (2017–18) a spatial installation inaugurated recently in Brussels at Het Huys (May 2018), where a special white light transforms the colours of the objects illuminated by it, giving a very counter-intuitive color-blinding effect. Lucca teaches color-theory in Brussels at the École Nationale Supérieure des Arts Visuels de La Cambre.













Dentelles de lumière - allégorie de la recherche
2018

Permanent glass installation
Academia Belgica, Rome, Italy

5 matte glass panels (44 m²), white stains and white painted lines

‘Lacework of light – allegory of research’ when translated into English, *Dentelles de lumière...* is my latest public artwork. It is a permanent, geometric and non-figurative in situ intervention on 5 large glass windows, situated outside of the Belgian Academy’s library, in Rome, Italy.

Dentelles... is the result of an investigation on natural light, glass and mathematics conducted during a five-month residency at the Belgian Academy. An ‘allegory of research’, *Dentelles...* is imperfect and like unfinished: none of its squares are real squares, none of its lines are really straight, its symmetries are never global nor exact and while repetition occurs constantly, it always involves variation.

Visible from the working spaces of the research library, the five stained glass act like symbols of a researcher’s mind or of her experience: a net made of ideas, links, obsessions, lines of thought, construction and deconstruction processes, doubt and creation. From left to right, one could imagine (1) a first vision, a web of concepts, (2) a moment of intense focus followed by (3) a period of doubt, depression and destruction, (4) a reconstruction and a return to the initial vision followed by (5) a final blooming period, something like a final result – but always a temporary and fugitive one.



Soleil de minuit

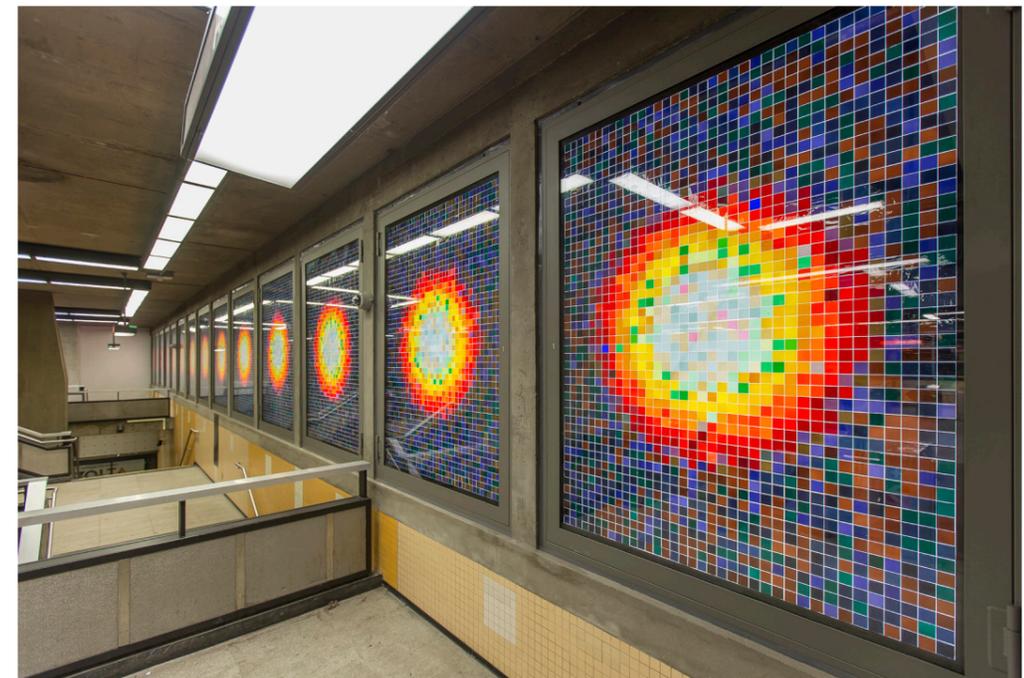
2017

Permanent laminated antique glass installation
 Metro station Place-D'Armes, Montréal, Canada

14 backlit glass mosaics (45 m²)

'Midnight sun' was produced in the context of a cultural exchange between the region of Brussels and the city of Montréal, as a gift for the 50 years of the metropolitan network and the 375 years of the city of Montréal. It was my first monumental commission for the public space and my first creation in glass.

On June 21st, 2015 – the first day of summer and the longest day of the year –, while it was midnight in Montréal I measured the first rays of sunlight in Brussels with a spectrophotometer. Using coloured glass and LEDs, I produced a series of 14 glass panels that reproduce the intense colours of this natural light phenomenon.





White light research/demos/demons
2017

Solo exhibition
RIB art centre, Rotterdam, The Netherlands

From the 17th century onwards, a color science was developed on a paradigm shift: modern white lights – sunlight, daylight, flame light, moonlight, electric light – are all compounds of colored light rays: blends of radiations impacting our eyes, giving us the sensation of white when illuminating white objects. [...]

Since the causes of colors depend on invisible mechanisms, a demon that understands and controls the non-visual parameters behind color or vision can now play with a keyboard of light effects to do magic tricks. These tricks or “demos” are even possibly beautiful, pleasing and surprising. They can make us laugh, happy or anxious but in any case, they touch the very foundations of our visual universe: what if I can sense the world in a completely different manner? Can the techniques of the demon – who is neither a real scientist nor a real magician – open-up a space for experiencing, enjoying and criticizing our intimate visions and beliefs?

