

*Opal and the Sunstone*  
A Critical Archaeology of Optics from the Lighthouse to the GPS

Filipa: From Edouard Glissant *Poetics of Relation*

*[K]nowledge, composed of abstract generality and linked to the spirit of conquest and discovery, has the presence of human cultures in their solid materiality superimposed upon it. And knowledge, or at least the epistemology we produce for ourselves from it, has been changed by this. Its transparency, in fact, its legitimacy is no longer based on a Right.*

Louis: *Transparency no longer seems like the bottom of the mirror in which Western humanity reflected the world in its own image. There is opacity now at the bottom of the mirror, a whole alluvium deposited by populations, silt that is fertile but, in actual fact, indistinct and unexplored even today, denied or insulted more often than not, and with an insistent presence that we are incapable of not experiencing.*

Filipa: Opposition, opportunism, oppression, operator, opulent, optimum, optical, opacity, opera, option, open, opal, opt, ops, op-. I imagine the lighthouse lens as a departing point to unfold an optical critique of the Western construction of knowledge where the projection of light and its *Enlightenments* are embedded in the processes and the imperial gestures of discovering, grasping, comprehending, framing, revealing and possessing.

Louis: The lighthouse, as man-made object built to shed light into the dark unknown, encapsulates perfectly the desires of the Enlightenment project of modernity: the domination of nature through reason and intellect, the advancement of technology and trade on a global scale, the illuminatory transparency of European Christian morality — a beacon in the dark.

Filipa: Photons refracted and bent by a Fresnel lens reach out into the darkness of the unknown Atlantic. Their beams conduct the light-matter towards the possibility of an intersection, describing a line for the encounter between two entities — one that navigates and moves, and another that is the reference or anchor, edified at the shore.

Louis: In plotting points along specific axes the Cartesian plane divides and measures space into a system of coordinates. Space becomes volume and object — available to be “grasped” and studied through the Western lenses of reductionism. From this perspective things are seen from a point of view from nowhere, the “God Trick”. As a response to this conception of space received via a dualistic mind/body split, we propose embodied objectivity and a reclamation of visuality as a form of situated knowledge. To liberate oneself from the grid, to become a *seer*.

Filipa: In 1995, the operational introduction of the Global Positioning System (GPS) — the navigation tool that provides location and time information, anywhere near the earth where there is an unobstructed line of sight to four or more satellites — announces the end of the lighthouse browser system. However, its imprint on the architecture of Western perception and knowledge production persists.

Louis: Fading into obscurity the lighthouse becomes a defunct object that can only speak of its past history. GPS technologically alters human perception of space, powers of vision, cartographic capabilities and creates new images of the world. With this new system of mapping come new forms of power and control. The lighthouse remains on the shores of consciousness as a form of thinking - the GPS navigates them further.

*Filipa:* Lens-apparatuses are the *prosopomorphic* agents convoking the conflict at the most western point of continental Europe. The lighthouse is the announcement of an edge, the end of a material and inhabitable surface. It overlaps the projected beginning of the abyss: horizontally towards the ungraspable ocean and vertically towards gravitational space. The lighthouse lens is the technical prosthesis of the sun, pointing at all imaginable media to overcome *finisterre*.

*Louis:* The apparently impassable horizon of the Atlantic Ocean had been traversed by ancient papyrus ships centuries before the European caravels made their first misjudged stumblings towards “new” soil. Cocaine and tobacco found in the stomachs of Egyptian mummies, and ancient Mayan depictions of black gods point towards this possibility.

*Filipa:* This op-film will be a disorienting and disorienting, counter-light derive from optical navigation to algorithms of locating — an essay *against the grain* of Western patterns of referencing and situating. Question to an *optician*: How far can the light bent by a Fresnel lens reach into the horizon? Answer: It is not a problem of the light but of the blue marble. The infinite beam loses the parallelism with the water’s surface, once the earth claims its roundness in a gentle dismissal from horizontality.

*Louis:* The shores that were approached from the initial Atlantic crossings of Columbus gave rise to a triangular trading system of commodities and slaves that eventuated the birth of European industry. If the lighthouse signals this growth in the transatlantic transportation across seas, then the GPS signals the transfer of the material substrate of commerce from goods to data. The GPS is born from the age of a networked interpolation of military space, civic space, commercial space, private space, public space. Data is collected and used and bought and sold.

*Filipa:* From a film made with lenses and photosensitive celluloid to the desktop location engine, we will navigate from the material production of the Fresnel lens, passing by the pirate “false lights” (and its wreckings), transluminating Glissant’s critique of transparency, tales and songs as maps, deviating towards Vasarely and Moholy-Nagy. Op-art and its Latin American political reading as the art of all people, producing consciousness about the illusive nature of the mechanisms of perception. *The Responsive Eye* versus *The Illusive Eye* exhibitions. We will visit Harun Farocki’s insights on the war machine as an optical engine (Eye/Machine). The gaze of male superheroes, the lighthouse as the eye-flare that eliminates while it illuminates.

*Louis:* Let’s say that there has been an epistemological shift from the lens as a single projection of illumination towards the GPS as a multi-positioned point of view. Can this be repurposed as a way to activate a future politics based upon an idea of the stars as a multiperspectival resistance to the “Sun King of Western reason” — a cosmopolitics of polyphony?

*Filipa:* (browser op-search) *op* means work; *ops* means power, possession, resource, wealth; *opal* “it was said to confer the power of invisibility if wrapped in a fresh bay leaf and held in the hand”, and backlit “was believed to embody the evil eye”.

*Louis:* Many moons ago a *Sunstone* polarising crystal was used to filter rays of the sun, to determine its position and thus aid sea-navigation on sunless days, and even on sunless nights from scattered subhorizon light. In contrast, the dark crystal Opal diffracts light internally and so creates every colour in the spectrum inside its own opaque form.

From Donna Haraway *Situated Knowledge*:

*The eyes have been used to signify a perverse capacity — honed to perfection in the history of science tied to militarism, capitalism, colonialism, and male supremacy — to distance the knowing subject from everybody and everything in the interests of unfettered power. The instruments of visualization in multinationalist, postmodernist culture have compounded these meanings of dis-embodiment.*

*Louis:*

*The visualizing technologies are without apparent limit; the eye of the ordinary primate like us can be endlessly enhanced by sonography systems, magnetic resonance imaging, artificial intelligence-linked graphic manipulation systems, scanning electron microscopes, computer-aided tomography scanners, colour enhancement techniques, satellite surveillance systems, home and office video display terminals, cameras for every purpose from filming the mucous membrane lining the gut cavity of a marine worm living in the vent gases on a fault between continental plates to mapping a planetary hemisphere elsewhere in the solar system. Vision in this technological feast becomes unregulated gluttony; all seems not just mythically about the god-trick of seeing everywhere from nowhere, but to have put the myth into ordinary practice. And like the god-trick, this eye fucks the world to make techno-monsters.*