

Reading Glass: An Extended Commentary

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*We see through lenses, microscopes, telescopes and cameras.*¹

In 1629, René Descartes posted a letter to instrument maker Jean Ferrier, inviting Ferrier to work with him on the construction of a fully automated machine for grinding lenses with a precision that would allow users to study objects at an infinite distance, to see, as Descartes put it, “if there are animals on the moon.”² At the time, even the finest lenses used in refracting telescopes suffered from flaws that rendered them useless for Descartes’ purposes.³ Removing the

- 1 Malin Pettersson Öberg, “Reading Glass”, one channel video, part of the exhibition *Moving Mass*, Kalmar Konstmuseum, 05.12.2015–28.02.2016.
- 2 René Descartes, letter to Jean Ferrier, cited in D. Graham Burnett, *Descartes and the Hyperbolic Quest: Lens Making Machines and Their Significance in the Seventeenth Century*, Philadelphia, PA: Transactions of the American Philosophical Society, 2005, p. 1.
- 3 Op. cit. p. 5. See also Henry C. King, *The History of the Telescope* (Mineola, NY: Dover Publications 2003).

obstacle caused by the unreliability of the human hand in a fully automated process would be likely, Descartes contended, to resolve these issues. As he lacked the artisanal skills required to make such instrument, however, he needed Ferrier's services.

As it happened, Ferrier wasn't particularly keen to leave Paris to visit Descartes in the Dutch Republic, but this did not stop Descartes. He wrote a series of letters to Ferrier describing, through numerous sketches, the technical intricacies of the design he had in mind so that it could be built by Ferrier in Paris. The machine itself was never actually constructed, but the letters, technical descriptions and sketches have since been published.⁴

Thirty-five years or so prior to Descartes penning his letter to Ferrier, Dutch instrument maker Hans Jansen presented the Archduke of Austria with an instrument composed of three extendable sliding tubes on an ornate support in the form of three brass dolphins that created a tripod. The instrument itself has not survived but, from recorded descriptions, it seems it contained two lenses and diaphragms and, with the tubes fully extended, the design allowed its users to magnify an object to nine times its size.⁵

The telescope and the microscope are two instruments that, in their modern form, appeared at approximately the same time and in approximately the same place. Optics, it seems, might have had something to do with the paradigm shifts faced by these early modern people. What the tele-

4 Op. cit. p. 2. See also John Schuster, *Descartes-Agonistes: Physico mathematics, Method & Corpuscular Mechanism 1618–33*, Dordrecht: Springer 2013, pp. 400–401.

5 William J. Croft, *Under the Microscope: A Brief History of Microscopy*, Singapore: World Scientific 2006, pp. 5–6.

scope and the microscope call forth is an age of opticality, one where vision is instrumentalized to manifest discourses of reason and scientificity and, more importantly, the *subject* of reason and scientificity. Descartes' dream of a fully automated, non-embodied machine to produce the infrastructure for a non-embodied vision beyond the materiality of embodied human aesthesis is therefore, in some ways, the very foundation of Reason's subject, as expressed in the now (in)famous dictum "Cogito, ergo sum."⁶ This is a disembodied subject, detached from the physical body, hovering as if above it, at a distance, gazing down at its materiality, capable of observing it from the outside. It is a subject able to reflect objectively, undeterred by the affects of the body; its joys and exhilarations, the sadnesses and pains it suffers.⁷

Through the microscope we can see, coldly, with a degree of separation from our own material being, the most minute details of the ecologies we move in and between; through the telescopic lens we discover that there are no animals on the moon—at any rate not until humans set foot on it—and, furthermore, we discover that we live on a globular body, that there are other such globular bodies and galaxies beyond ours. Our vision is extended in two directions, meaning we know and inhabit the world differently, but we ourselves are also rendered visible as beings whose materiality and fate in this world can now be studied, measured and fully known through rational means.

What is at stake, then, is *aesthetics* (in the Greek sense,

6 René Descartes, *Discourse on Method*, Indianapolis, IN: Hackett Publishing Company, 1998, p. 18.

7 See Descartes, *Meditations on First Philosophy*, Indianapolis, IN: Hackett Publishing Company, 1993.

that of perception and sensibility) but also, and simultaneously, *ethics* (again, in the Greek sense, as habitual character or disposition or, perhaps better, a way of living). The way we inhabit our bodies, our worlds, individually and together; the way we construct universes within which life can be sustained, within which we can become subjects, is intimately linked to the perspective we adopt and the sensibilities we develop in relation to the ecologies within which we are embedded.

The 17th century's shift towards opticality is fundamentally important. We see this shift towards modern notions of reason and objective truth in several domains of knowledge during this period: maps become geographical representations of territory, devoid of deities and references to human activity; within the judicial realm, as Michel Foucault has aptly pointed out, punishment is no longer meted out by means of carnal, corporal procedures but is now conceived of as a means to control and discipline our bodies and subjectivities⁸; crafts-based production and agriculture become mechanised and industrialized; fossil fuels are extracted from the ground to be combusted for energy; relatively circular systems of production and consumption become increasingly linear and oriented solely towards capital gains; the entire surface of the planet is in some way or other colonised by capital; and anything of value, including human muscle fibres, are utilized as part of a spiralling system of mass production and consumption, creating massive landfills of waste and a flood of human suffering.

8 Michel Foucault, *Discipline and Punish: The Birth of the Prison*, New York, NY: Vintage Books, 1995.

*What should we do when the lens through which the symptoms are viewed is itself often symptomatic?*⁹

A fashionable term currently used to describe the world that emerged with modernity and that we now inhabit is the geological concept of the *Anthropocene*. Although the validity of the concept within geological discourse remains contested, it appears to have become a common, albeit loosely defined, term for the geological epoch following the Holocene. It is defined by the detrimental impact of humanity—the *Anthropos* of the Anthropocene—on the geological strata of the planet.

What I want to propose here is that if we wish to try to live and love in the Anthropocene, we urgently need to find other ways of inhabiting our bodies—of being *embodied*—and other ways of collectively inhabiting the geosphere—of being, in a sense, *embedded*. Following on from the above, this involves aesthetics (developing sensibilities and forms of attentiveness) *and* ethics (designing environments and ways of living in which life can be sustained in some form). Here, art, design, and other creative practices, if re-tuned to face the Anthropocene, may come to play a most crucial role.

At this point, I'd like to turn my attention to another lens grinder, Baruch Spinoza. In 1665, Spinoza was given the opportunity to inspect a machine similar to the one Descartes had in mind. Unlike Descartes, however, Spinoza merely expressed indifference to the automated process, adding that experience had taught him that “in polishing

9 Teju Cole, “Open City”, quoted in Malin Pettersson Öberg, “Reading Glass”, one chanel video, part of the exhibition *Moving Mass*, Kalmar Konstmuseum, 05.12.2015–28.02.2016.

spherical plates a free hand yields safer and better results than any machine.”¹⁰

In terms of the success of the machinery, Spinoza has, of course, been proven wrong. The modernity that was on the threshold was very much moulded in the figure of Descartes’ *cogito*. In facing the consequences of modernity, however, now is perhaps a good time to turn to Spinoza and his love of the material, the relationship between the hand and the material, to his attentiveness to the glass plates and the polishing process, to explore what a Spinozist subject, as opposed to the Cartesian *cogito*, has to offer in terms of an ethico-aesthetics for life in the Anthropocene.

To Spinoza, the world is composed of simple bodies entering assemblages with other simple bodies with which they feel a connection. In turn, these assemblages enter larger assemblages or complexes. This is how universes are constructed, and they have no permanence. They are in constant flux. Complexes and assemblages are only relatively stable and are in constant movement. They dissolve and reform in different constellations in different conditions. The human body is one such complex, composed of assemblages of simple bodies. It changes continuously, entering assemblages with bodies that surround it. The human body may appear relatively stable, at least from an anthropocentric perspective, but it comes from something pre-human and moves towards post-human assemblages as it decomposes. Throughout its life it changes, grows, ages; encountering and entering assemblages with nutrients, drugs, animals, viruses, objects, artefacts... Some of these encounters

10 Baruch Spinoza, “Letter to Henry Oldenburg (1665)” in *Spinoza: The Complete Works*, Indianapolis, IN: Hackett Publishing Company, 2002, p. 850.

are between bodies that are agreeable: our encounters with food, for instance, or with a beloved friend. We experience these encounters as joy. Others are between bodies that disagree: a poison, say, or a virus, or an allergen. These encounters are experienced as a kind of sadness.

To Spinoza, ethics is the ability to develop ways of living that allow us to distinguish between agreement and disagreement in our encounters with other bodies, to distinguish food from poison, at the most rudimentary level, or to distinguish an ally from an adversary. It is, in a sense, a diagnostic task, learning to read symptoms as we encounter the world. Pollen is caught in the body of the allergic. It is translated from being a spore within one assemblage to becoming an allergen in another, and appearing as a symptom to the person suffering the allergic shock. Learning to avoid the spore that causes the allergic reaction is part of the diagnostics of a Spinozist ethics. Always opt for joy and avoid sadness; always identify and ally with that which agrees with you, with the composition of your body, and avoid that which causes you sorrow. An ethical life is found in joy and alliance, because joy and alliance increase our individual and collective capacity to act in the world. This is an ethics that explores ways of living, and it is one that requires an aesthetic, in the sense we use the word here, in that it presupposes the development of sensibilities and forms of attentiveness to the encounters that make up a life, so that we learn how to distinguish between different kinds of encounters.¹¹

Turning to Spinoza, we find a physical subject that is embodied and embedded in the ecologies that make up the

11 See Baruch Spinoza, "Ethics", in *op. cit.*

geosphere; a subject for which life, much like the grinding of lenses, involves attentiveness and craft rather mechanisation and detachment.

If the Cartesian subject, in its rational distance from the world, has been complicit in producing the problems we face in the Anthropocene, the proposition put forth in this short text is that we instead turn to the Spinozist subject for an alternative ethico-aesthetic trajectory for living and loving in the Anthropocene. In this turn towards a new Spinozism, creative practices such as art, literature and design become crucial testing sites for developing such new sensibilities and forms of attentiveness, and for developing ways of life and designing universes within which life can flourish.

It makes me think of the planetary globe's likeness to the eye globe, perhaps because my mother is an eye surgeon, and I was brought up surrounded by anatomical posters of eyes, or because I've been thinking a lot about the eye, its blinking motion, and the camera (as a technology) as a prosthesis for the human body and for vision.¹²

The pineal gland occupies a somewhat peculiar position in Descartes' writing. Lodged deep within the brain, Descartes considered it the only human part that exists in the singular rather than as one of a pair. This led him to assign to the pineal gland a special significance: it is here, near the centre of the brain, that all thoughts are formed on the basis of partial sensory perceptions. The mind, in other words, is joined to the body most fully at the pineal gland. It stands,

12 Malin Pettersson Öberg, in correspondence, 15.04.2016.

then, as a site of relative uncertainty, an interface of sorts between the two poles of the Cartesian body/mind dualism.¹³

As it turns out, Descartes was mistaken. The function of the pineal gland is to regulate sleep according to seasonal and circadian rhythms. It is thus, somewhat paradoxically given Descartes' take on the matter, very much a part of the embodiment of the mind; a part that links our mind with how we position ourselves in the environments and climates we inhabit, how we relate to planetary movements, how we distinguish time for rest and sleep from time for labour, love and play.

Interestingly, however, the pineal gland has a sub-history in which it is associated with a "third eye" capable of providing vision beyond ordinary sight.¹⁴ It is perhaps from this sub-history that George Bataille's interest in the pineal gland stems. Bataille writes:

*The eye, at the summit of the skull, opening on the incandescent sun in order to contemplate it in a sinister solitude, is not a product of the understanding, but is instead an immediate existence; it opens and blinds itself like a conflagration, or like a fever that eats the being, or more exactly, the head.*¹⁵

In this quote, we find a second kind of vision ascribed to

13 René Descartes, *The Passions of the Soul*, Indianapolis, IN: Hackett Publishing Company, 1989, pp. 36–37.

14 Clinical experiments have indicated that the pineal gland is capable of producing a powerful hallucinogen under certain conditions, such as near death experiences. See R. Strassman, *DMT: The Spirit Molecule*, Rochester, VtT, Park Street Press, 2001. "

15 George Bataille, "The Pineal Eye" in *Visions of Excess: Selected Writings, 1927–1939*, Manchester: Manchester University Press, 1985, p. 82.

the pineal gland. This is no longer the gaze of Reason that distances thought from the world, allowing us to understand the world as if from above. Bataille is providing us with another kind of vision, one of 'immediate existence'. It is perhaps here, in the immediacy of being in the world, that we find the sensibilities required for a becoming that reaches beyond *Anthropos*' limitations.