Racial Shifts And Enlightenment Astronomical Thought

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In a book project titled Cosmopolics Black and White: Astronomy, Race and The Emergence of Photosensitive Modernity, I argue that a profound change took place in Enlightenment aesthesis. For Rancière, aesthesis denotes the broad cultural ways in which sensible experience parses out the socius, predetermining the emplacement and actions of its constituents—particularly those denied representation and intelligibility. The change in question has to do with a new reciprocity between two categories of the sensible held separate until the early 1700s: vision and motion. By 1750, I contend, visual experiencing became permeated with forms of mobility, while reciprocally, modes of visualization were deployed to approach motion. I call this intertwinement kinopsis. The book claims that kinoptic aesthesis represents an overlooked linkage between astronomy—as the practiced observation of motion and mechanics—and proto-technics of photography and cinema that sought to ‘fix’ flows of light into analog imaging. It also claims that kinoptic insights of enlightenment astronomers involved racial difference—the “sans-parts” that were enslaved black peoples. Aesthetic concepts and sensoria tying together the cosmos, new modes of visualizing and imaging, and racial diversity against the horizon of slavery are the topic of this paper. To provide a concrete example of such crossovers, we can invoke astronomer François Arago. He conducted photochemical experiments in the 1820s, was responsible for open-sourcing Daguerre’s invention of photography in 1839, and, as minister of the 1848 Revolution, he signed the decree abolishing slavery in the French colonies. My aim is to understand such commitments as other than incommensurate or mere contingencies.

From Celestial Bodies to Interraced Human Bodies

From the late 17th century to the late 19th century, contrary to the cliché of the ‘clockwork universe’, astronomers believed in a sentient cosmos via the ‘plurality of worlds’: they were convinced other celestial bodies must be inhabited. In Fontenelle’s 1686 bestseller Entretiens sur la pluralité des mondes, an astronomer takes his interlocutor, a Marquise, into an imaginary journey through the solar system and its inhabitants. Race is promptly invoked. He deems lunar inhabitants superior to “us” Europeans in the same way Europeans are superior to “[Native] Americans.” Critics are prompt to denounce racial prejudice behind such homologies, but they are only half right. They miss half of Fontenelle’s point: the positing of a race of thinking beings superior to whites, representing an epochal dent in the consensus of white supremacy. In Fontenelle’s cosmogony, earthlings occupy a middling position, a “juste milieu” halfway between the “quick” dwellers of hot Mercury and the “slow” inhabitants of cold Jupiter. This mirrors the common idea (Montesquieu), that European superiority devolves from its dwelling along a privileged band of temperate climate. Fontenelle disrupts this climatic model because quicker Lunarians and Mercurians are more intelligent than humans. In other words, Eurocentric racial hierarchies when projected to the cosmos become diffracted, and cause interferences when projected back on earth. The Marquise concludes from the
astronomer’s cosmo-ethnology: “we are a mix [mélange] of all the species from other planets” (288-9). For her, humanity, that is, “we” whites, are the mulattos of the solar system. Such cosmic méttissage minimizes racial differences among earthlings: “We are in the universe but like a very small family whose faces [visages] resemble each other; in another planet is another family whose faces have a different mien [air]” (210). In this radical theory of race human body-types share a close family resemblance, because the purview and scale is that of the cosmic diversity of beings. Such cosmographic viewpoint (as I call it)—precisely not a view from nowhere—uses the rotation of the Earth as a key astronomical datum to further transform racial difference into a dynamic spectrum of imaging:

Sometimes for instance I imagine I am suspended in the air and stay there motionless while the Earth turns under me in twenty-four hours and I see passing under my eyes all these different faces [visages différents], some white, others black, others tanned [basannés], others olive-skinned, and I see first hats then turbans then hairy and shaven heads, and in turns cities with belfries, with long needles and crescents, cities with porcelain towers, and large countries with no huts; here vast seas, there awful deserts, in short, the infinite variety that is on the Earth’s surface (71).

Our rotating globe impels a cinematic continuity interweaving skin-color differences, natural and urban milieus, cultural and religious diversity. Cosmoscopy is cosmopolitical. We might object that this is merely a view of the mind. Yet again the keen Marquise proves us wrong, going straight to the most embodied consequences: “Hence in this very location where we are now, not in this park per se but in this location at an airborne purview [à le prendre dans l’air], other people have continuously gone through, taking our place, and after twenty-four hours we come back to it” (73). The space of my body, she deduces, hosts at other times other bodies and body-types in a dynamics of substitution, equivalence, and ultimately visceral promiscuity. The imaginary cosmic POV in which “we are a mix of all the species from other planets” is strictly coextensive to viewing all humans not only as forming one species—‘monogenesis’ was far from established by contemporary ‘science’—but one that is dynamically transracial. At the very time that the Code Noir (1685) was hardening de jure the de facto color lines of plantocracy, astronomers began blurring them de visu by making human visages a blended spectrum when viewed, or rather visualized, from a virtual POV in orbital motion. Kinesthetic-optical insights from astronomy asserted what plantocratic economy most resisted: humanity was a continuum.

If Fontenelle’s kinoptic monogenesis remained somewhat oblique, another astronomer made a more robust case by connecting the kinetic formation of celestial bodies to interraced human bodies. It all started with the shape of the Earth. Descartes thought it was squeezed by vortices and bulging at the poles; Newton deduced it bulged at the equator because of centrifugal force. In the late 1720s, Pierre Louis Moreau de Maupertuis led an expedition to Lapland to measure the rotundity of the meridian, confirming Newton. For Maupertuis, this meant that planets were not Aristotelian unchangeable spheres, but deformable plastic bodies. If the Earth behaved like a semi-fluid what about stars? It was known the Sun rotated since black spots were observed circling its surface. Maupertuis made mind experiments with spherical semi-fluid celestial
bodies in rotation over very long periods of time. The problem he tackled was variable stars whose light intensity fluctuates for an unfathomable reason. He proposed that if rotating spheres bulge at their equator the same could happen with stars to the point that, over long periods, they would become disks showing themselves at times in profile and at others as ellipses or circles. He was wrong about variable stars, yet his disk-formation theory revolutionized cosmology a few decades later when Immanuel Kant explained how planetary systems form out of a Maupertuisian disk (the “Kant-Laplace nebular hypothesis”). I insist on this example for two reasons. First, as a new way of visualizing motion in accelerated time, it exemplifies the kinoptic turn in enlightenment aesthetics. Second, Maupertuis was convinced he had stumbled on a general theory of nature he called “the principle of least action.” It stipulates that dynamic semi-fluid systems always deploy the minimum amount of force to change from one state to another.

In the early 1740s, he decided to apply this idea to sexual reproduction in a book euphemistically titled La Vénus physique. The prevalent theory was preformation, with embryos as tiny homunculi in male sperm that just grew but kept their proportions. Maupertuis thought this was nonsense since experiments on mammal embryos showed these looked like tadpoles morphing over time—just like stars, only irregularly, and through another force than gravitation. Preformation discounted any role to the mother whose womb served only as food and shelter to the male-produced homunculi. Maupertuis asserted that men and women contribute equally their “seminal liquors” to the mixed-body of the embryo. The proof was obvious:

If a black man marries a white woman, it seems that both colors are mixed; the child has an olive-colored hue, and features half from the mother and half from the father.

Because a mixed-race child blends resemblance with both father and mother, both contribute actively and equally. Slave-holding colonies knew this all too well, of course, concealing this troubling group of mixed-race individuals (resulting equally from forcible rape and plaçage, semi-legal unions). Yet Maupertuis invokes “a black man” and “a white woman,” the most taboo interracial coupling, his suggestion that they are “married” being of course deeply sarcastic. The 1724 version of the Code Noir states (in the king’s voice): “We forbid our white subjects of one or the other sex to contract marriage with blacks.” Wanting to shock his readers, Maupertuis asserts all at once the biological equality of mothers, the biological fungibility of ‘races’, and the scientific inanity of racism and slavery. He knew the latter two firsthand since his own father was a leading slave-trader of Saint-Malo. His least action theory of human reproduction derived from the visualization of semi-fluid celestial bodies deconstructed the polygenetic basis of slavery as an institution. Unlike biological thinkers like Buffon who took interracial children to be monstrous, astronomers derived from the kinoptic cosmos a new regard for race-mixing and race-shifting as central to understanding the human as such.

In his 1764 Observations on the Beautiful and Sublime, Immanuel Kant claims that “not a single one of [the negroes] was ever found who presented anything great in art or science or any other praiseworthy quality,” and “this fellow what totally black from head to toe, a sure indication that what he said was dumb.” Kant is of plain bad faith since he knew that
Anton Wilhelm Amo, an Akan African man from Ghana brought to Amsterdam as a four year-old, had been named professor of philosophy at the Universities of Halle in 1736 then Jena in 1740, under the patronage of Christian Wolf who, incidentally, wrote the first treatise on cosmology. In his *Natural History of the Heavens* written in 1755, a cosmology that generalizes Maupertuis’ kinematic formation of celestial bodies, Kant summarizes the plurality of worlds theory with a striking formulation:

What an amazing sight! On the one hand, we saw thinking creatures among whom a Greenlander or Hottentot would be Newton, on the other hand, those who would admire him as an ape (I:360-1).

This passage compares the incarnation of enlightenment genius, Newton (Kant’s intellectual hero), to subaltern populations at the extremes of the globe and (ostensibly) of skin color. It rehearses the worst racist stereotypes associating indigenous Khoi of South Africa to apes. Nonetheless, placing Newton on a racial ladder in which whiteness is no longer the top rung, it acknowledges that exoplanetay beings could treat Newton himself with the same racist condescension with which he, Kant, treats non-whites. His cosmic POV proves powerful enough to produce an immanent critique of his white supremacy.

The efficacy of this cosmic POV in abolishing slaving practices should not be exaggerated. Abolition was a matter of realpolitik. But nor should this efficacy be undervalued. Among the staunchest opponents of slavery in late-18th century France was the Marquis de Condorcet, the secretary of the Académie des sciences, and an astronomer who tackled gravitational calculus between more than two celestial bodies, the so-called “three-body problem.” In 1781 he published *Mémoire sur l’esclavage des nègres* under the tongue-in-cheek pseudonym of “Dr. Schwartz,” or Dr. Black, a rhetorical blackface perhaps in homage to German Ph.D. Amo. Sala-Mollins is justified in taking Condorcet to task for denouncing slavery as running against natural law and human dignity, and for meekly settling for gradual emancipation through apprenticeship. When England abolished slavery (in 1833), it followed Condorcet’s proposal as the best compromise for the ‘three-body-problem’ between slaves, planters, and abolitionists, while in France and the US the plantocracy squashed any and all such alternatives.

**The Racial Continuum of Photosensitive Bodies**

Suppose we were to take a common globe; then begin at the equator to paint every country along the meridian line in succession from thence to the poles; and to paint them with the same colour which prevails in the respective inhabitants of each, we should see black, with which we had been obliged to begin, insensibly turn to an olive, and the olive, through as many intermediate colours, to a white [...] the difference would consist wholly in shades of the same colour.

This passage of Clarkson, a leading British abolitionist contemporary with Condorcet, illustrates a second axis of the antiracist aesthetic of late 18th century cosmological thought. Adopting the cosmic POVs of Fontenelle, Clarkson makes a mind experiment transferring human skin color to the Earth’s surface to show it can be painted with “shades of the same colour.” But this is a rather puzzling statement: how are black, white, and “olive” to be considered the same color? The answer is in Fontenelle and Maupertuis’ mulatto-centrism: Europeans are hybrids of equatorial ‘blacks’ and polar ‘whites’. (Maupertuis met Sami people, but few Enlightenment intellectual knew Arctic people were not white).

A second explanation is that a new paradigm radically altered late Enlightenment’s apprehension of light and vision: photosensitivity. In the 1770s, Jean Sénèbier (1742-1809), a botanist and head librarian of Geneva, decided to investigate comprehensively the effects of sunlight upon the animal, vegetal and mineral realms. He was convinced that “[…] this light that our eyes alone can seize up [saisir], is fixated [fixée], accumulated, more or less entwined in all the bodies around us.” Departing from the light/darkness rhetoric of the Enlightenment—Les Lumières—Die Erklärung, Sénèbier took light not as immaterial, but as concretely fused to animate and inanimate matter, and as though photographed within them. This led him to uncover the contribution of photosynthesis to plant growth. His 1782 four-volume compendium was a watershed for photochemistry and a new holism.6 Noting Swiss field-workers’ tan, he mentions the case of “a peasant woman whose complexion, burnt in the countryside, donned a lily-whiteness when in the city.” While subscribing to the widespread theory that blackness results from the “combined action of heat & sun,” he nonetheless views skin color as a fungible spectrum. He conjectures that, transplanted to Africa, “Europeans lose their whiteness,” and “after a few generations would likely become as black as these poor Africans whom they believe they have the right to enslave” (Mémoires III: 173-6). His anti-slavery position formulated en passant is not that the inferiority of blackness is a sham (Condorcet), but rather that since whites can become black, they are always already virtually black.

This idea comes from his pioneering research on silver nitrate [lune cornée]. That intriguing mineral known for centuries turns from whitish to brownish when exposed to air, heat or light—no one was sure. Sénèbier used a camera obscura and a lens, and a protocol eliminating other parameters, to affirm that only light blackened silver compounds. And not all light equally, but specific parts of the spectrum: “What strikes me the most is that this violet ray acts on silver nitrate in such a quick and strong fashion, while the red ray barely colors it after a long time,” (Mémoires, III: 315). This distinction proved instrumental when Talbot and Daguerre implemented photography. If Sénèbier transferred an insight gathered from short photochemical timespans to much longer time scales of human diversity through racial shifting, it was because his general kinoptic model intertwined matter, human bodies, and visualization to the transformative light of our star flooding the globe. The blackening of white silver salts is not merely contemporary with late Enlightenment’s reflections on blackness, it is epistemologically linked to it.

The transience of skin color Clarkson’s antiracist passage celebrates was, conversely, a huge source of anxiety in West Indies plantocracies at the end of the 18th century. The
growing and growingly political mulatto populations threatened the slaving system by upending its cognitive polarity of blackness and whiteness into a social ‘three-body problem’. A 1790 play makes this plain:

Quacou: Does it make a negro white, Massah?
Greville: It does more; for it makes him so lovely, that the very white women will be glad to adopt him as husband; but I will tell you it is kept a profound secret from all the blacks, least they should become as white as ourselves, and so no longer continue in subjection to us.7

The dramatic engine for the The New Cosmetic is the tanning of Louisa, a West Indian white Englishwoman, rendering abject in the eyes of the Englishman courting her. As her creole cousin Hannah Bananah (!) produces a cashew ointment restoring her whiteness, Louisa declares: “You understand the art Hannah, and have practiced it too I believe in rendering your face all colours” (49). As a 1797 British legal text makes clear, the planters feared that freed colored people were “intriguing with the mother, daughter, granddaughter, &c. till the black color disappear.”8

The growth of mulatto communities was a multi-generational anti-slaving revolution at a slow time-scale. Pratt’s play acknowledges plainly that skin color shifts disclose the bad consciousness of slavers. A protagonist explains: “Heaven I see has revenged the old man’s severity, and for a slave killed has returned a daughter burned; for a black lost, a mulatto gained” (60).

There is then a deep congruence in the ways in which black-white polarity lost its paradigmatic force within slaving regimes at the same time photosensitivity presented a holistic spectrum of kinoptic visualizability in space and time. In the late 1790s, William Herschel, the astronomer who generalized the kinoptic cosmology of Kant, began searching for the component of light responsible for blackening silver nitrate. He called it “black-making rays.” This pointedly oxymoronic expression for the enlightenment as ideology made blackness integral to light itself. While for physiologists’ thinking ethnic blackness required an explanation for its deviancy from whiteness, astronomers and optical researchers took blackness to be a natural component of light—no longer its absence, obstruction, or opposite. I argue that this new photo-aesthesis transvalued light and blackness (not darkness) into a new episteme of race.

Photonegative Discourses and Racial Recognition

In The Colonial System Unveiled (1814), Haitian métis Pompée Valentin Vastey denounced France’s resistance to following England’s lead in outlawing the slave trade (1812). While chronicling France’s colonial racism, he alludes to a 1790 experiment by British photochemist Thomas Beddoes using hydrochloric acid to whiten the skin of a black patient, Vastey claiming that “without being a chemist, I hold the secret of blackening [noircir] a white person by simple immersion.”9 The allusion concerns slave baptism as refigured by the 1806 Haitian Constitution stating that all Haitians are ‘black’—regardless of shade. For Vastey (King Christophe’s political adviser), Haitian independence entails “making the shadow of the white man disappear” (92-3 original emphasis). Rather than a Fanonian rhetoric of masking/whitefacing, he inverts the
symbolic polarity of light and darkness: whiteness intercepts the light of reason, eclipsing black self-consciousness. A photonegative discourse links all these rhetorical moves at roughly the same time Niépce made his first photograph (1816).

In a follow-up work, Vastey continues deconstructing the ideological primacy of white embodiment. He invokes Buffon’s idea of a species “prototype,” the model of which all subsequent expressions in a species are variations. He reasons that if blacks have always been deemed more primitive, and if the Bible asserts man was made in God’s image, then blacks must be the biological prototypes of humanity. Vastey’s deconstructive strategy leverages the reversal technics of photonegatives avant la lettre: a primitive ‘positive’ human image of the black divine was reversed by the slaving episteme into a white ‘negative’ in order to justify slavery. Vastey provides indeed a history in negative from a black POV through abolitionist historians from Mungo Park to Abbé Grégoire and Sismondi, arguing that Africa was the “crib of sciences and arts” and Greeks were “civilized by Egyptian colonists” whom he considers colored (32-4). Yet he retains the metaphor of light as civilizational instrument:

It is from this primitive hearth/focus [foyer], says M. Lesage, from which most certainly the spark [l’étincelle] of antiquity was issued, which in subsequent centuries engendered the whole mass of light/enlightenment [toute la masse de lumière] which today lights up Europe. (34)

The light of the enlightenment was no longer the opposite of blackness but its historical product. Herschel’s “black-making rays” could serve as emblem for Vastey’s Martin Bernal-like radical reappraisal of history.

Vastey invokes Bernardin de Saint-Pierre, now known mostly for his maudlin 1788 Paul et Virginie (12). Bernardin belonged to the abolitionist Society of the Friends of Truth with Condorcet, a longtime friend and supporter. After the Revolution, he expanded his early 1784 Studies of Nature into Harmonies of Nature, a compendium of natural history, a mystical system of “harmonies” with the cosmos, and pieces of fiction. It clearly revives Fontenelle’s cosmoscopic POV:

The position of the sun, in the center of its system, has suggested to some the possibility that might exists there a region reserved for the renewal of our existence into a happier state. The imagination may figure to itself the command of magnificent prospects across that sphere of light which surrounds its orb; across that radiated atmosphere which, like a celestial telescope, may display the relation between its planets and the other suns, in the way that our comparatively small atmosphere collects on the earth the rays of the orb of day. It is only in the center of our system that we can expect to obtain a comprehensive survey of its wonders. Nor does it seem unreasonable to imagine that the orb, which is the source of life and motion throughout this globe, should be the receptacle of its inhabitants in a future stage of existence; and that the souls of the good should look down on this lower world to confer aid on oppressed innocence (III:334).
Saint-Pierre revered William Herschel for conjecturing that the sun is inhabited. He combines Herschel’s telescope with the sun as a panoptic sphere from which the whole cosmos may be viewed, its atmosphere acting as an infinite lens giving access to all scales as a truth-and-justice instrument: “after remaining for a season a slave and in irons, now behold [man] free, and the possessor of a new domain!” (III:365). At this point, we might mutter ‘here we go again’ with Sala-Molin and Susan Buck-Morss, witnessing yet another enlightenment philosopher metaphorizing slavery thus occulting its actuality.

The opposite is the case. Saint-Pierre adds a coda making it plain that for him slavery is never a metaphor. Titled “Empsaël; an Episode, or Dialogue, illustrative of Human Harmonies,” the play stages the primal photonegative scene of Enlightenment slavery: whites as slaves of ostensibly benevolent black masters. As noted, apprenticeship towards emancipation was the first realistic solution to slavery. Against it, planters developed a PR campaign promising responsible and respectful slaving practices, pushing gradual emancipation to distant horizons. The gist of Saint-Pierre’s play is to satirize this benevolent incrementalism:

I thought that nothing was more apt to make one feel the weakness of the reasons with which the white inhabitants of our islands in America justify the slavery of blacks than to put these very reasons in the mouth of a black man from the Barbary coast towards some inhabitant of our islands having himself fallen into slavery in Africa.

The conceit is based on the historical precedent of a black Muslim from Guinea named Empsaël (a minister to the Dey of Morocco) who counted a white woman among his wives. Bernardin eschews Muslim caricature as in Molière’s Bourgeois Gentilhomme or the critique of polygamy or ‘white women slavery’, refusing even to present Empsaël as cruel towards Zoraïde—his beloved French wife and slave—thus doing away with the equation of a black man’s love for a white woman with an Othello-like desperate lust. Surely, Bernardin suggests, any claim that a ‘good’ master is a tolerable compromise will render black Empsaël’s ‘caring’ enslavement of a French woman legitimate. To reinforce the argument ad absurdo, the play features Ozorio, the formerly cruel owner of Empsaël now a slave at Empsaël’s mercy.

Bernardin rehearses all the clichés of slavers. “I know white people,” Empsaël’s black overseer says, “as soon as there is the slightest friendship between two white slaves, they plot against their master. To govern them, remember this maxim: separate those who love each other, put together those who hate each other” (39). This was the age-old strategy of planters in separating families and friends. Bernardin weaves meticulous historical facts to remind readers that this satire is not a farce but a dramatization of the viciousness of black enslavement. He features the Quaker Anthony Benezet, the Huguenot leader of abolition in Pennsylvania, as a faultness protagonist. This propaedeutic allows for the greatest satiric effect when he unfolds the photonegative of slavery. An imam says: “The only thing missing to this white man to be perfect, is to be black” (47), or “We should not despise Zoraïde because she is white. God gave her a soul as he did to you and me” (49). The absurdity of such noble sentiments explodes in the white readers’ face through casual dehumanization: “Whites are made to serve blacks. In
fact, there is no better mount than white men. Donkeys are too slow, and our Arabian horses too speedy. But with white slaves you go fast and stop whenever you want” (65).

With Vastey and Saint-Pierre whose contemporary cosmopolitical purviews linked France, Reunion Island, Haiti, and the globe, photonegative reversals between blackness and whiteness undermined racist essentialism. In France, as Hoffman has demonstrated, before the French Revolution only six plays contained black characters, while the decade of the 1790s counts twelve (105). The first play in which a black protagonist was allowed to voice abolition is from 1796 (113). Several plays began using race shifting as a ploy in the 1780s. In *The Black and White Prince* (1786), a white man named Zulica is hexed by a goddess for courting an underage white girl and is turned black. The text emphasizes the scopic mutation: “we see Zulica transformed into a negro” (18).15 While he vehemently bemoans his “horrible metamorphosis” and “cruel metamorphosis,” the play leaves it to the reader to decide what exactly makes it so cruel if not the association of blackness with slavery (21-22). Rosine, the teenager, must accept to become “ugly” herself, that is, black too, in order for him to become purged of his black stain (25). She accepts the bargain, upon which but the merciful gods allow both to regain their whiteness. Arising at the height of abolitionist advocacy, such a play ambiguously weaves back-and-forth across racial lines. A white woman reciprocates the love of a now black man, and must heroically become black—only to enjoy as reward for her sacrifice a revalued whiteness. It enacts a kind of race-sensitivity training for the audience, yet blackness remains the single obstacle to a happy ending.

From the 1820s to 1840s, renewed public pressure and a relative political acceptability (France’s recognition of Haiti in 1825 against huge reparations—indeed a ransom) resulted in a wave of abolitionist productions. The Académie française’s poetry competition topic for 1822 was the abolition of the slave trade, and Claire de Duras’ 1823 novel *Ourika* championed alienated black consciousness. In reality, racial stereotypes were equally reformed by anti-slavery authors and reinforced by the planter-controlled press, the bulk of literary production falling in between, as though hedging its bets. In the first pages of the 1823 *The Mulatto*, co-authored by Honoré de Balzac in his ghostwriting years, we find the following dream by Sténie, a young white woman, concerning her friend Féo, the enslaved young black man chosen by her father to be her play companion:

[… ] she is a fairy, and with her magic wand, she has just metamorphosed the faithful, but black Féo, into a young lily-white prince whose interesting youth she enjoys protecting. Soon she launches him into the world; has him kill off lions, snakes and bad princes as white as he. At last she is about to grant him the noblest and sweetest reward; yet at the very moment she extends to Féo a hand she believes is bestowed to the most lovable and whitest prince upon the globe, the handsome prince disappears, replaced by a tall evil genie black as ebony, who, fixing [*fixant*] upon her his blood-thirsty pupil, stares at her with an awful smile, and takes her to a deep grotto. There, everything disappears and poor Sténie, the victim of a torture she can neither conceive nor define, dares not even implore god’s help, terrified as she is by the sight of two large black eyes, shining, isolated in the void, seemingly hovering over her like the sword of Damocles. (17-18)
The exploitation plot and trash style of the authors (Balzac and Lepoitevin de l’Égreville) leverage pêle-mêle racist phobia, interracial fantasies, and race-shifting discourse. The morphing of “but black Féo [mais noir Féo]” into a white prince seems meant only to sensationalize his re-incarnation into the caricature of a raping black man. As Féo’s white avatar conquers the “globe” dispatching “white” princes (non-whites being tacitly figured as wild animals), an implicit cosmoscopic vantage enters the dream. When retransformed into a black body, Féo eclipses the light of the entire world, leaving only his disembodied gaze resembling two eclipsed stars in the night sky. In such schizoid novel vocalizing, legitimizing, and ultimately indicting black anger, photonegative energeia and cosmoscopy become singularly ambivalent tools. Yet what better proof could there be that the linkages of astronomy, proto-photosensitive medias and race constructs have now spread across the entire cultural landscape?

**Conclusion: A Cosmopolitical Aesthesis?**

Daguerre by the simple but all abounding sunshine has converted the planet into a picture gallery. […] Rightly viewed, the whole soul of man is a sort of picture gallery, a grand panorama, in which all the great facts of the universe, the tracings of time and things of eternity are painted.

Frederick Douglass, “Pictures and Progress,” 1861

The becoming of kinoptic aesthesis—needless to say—never resulted in an all-out cosmopolitical implementation. In fact, as the 19th century wore on, it informed disparate philosophies of history from Hegel and Saint-Simon to Comte and even Marx (which are all deeply informed by astronomy, but that is another story). Kinoptic aesthesis, that is to say, spawned the panopticon of colonial expansionism as well as the recognition of global alienation, which both preceded it and opposed it. My project is to show how this common aesthesis bifurcated. Isabelle Stengers defines the cosmos of her cosmopolitics as “pointing ‘to the unknown constituted by these multiple, divergent worlds and to the articulations of which they could eventually be capable.’” She adds that the cosmos implies a mode of equalization that is not a mode of equivalences. She invokes Newton and Galileo as bad examples to shore up her point that we ought “to accentuate our own rather frightening particularity among the people of the world” (999). A great deal of her own insights, however, devolve precisely from a strain of antiracist cosmoscopy within ‘Western’ thinking, and one that can only hastily be identified with any stable distinction between an “us” and “the people of the world.”

Frederick Douglass is a case in point. He named his newspaper *The North Star* in 1847 to provide an astronomical algorithm for runaway slaves in the underground railroad: follow Polaris. As soon as the daguerreotype reached America, he understood it to be a crucial tool for depicting black humanity and dignity, thereby undoing stereotypes, and he later gave several speeches on the role of photography for human progress and, by inference, for emancipation—his single cause until 1865. When the government of Louis-Philippe was overturned during the 1848 Revolution, he took it as a sign of the coming global emancipation. On April 28, 1848, in an editorial titled “France” he wrote:
A revolution now cannot be confined to the place or the people where it may commence, but flashes with lightning speed from heart to heart, from land to land, till it has traversed the globe […]. The revolution of France, like a bolt of living thunder, has aroused the world from its stupor.\(^{18}\) (56)

The signing of the French abolition decree by Arago was for Douglass a confirmation of the cosmopolitical scale of the revolution. Of course, both it and abolition were short-lived. Slavery morphed in the French Caribbean into a variant form of total racist exploitation. Astronomers themselves, after the 1850s, were absorbed by the military-industrial apparatus and desisted from any real cosmopolitical critique. Yet in contributing to photography and cinema, they produced medias ideally suited to depicting “the multiple, divergent worlds” of a true cosmopolitics—as Douglass well understood. At least, that is a legacy of cosmoscopic aesthesis worth fighting for in media theory.

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2. M. de Maupertuis, *Discours sur les différentes figures des astres*, Paris: Imprimerie royale, 1732
7. C. Melmonth [Samuel Jackson Pratt], *The New Cosmetic, or The Triumph of Beauty*, 1790, 39.
13. Hoffman considers it one of the most interesting texts in his entire corpus, 135.
16. When the hypnotized protagonist of the film *Get Out* (2016) floats down the dark “Sunken Place,” he falls backward (as another Benjaminian ‘angel of history’) among streaming stars.