Memory's Seams: Scarcity, Preciousness, and Earth in Bideford Black

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Abstract

As a naturally occurring carbon-based 'mineral black' that is mined from ancient flood seams in North Devon, England, Bideford black embodies the contradictions of modernity, and how these are understood at social and bodily scales. During the Second World War the material was mined for its coal-like properties and used to conceal tanks and ships, while its intense colour and oily texture coated eyelashes in Max Factor's first commercial mascara, until it was replaced by blacker polymers – a form of synthetic mimicry that replaces mined minerals with plastics. More recently, artists and community stakeholders working in Devon have reclaimed the natural pigment as an important piece of biocultural heritage. This object biography tells the story of Bideford black and parallel transformations in its extraction, from the exploitation of a finite resource to its displacement by synthetic forms whose 'toxic progenies' (Davis 2022) make different kinds of claims on the future.

Keywords: pigment; memory; mining; coal; contemporary art

This object biography starts with a lump of rich, sticky pigment: Bideford black, an earth material that is at once a marker of a geologic seam and an art substance (Fig.1). This sample, held in a jar in London-based minerologist Ruth Siddall's personal collection, is currently in use as a specimen at University College London's Slade School of Art's pigment library.[1] Such chromatic repositories collect colour as material, including this rare 'mineral black' composed of carbon, alumina, and silica – in geologic terms, carbargillite, a carbonaceous shale (Cornford et al. 2011). In art historical terms, a 'mineral black' is a dark composite of carbon and clay, suggesting that this substance also forms a seam or suture between the components of living and nonliving matter. Both its human and earthly sources are named on the label of a sample collected from its elusive seam in Greencliff by Onya McCausland, a painter who works with pigments that remediate industrial processes (Fig.1).

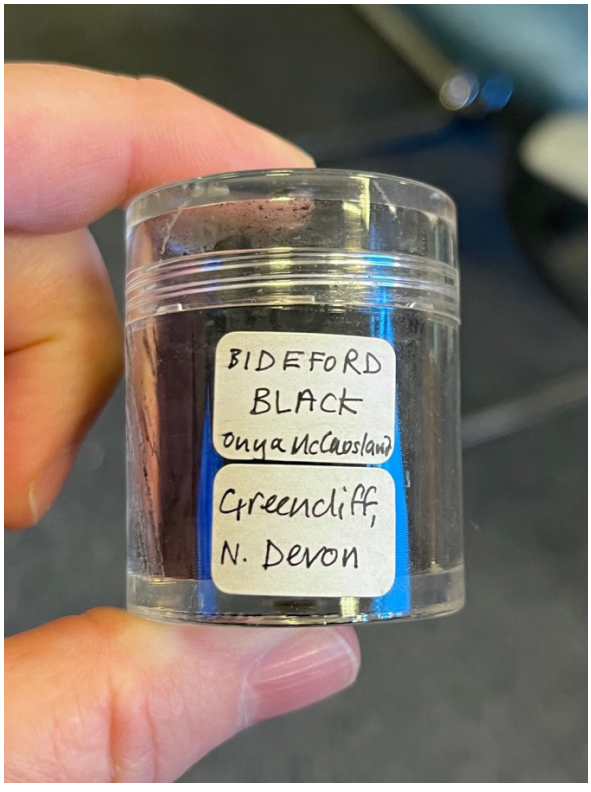

Fig. 1 Ruth Siddall's vial of Bideford black. Image courtesy of Ruth Siddall and Onya McCausland.

Found only in this particular carbon-based deposit, Bideford black – also called 'Biddiblack' in its commercial pigment form – was mined in an ancient flood seam near the River Taw estuary in North Devon, England. As McCausland writes, "Bideford black is available, but only to those who know how to get to the thin vein outcropping on the North Devon coast accessible via a single-track road and across several fields along a stretch of beach" (2017: 56). Like all earth pigments, Bideford black is intimately tied to place and time. Local geologists explain that its waxy blackness is the result of an ancient log jam, in which tree ferns and insects were swept together down rivers and buried in the earth when its tectonic plates reorganized themselves (Cornford, Jones, and Scrivener 2011). Trees and their lignin accumulated in these 'abandoned meanders' of rivers (Cornford, in Smith 2015). These sources of geologic tension coalesce to form this unique Bideford black, also called the 'mother-of-coal' (Eastaugh et al. 2008: 51) – a familial name that insists on its relations with industry, and with us.

To write of Bideford black is to write of loss. Starting in the thirteenth century, labourers pulled both culm (a fuel source) and the pigment out of the earth's seams using pickaxes. Later, in the twentieth century, they adopted air drills, extracting its waxy blackness to coat the hulls of ships (Cleaver et al. 2023: 1). The last pigment mine closed in 1969 due to waning demand, as industries came to favour synthetic pigments that were blacker and more profitable. Yet as the artist Luce Choules has pointed out, the legacy of industrial loss is being reclaimed, as Bideford black is now mined by artists – through a slower and more erratic technique – by hand (Choules, in Smith 2015).

Moving between practices of geologists and artists, from military applications to intimate records of place, this critical biography of Bideford black considers how earth pigments – the materials that accumulate in the abandoned meanders – intersect with environmental art movements. The story of Bideford black is also told through the Bruton Art Gallery, a site where

industrial memory is recorded as existing between art and science, and contemporary artists activate memory in their painstaking attention to materiality and form. In recent reclamations, Bideford black transforms this seam and its activations into a kind of ecomuseum (Kreps 2003; Montanari 2015), where artists participate in the conservation of this mineral black across different spaces of cultural heritage and across registers of art and science. In attending to Bideford black itself, as well as its museological narratives, abundant discourses of scarcity, primordial formation, and luxury, this biography reveals what is at stake in mining, collecting, marking, and selling the landscape's striations.

Black, that colour which is also perceived as a void, an absence, and a devourer of light, is a rich site to be mined for high-modernist magic. Bideford black is shot through with the properties of this colour. As literary critic John Harvey has argued, the fact that all jet-blacks are 'relatives' of coal leads one to speculate about this 'mother-of-coal's' symbolic properties: "one might then say it was with organic life – and death – that black first became the colour of death", he writes (2013: 200).

Anthropologist Elizabeth Povinelli has theorized the 'carbon imaginary' of our era as a time in which carbon stands in for life itself, one in which the distinctions between biology and geology break down in an increasing awareness of the intermingling of human and nonhuman entities. Povinelli cites England's coalfield mining sites as producing both resources *and* knowledge of the Anthropogenic: "the concept of the Anthropocene is as much a product of the coalfields as an analysis of their formation insofar as the fossils within the coalfields helped produce and secure the modern discipline of geology and by contrast biology" (Povinelli 2016: 10).

Black is the colour of oil, that precious and compressed resource that is extracted from the earth, refined, and returned to us as 'fossil kin'.[2] This evocative phrase coined by decolonial geographer Zoe Todd is meant to shift the way we think about the moral purity of rejecting extraction, instead expanding our obligations to oil as a relation, a more-than-human kin. Thinking through these compressed forms of human history brings into focus Bideford black as a collagist portrait of its origins, its mineral meanings as embodying contradictions of modernity, and how it is felt at social and bodily scales. Spelunkers on a pilgrimage to Devon grapple along its caves and coastline, their hands blackened; a smudge of ground and diluted Biddiblack on paper records a shared past, working as an oily index of place.

Bideford black is also prized for its role as a device for enabling concealment in the military. During the Second World War, the material was mined for its coal-like properties in order to conceal tanks – its natural super-black properties were dried, ground, and exported over a two-hundred year-long industrial history by the Bideford Black Mining Company.[3] These military applications highlight the properties of colour as a "polymorphous magical substance", as anthropologist Michael Taussig puts it (2009: 40), pointing to the ways that colour mixes attraction and repulsion, and drawing attention to the material relations between "dying and dyeing" involved in so much history of pigment extraction (2009: 26). According to the seventh-century folk etymology of theologian Isidore of Seville, colour is intimately bound to *calor* (heat), a sensory experience of colour's enchanted properties (Taussig 2009: 5).

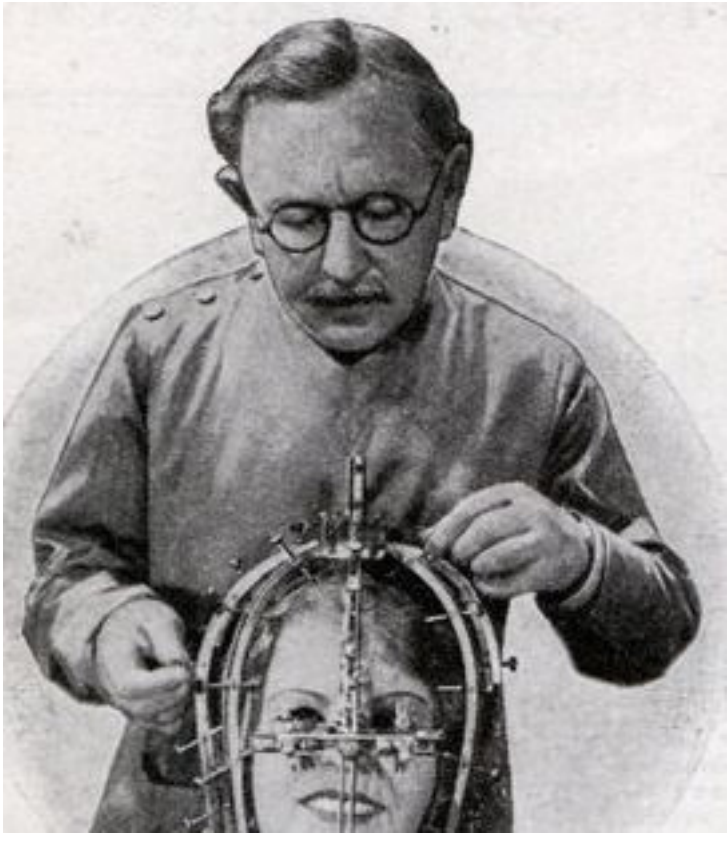

Fig. 2 Max Factor's Beauty Calibrator. Image Source: Wikipedia.

This history is also layered on the body, given that the vivid colour and oily texture of Biddiblack is used to create commercial mascara for Max Factor, which is applied to eyelashes from a cake deposited in a container with a small comb. Indeed, Maximilien Faktorowicz's escape from the House of Romanov to the glamour of Hollywood is said to have been built on concealment, mediated by a faux illness displayed convincingly through heavily caked-on makeup (Basten et al. 1995). Factor – his name Americanized upon immigration – transformed the negative connotation of caking with his popular 'pan-cake' foundation, another pigmented layer worn on the skin's surface (Basten et al. 1995). Both mask and mascara are derived from the French *mascurer* (to blacken); the blackness of Egyptian kohl has always informed the lining of white eyes in the eroticized history of beauty (Hernández 2011). As Harvey points out, "the mask, one might say, is the supreme mascara and needs small prompting from the eye that it accentuates to launch its innuendo of mystery and excitement" (Harvey 2013: 200). To assist with this process of beautification, Factor invented the beauty calibrator, a contraption developed to show precisely where cosmetic enhancements were necessary to produce an ideal face informed by theories of phrenology (Fig.2). Here too, the act of concealment rather than modification seems tied to the cultural properties of make-up.

In the present, North Devon is a major site of Bideford black's material memory, and an important site of care and pilgrimage for artists drawn to the pigment's entangled histories. The Bideford and District Community Archive holds a collection of historical mining materials, including oral histories of miners and their descendants, as well as records of the paint mines, now ruins. In these records, miners remember the bodily toll of labour, how the pigment settled into their pores – it could be cleaned off, but it would return to the surface of miners' skin when

they began to sweat (Cleaver et al. 2023: 23). Exhibitions and collections manager Warren Collum, as well as the many artists who have held residencies at the Burton Art Gallery, have contributed to a huge public archiving project that collates local memories of mining and living with the landscape's black striations. The results of the museum's call for public contributions are archived in a website and in the museum's collections. These consist of artists' pencils made with earth pigments, historical photographs of local miners, and maps of caves where the black mineral seams are visible. This artistic reclaiming of the substance as biocultural heritage and natural earth pigment returns mining to nature, reimagining industrial memory in tandem with geologic time.

Artists' work with the substance at the Burton has varied greatly, ranging from those who have insisted on reclaiming this substance's potentiality – capturing the "primitive energy present in the material", as artist Tabatha Andrews puts it (Smith 2015, 4:45) – to experiments that have explored its material secrets. In an exhibition entitled *Bideford Black: The Next Generation* (2014), Liberty Smith was commissioned to make a film documenting artists' work with the material, in which they use techniques of grinding, stomping, casting, and firing to explore the richness of this obsolete pigment (apparently it turns white if you put it in a kiln). Other artists have explored what the mineral sounds like, creating a literal record through an amalgam of Bideford black and polymers, turning an "unglamorous, unprecious" material used in "very functional things" (Smith 2015, 2:24) into an object of local fascination and care. Artist Peter Ward has written about this use of earth pigments as embodying knowing engagements with time, as materials that "become a part of that place, a part of the earth, carrying a story and a specific nature of their own which deeply influences the way you use them and encourage a sense of the scarcity and preciousness of such materials".[4]

Imagine two rivers, running parallel to each other. Even though they are separate and do not necessarily cross, there may be a point when each one falls at a similar elevation. If you connect those points on a map, as geographers do, you have drawn a "fall line" – an imaginary line, but one that has material presence in its tracing of a coastline environment. Tessa Grundon's watercolour *Fall Line* (2015) (Fig.3) is painted with Bideford black that the artist collected, dried, and ground into pigment on a pilgrimage to North Devon. The artist's work is largely a record of lost or forgotten places – Grundon makes tinctures of these places, processing them into museum-like specimens. *Fall Line* was produced on *khadi* paper, an Indian cotton that is known for its natural acid-free properties, extending the life of the more fragile natural pigments and dyes that the artist works with – preservation made material along with the memory of place.[5] In these ways, too, Bideford black's fame exceeds these local contexts, as artists travel to the region to get their hands dirty.

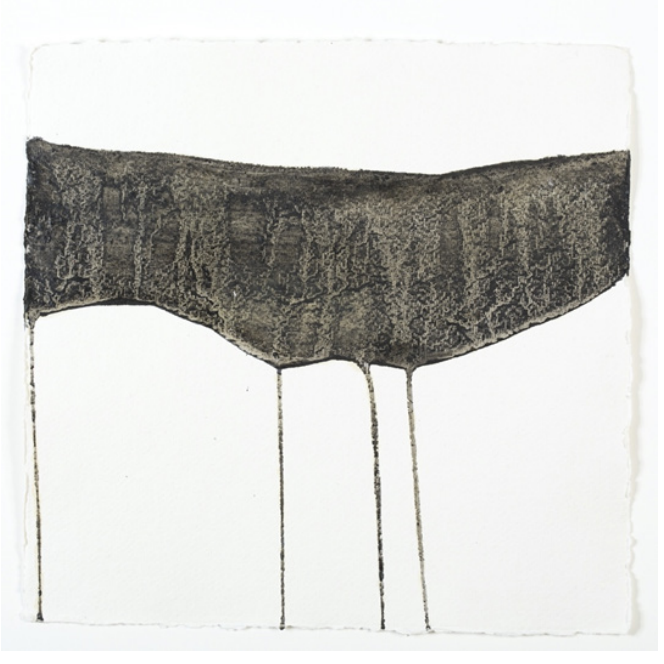

Fig. 3 Tessa Grundon, Fall Line (2015). Image courtesy of the artist.

Scarcity and preciousness: a way to return mining to nature, re-imagining geologic time in tandem with industrial memory, and generating new forms of value around earth pigments. In this way, artists and community stakeholders working in Devon have reclaimed the natural pigment as an important piece of biocultural heritage. Through this return to the earth, such projects evoke the mineral through multiple sensory registers, while highlighting the role of a community of collaborators in shaping the landscape. Here entanglements between environmental and Indigenous histories are crucial to the pigment's relational resurgence: one of Peter Ward's recent experiments with Bideford black consisted of a collaboration with Noel Butler, an Aboriginal Australian Elder of the Yuin Nation, who traveled to England to perform reconciliation ceremonies, and in doing so widened geographies of repair for the Stolen Generations of Aboriginal children taken from their families by the Australian state.

Connecting over their deeply felt ancestral ties to pigments and place, Ward and Butler walked together along the seam, gathering Bideford black. In return, Butler gifted Ward several desert ochre pigments – "his Country's warm red, yellow, and white clays"[6] – thus materializing this chromatic exchange.

Fig. 4 Peter Ward, Bideford Blackface (2013). Image courtesy of the artist.

As a descendant of miners in the community, Ward's performance *Bideford Blackface* (2013) (Fig.4) mimics and embodies the appearance of Devon miners who would return home coated in the stuff, its porous seepage blackening their skin long after they had come to ground. Ward's blackface holds multiple complex desires. It is both explicitly connected to these white workers and the memory of industrial whiteness, but it also represents a sincere desire for a land-based ritual that is inscribed on the body, becoming a 'social skin' (Turner 2003). Yet one cannot perform blackface without also evoking race. This blackening also calls up the uneasy tension in the reclamation of earth pigments, and a desire to connect with a primordial past. Returning to his exchange with Butler, Ward recounts an unexpected way in which this desire was reciprocated:

> On returning home, Noel shared some Bideford Black with his nephew Phil who wanted it to cover tattoos during ceremony and dance. It worked well but as Phil told me, meeting him in 2023 [when Ward visited Noel in Australia], it was very hard to remove, coming off on hotel sheets for days afterwards despite soap and hot water showers! The Bideford black miners had told me it took about 3 months for it to leave their skin after working in the mines, so fine is the particle size of this smooth oily clay.[7]

This exchange complicates some of the rhetoric around 'primitive' qualities of earth pigments, and the problematic ways in which ties to land are imagined in nativist terms as 'indigenous', as well as deeply felt across generations and labour histories. On the one hand, nostalgia for Bideford black as 'natural' or 'primordial' seems to fit into what Salar Mameni has called a 'crude aesthetics,' in which oily substances are affectively and sensuously constructed as raw, practically inviting imperial ventures and the exploitation of bodies associated with the 'crude' (Mameni 2023). Yet Bideford black's transcultural circulation matters, as does the protectiveness with which museums preserve its histories and artists probe its depths.

Turning to another work from the Burton project, artist Corinne Felgate's mascara container cast out of Bideford black – a hybrid of earthly substance and lab-based polymer – amounts to a fossil of the substance's applications as a beauty product. Like her, the artists

at the Burton who explore the material's meanings in Smith's film (2015) are concerned with staying 'true to form'. They wonder out loud whether mixing the pigment with other materials is cheating, somehow moving away from its essence and its purity – a worry about remembering both deep time, as well as a more recent history of the inscriptions of labour on the landscape. These forms of awareness represent forms of belonging that Bideford black activates as it circulates across artistic contexts – an 'intimate ecology' in Ward's words (Ward 2023).

The intimate militarism of the colour of death are also relevant to the concealing effects enabled by Bideford black. The reorientation of Anthropocene-era political ecology by self-described 'inhuman geographer' Kathryn Yusoff as a 'billion Black Anthropocenes or none' (2018) traces our current moment of accretion to the colonialist extraction of labour and raw materials. Black cannot be the colour of property without this discourse, too, as the line between culture and nature is enforced in the property relation. As Yusoff explains:

> It is not just that geology is a signifier for extraction but that a transmutation of matter occurs within that signification that renders matter as property, that makes a delineation between agency and inertness, which stabilizes the *cut* of property and enacts the removal of matter from its constitutive relations as both subject and mineral embedded in sociological and ecological fields. (2018: 4)

I see in the desire for earth pigments a wish to suture this cut, to make visible these labour histories, as well as their participants. As philosopher Heidi Gustafson has written, "eventually our coloured worlds harken back to very specific somewheres and several somebodies bludgeoning the rainbow".[8]

Since the 1960s, use of pigments for camouflage and mascara – both kinds of masks – have been largely replaced by blacker polymers. As Taussig observes in a discussion about colours that pour from tar, "almost everything around us derives from coal chemistry" (2009: 44). This is especially true of a new class of so-called 'Superblacks', carbon substances grown in laboratories, which constitute an invention of colour. Indeed, the blackness effect is secondary to these substrates as materials that possess an extraordinary ability to absorb light and heat, and which can be used to reduce stray light in space-based astronomical instruments, and facilitate infrared sensing and 'energy harvesting' on the surface of whatever the substances coat. "When light strikes the layer of [carbon nanotubes]", the patent for one such Superblack explains, "instead of bouncing off it is trapped between the tubes before eventually becoming heat" (WIPO 2017: 2). In the case of these lab grown Superblacks, neither the void effect, the texture, nor the carbon nanotubes themselves, are the object of invention. Rather, the coating and the process of its growth on various substrates in a lab mark the separation of culture from nature that warrants the patent. This comparison illustrates a crucial difference between the mother of coal and her progeny: Bideford black is uncovered, rather than invented. As Spike Bucklow et al. (2013) note in *Turning Landscape into Colour* – an artist's book recording their collaborations – earth pigments are 'lowly' matter; their origins are in *mater/mother* and country, ensuring that they are a feminized resource. Here, their movement matters too: "Earths grow-up in the wild before taking-up residence in art".

In this way, there is something lost in the transition from carbon-based earth pigments to plastics, a loss that underlies attempts to reconnect with the earth through its materials. Indeed, these new Superblacks are a form of synthetic mimicry that provoke ambivalence in their displacement of history, culture, and meanings of mining. As we know from Roland Barthes, plastics are "artificial Matter, more bountiful than all the natural deposits", in contrast to a "luxurious object [that] is still of this earth, [that] still recalls, albeit in a precious mode, its mineral or animal origin, the natural theme of which it is but one actualization" (Barthes 1957: 111). In these ways, the story of Bideford black runs alongside many parallel transformations of extracted materials, from the exploitation of a natural resource to its displacement and paradoxical protection by synthetics, whose 'toxic progenies' (Davis 2022) make indelible claims on the future as plastic polymers become lodged in our bodies. Indeed, Bideford black's obsolescence means that it is still there in the earth, but it has become harder and harder to find. Recently, Peter Ward has told me, the exposed seam on the cliff face has closed in on itself, concealing its deposits.[9] And this brings us back to the glass vial in Ruth Siddall's pigment library, as well to the Burton museum as a living space where earth pigments are

collected, preserved, studied, and displayed. Both are repositories for the creation of memory and records for the process of noticing. This resurgence is intimately tied to sensing the Anthropocene, the contested geologic era of environmental damage set to the rhythms of deep time. As a geologic formation and scientific specimen at once industrial, artistic, and bodily in its applications, Bideford black remembers more-than-human accretions in carbon-based resources that travel across museum settings and property regimes, between human hands and the blackened beaks of chickens pecking earth shot through with the material.

Notes

1 Ruth Siddall, personal communication, 12 January 2023.

2 Zoe Todd, 'The Weaponization of Fossil Kin', NiCHE 2023. https://niche-canada.org/2023/04/14/the-weaponization-of-fossil-kin/, accessed 12 January 2023.

3 See the town's website for a concise account of this history: https://bideford.com/bideford-black

4 Peter Ward, 'Art,' The Story of Bideford Black 2013. http://bidefordblack.blogspot.com/p/art.html, accessed 23 August 2024.

5 Tessa Grundon, personal communication, 8 September 2021. For more on Grundon's practice, visit https://tessagrundon.com/home.html.

6 Peter Ward, personal communication, 13 January 2024.

7 Peter Ward, pers. comm., 29 Jan 2023.

8 Heidi Gustafson, 'Dust to Dust: A Geology of Colour', The Side View 2019. https://thesideview.co/journal/dust-to-dust/, accessed 22 September 2023.

9 Peter Ward, pers. comm., 29 Jan 2023.

References

Bahlawane, N. (2017) Carbon-nanotube-based composite coating and production method thereof. WO2017001406A2. World Intellectual Property Organization.

Barthes, R. (1957) *Mythologies*, New York: Noonday Press.

Basten, F., Salvatore, R. and Kauffman, P. (1995) *Max Factor's Hollywood: Glamour, Movies, Make-up*, Los Angeles**:** General Publishing Group.

Bucklow, S., McCausland, O., Siddall, R. and Volley, J. (2013). *Turning Landscape into Colour*, London: Slade Press, Slade School of Fine Art, UCL.

Cleaver, D., Coulter, J., Slade, P., Waters, E. and White, D. (2023) *Bideford Black: The History of a Unique Local Industry*, Northam: Bideford & District Community Archive.

Cornford, C., Jones, M. and Scrivener, R.C. (2011) 'Towards an Origin for Bideford Black', *Geoscience in South-West England*, 12 (1) 356-63. https://ussher.org.uk/wp-content/uploads/journal/2011/13-Cornford-Bideford-Black-2011-full.pdf.

Davis, H. (2022) *Plastic Matter*, Durham, NC: Duke University Press.

Eastaugh, N., Walsh, V., Chaplin, T. and Siddall, R. (2008) *Pigment Compendium,* London: Routledge.

Harvey, J. (2013) *The Story of Black*, Chicago: University of Chicago Press.

Hernández, G. (2011) *Classic Beauty: The History of Make-Up*, Atglen: Schiffer Publishing.

Kreps, C. (2003) *Liberating Culture: Cross-Cultural Perspectives on Museums, Curation, and Heritage Preservation*, New York: Routledge.

Mameni, S. (2023) *Terracene: A Crude Aesthetics*, Durham: Duke University Press.

McCausland, O. (2017) *Turning Landscape Into Colour*, PhD thesis submitted to University College London.

Montanari, E. (2015) 'Ecomuseums and Contemporary Multi-cultural Communities: Assessing Problems and Potentialities through the Experience of the Écomusée du Val de Bièvre, Fresnes, France', *Museum and Society, 13* (3) 369-84. https://doi.org/10.29311/mas.v13i3.336.

Povinelli, E. (2016) *Geontologies: A Requiem to Late Liberalism*, Durham, NC: Duke University Press.

Taussig, M. (2009) *What Colour Is the Sacred?,* Chicago: University of Chicago Press.

Turner, T. (1980) 'The Social Skin', *HAU* 2 (2) 486-504. https://doi.org/10.14318/hau2.2.026.

Smith, L. (2015) *Bideford Black: The Next Generation.* [film]

Ward, P. (2023) *Peter Ward: Expressions of an Intimate Ecology*, Kingsbridge: Art.earth.

Yusoff, K. (2019) *A Billion Black Anthropocenes or None*, Minneapolis: University of Minnesota.

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