

NonWest by North

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For *Third Text* Special Issue 'The Wretched Earth: Botanical Conflicts and Artistic Interventions'

North and NonWest: Marianne North and William Colenso's responses to plantlife and the classification of economic botany

Abstract:

What is at stake in traditional botany and how has it historically swept aside even the most eminent of botanical artists such as Marianne North (1830–90)? In three sections, this chapter explores themes of plant sexuality, colonization and the relationships between botany at the metropolitan centre and at the empire's peripheries. Marianne North and Julia Margaret Cameron's amateur science and experimentation are the subject of the first section. Charles Darwin (1809–82) and North's views of relationality rather than Malthusian conflict are addressed in the second. Finally, as two amateur botanists and important plant specimen collectors for Kew, William Colenso (1811-1899) together with Marianne North provide case studies for the complexities of colonial classification.

To what has been written about contemporary 'botanical conflicts', this paper adds an analysis of the historical legacies of colonial science's systems of control, against which indigenous and feminist botanical painters, as well as those interested in plant sentience and other forms of radical environmental art, continue to struggle. It is an anachronistic reinterpretation of Marianne North's interest in Charles Darwin's theories of conflict in relationships between species in *Origins of the Species* (1859) that reassesses the relationships of power, contest and sexualities with reference to the 'plant turn' in philosophy and critical theory (as theorized by Natasha Myers, Carla Hustak, Michael Marder, Michael Pollan, et al), as well as contemporary art. This article is about the conflict between central patriarchies and peripheral establishments of natural science, between Indigenous and colonial botany and its artistic representations.

Introduction

The centrality of the politics of display in botany and natural history are perhaps nowhere more pronounced than in the Kew Royal Botanical Gardens in London. Artists have played a key role in botanizing and in the transfer of botanical knowledge, not only as illustrators of their physical characteristics, they have also pushed the ways that scientists (in this case

study, plant sciences at Kew) have understood, named, represented, categorized, and related to plants. Plants are sensitive to touch and produce chemicals in response to those around them. For instance, orchids store their perfumes in pouches until they need them. Their colours entice the males into the 'pleasures of pseudocopulation'.¹ Charles Darwin was studying these phenomena in *The Movement of Plants*, and yet while in the history of science Darwin is most closely associated with animal studies, he was actually committed to botanical studies. His grandfather Erasmus Darwin was famous for poetic writing about 'plant lives and loves'.² The following study of Marianne North's plant portraiture and William Colenso's naming pursues the notion that the anthropologist of science Natasha Myers sets out about the *practices* of plants that bring them together in an affectively charged, multisensory partnership with insects, humans, etc. It is an 'otherwise muted register' of observing plants' sensorial ingenuity and complexity of relation to other species and the environment that is thereby traced from Darwin to the present. To the contemporary scholars that Myers and by extension this article, employs, plants are expert practitioners, living active rather than immobile lives.

This essay does so by looking at how Marianne North's paintings present plants in ways that engage with, but also exceed, the theories of her peers such as Charles Darwin and Thomas Malthus. It thus positions her as one of the artists that have made a crucial contribution to, and intervention within, the field of botanical conflicts, though she has thus far been overlooked in contemporary artistic debates about plant artists.³

¹ Bradshaw, Elizabeth, et al. 'Comparative Labellum Micromorphology of the Sexually Deceptive Temperate Orchid Genus *Ophrys*: Diverse Epidermal Cell Types and Multiple Origins of Structural Colour.' *Botanical Journal of the Linnean Society* 162.3 (2010): 504–40.

² Cited in Carla Hustak and Natasha Myers, 'Involuntary Momentum: Affective Ecologies and the Sciences of Plant/Insect Encounters', *differences: A Journal of Feminist Cultural Studies*, 2012, p. 80.

³ There are painters like Ian McKeever who have referred bodies of work to North. The *Botanical Drift* series of performative interventions into Kew also sought to redress North and is published as: Khadija von Zinnenburg Carroll (Ed.), *Botanical Drift: Protagonists of the Invasive Herbarium*, Berlin: Sternberg Press, 2017.



[Please insert fig. numbers and full captions with each of the images. Images to be placed with first mention of each, respectively.]

Figure 1 Marianne North dressed as an Old Testament Prophet, photograph by Julia Margaret Cameron, 1877. © Board of Trustees of the Royal Botanic Gardens, Kew.

Photosynthesis: Marianne North, Julia Margaret Cameron, and the sun

In this photograph it is 1877: Julia Margaret Cameron is to pioneering art photography what Marianne North is to global and site-specific plant portraiture. What was shared between Cameron and North about the definitions of natural science in their representations as North sat for her portrait in Cameron's garden in Ceylon (Figure 1)? Did they return in conversation to the criticisms their work received about their lack of objectivity in which they intentionally reject the scientific method in favour of their artistic response?⁴ The female artist, presumed to be sentient or sensitive, nonetheless takes on a masculine, predatory role of *hunting* plants and through portraiture and photography *captures* the object.

Travelling the world to hunt plants, North was mixing her limited palette of paints, thereby

⁴ Condensing comments about Marianne North's botanical illustrations are still made regularly in conversation at Kew, and in print, for instance by W. B. Hemsley, a colleague and friend of North's also at Kew Gardens, wrote in volume 28 of *The Journal of Botany* in 1890, that 'her painting was a natural gift.' At the same time, Hemsley made it clear that he did not think of North as a botanist as 'she never attempted to master the technicalities of systematic botany.' Suzanne Le-May Sheffield, *Revealing New Worlds: Three Victorian Women Naturalists* (London: Routledge, 2001) 85. Hemsley's praise of her talent is yet another example of patronising misogyny, as being attributed a 'natural gift' takes away North's agency as someone who intentionally practices in a certain way. In fact, she studied painting and was not simply endowed with some magic power to paint. She was tutored by a number of artists, including the Royal Academician John Ballantyne (1815–97), Madeline Von Fowinkel, Valentine Bartholomew (1799–1879), and the Australian Robert Dowling (1827–86), who taught North oil painting while spending Christmas with the North family in Hastings.

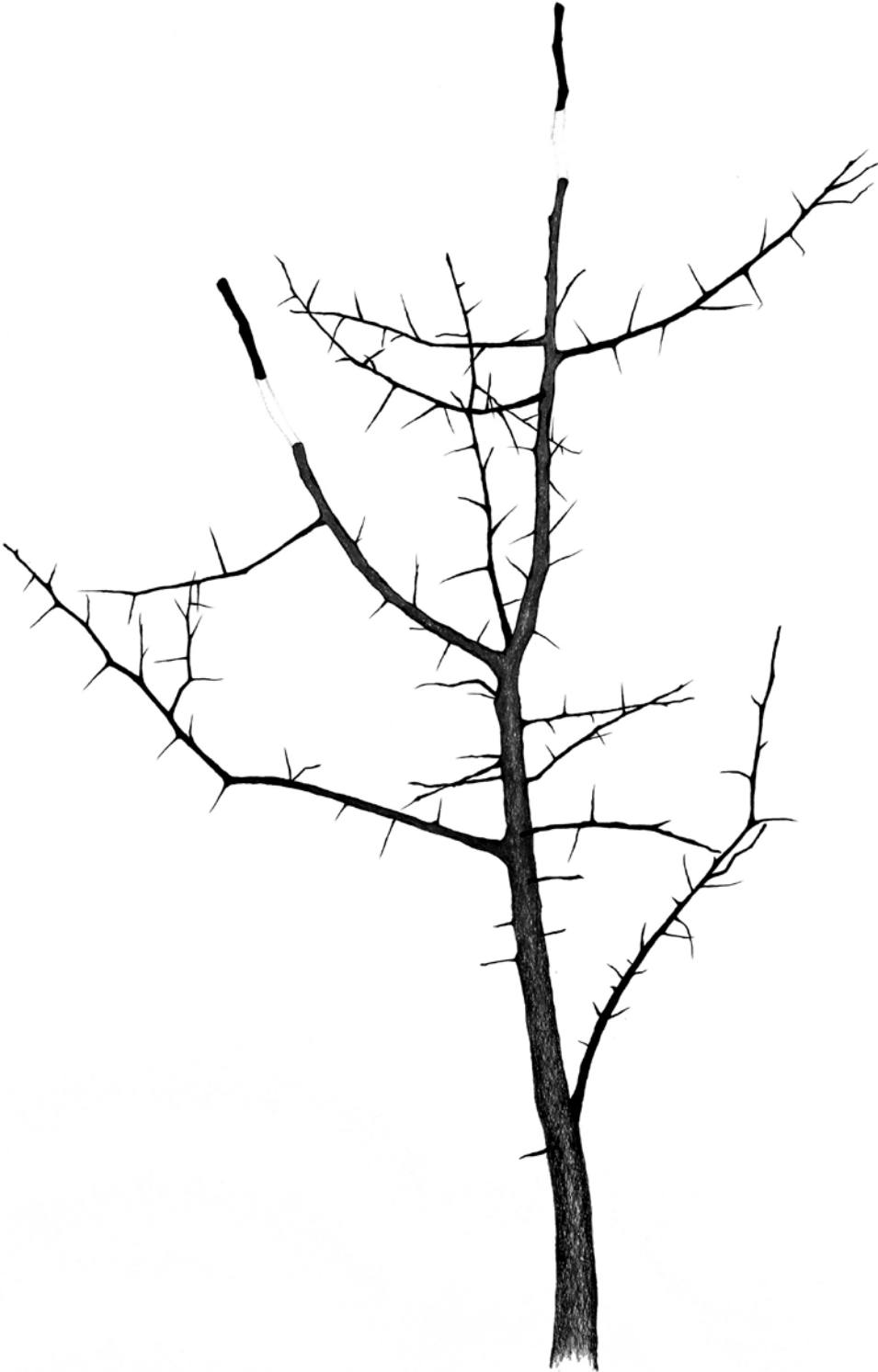
contesting the 'objective' colouring of botanical illustration by numbers and the authority and precision that came with it.⁵ Her mixing (of colours) extended to the plant protagonists of her pictures that were shown in relation to each other (rather than using a herbarium specimen or single plant models strung in white space, i.e. Figure 2). These experiments with symbiosis are parallel to Cameron's use of the camera not as a scientist's apparatus, but as a means of expressing the inner world of the sitter. Cameron's photographic blurs and scratches heighten North's felt experience and discomfort in the burning Ceylon sun.⁶ Wrapping a white shawl over her skin, her entirely draped figure is framed by a palm that also sheds layers of trunk as leaves are held in graphic array. It is in these 'poses of photosynthesis' that I want to capture the contribution made by North to conflicts between botanical theories of the nineteenth century and those of the present.⁷ This involves looking beyond the reductionist view of anthropomorphism to the contribution of artists.

Insert Figure 2> David Allen or 19 Cent specimen? could get one of Colenso's photographed as well. see email.

⁵ Tanya Millard, Emma Le Cornu, Rachael Smith, Eleanor Hasler, Helen Cowdy, Rebecca Chisholm & Elanor King, 'The conservation of 830 oil paintings on paper by Marianne North,' *Journal of the Institute of Conservation* 34, no. 2 (2011): 161. On botanical illustrations coloured according to numerical codes see Ferdinand Bauer, for instance in: Richard Mulholland, 'Colouring by numbers: botanical art techniques investigated', *The Conveyor: Research on the special collections of the Bodleian library*, <https://blogs.bodleian.ox.ac.uk/theconveyor/2015/05/27/colouring-by-numbers-botanical-art-techniques-investigated/> [accessed 11 June, 2017].

⁶ This is to read beyond what North records in her memoir about the encounter with Cameron. Marianne North, *Recollections of a Happy Life: Being the Autobiography of Marianne North*, Volume 1, (London: Macmillan & Co, 1892) 315.

⁷ On photosynthesis see Wietske Maas, 'The Corruption of the Eye: On Photogenesis and Self-Growing Images,' *e-flux* 65 SUPERCOMMUNITY (may–august 2015); and Natasha Myers, 'Photosynthesis.' In 'A Lexicon for an Anthropocene Yet Unseen,' *Theorizing the Contemporary*, *Cultural Anthropology* website, January 21, 2016. <http://culanth.org/fieldsights/790-photosynthesis> [accessed 11 June, 2017].





A Victorian installation artist, North created her life's work in her large permanent gallery that remains in Kew Gardens to this day. She created an immersive experience for the visitor by diagrammatically hanging 832 of her paintings without any space between. This intensity of immersion created by a single artist's spatial and illusionistic installation resonates with late twentieth-century debates in curatorial strategies for art on an architectural scale.⁸ Where her paintings did not quite fit seamlessly frame by frame, she painted additional strips and attached them to fill the gaps. Mirroring the greenhouses with her paints she embedded twigs and other parts of the plants she had collected into her pigments, again experimenting with media ahead of her time.⁹

<Insert (figure 3)>

Figure 3. *Botanical Drift* in the Marianne North Gallery, from left to right: Natasha Eaton, Mark Nesbitt, Caroline Cornish, Natasha Myers, Alana Jelinek, Khadija von Zinnenburg Carroll, Philip Kerrigan, Rebecca Anderson, 5 June 2014, photo © Olaf Pascheit

⁸ For a further bibliography on this large topic see: Khadija Carroll and Alex Schweder, "...(excerpting collections) from a history of interventions', *On Curating: Fresh Breeze In The Depots – Curatorial Concepts for Reinterpreting Collections*, Iss. 12/11, pp 20-24. http://www.on-curating.org/files/oc/dateverwaltung/old%20Issues/ONCURATING_Issue12.pdf [accessed 11 June, 2017].

⁹ Millard et al, 161.



The Marianne North Gallery (figure 3), as she conceived it, is a ‘rest house for tired visitors’ who undergo a dramatic shift from immersion in organic growth to her oil painted *Gesamtkunstwerk* (total work of art).¹⁰ The gallery houses an extreme boundary between paint and plant that the visitor experiences in the transition between gardens and gallery. The phenomenological extremity of the gallery is not just ‘a unique adjunct to a botanic garden’ but a kaleidoscope of the world, designed into the miniature plant universe of Kew.¹¹ Organized geographically, North’s installation was based on a personal aesthetic rather than the conventional modes of display in the colonial botanic garden and museum.

¹⁰ Citation from North’s diary, which is published in *A Vision of Eden: The Life and Work of Marianne North*, ed. Anthony Huxley (Surrey, UK: The Royal Botanical Gardens, Kew, 1993) 234.

¹¹ This description of the gallery appears in the review in the *Gardeners’ Chronicle* in June 1882, cited in Monica Anderson, ‘A Monumental Autobiography: Marianne North’s Gallery at Kew Gardens,’ *Limina* 2003: 66.



Figure 4. Marianne North, 'Scotchman Hugging a Creole, Brazil,' oil on paper, 1880. © Board of Trustees of the Royal Botanic Gardens, Kew.

In contrast, the Marianne North Gallery's non-hierarchical combination of approaches marks her out as a problematic figure whose work sits uneasily in relation to the established scientific and artistic conventions of the nineteenth century. The art historian Lynne Gladston anachronistically calls the North Gallery a 'Cabinet of Curiosities,' as if it belonged belatedly to an earlier modern and universal display according to material.¹² The world within North's gallery is the globe inside out. North was fascinated with the massive extrusions that Morton Bay fig tree's roots produce above surface and installed her paintings with an equally closed grip of tentacles. A complete vertical growth, to describe it as a salon hang of several paintings densely lined up and down a wall says nothing of the strangle that each cell of a painting has on the wall and all within – totality desired, in 832 paintings, continent by continent.

I will argue that for North a process of what I call 'becoming vegetalized' by plant subjects can mean thinking and making *with* plants, not just condescending to them as intelligent *like*

¹² Gladston also uses the twentieth-century method of montage to read North. Gladston's is the perspective of a trained botanical illustrator who gives the insights of an artist into the composite approaches to image making based on the use of photographic materials. Lynne Gladston, 'The Hybrid Work of Marianne North in the Context of Nineteenth-Century Visual Practice(s)' (PhD thesis, University of Nottingham, 2012). http://eprints.nottingham.ac.uk/12653/1/Lynne_Gladston_thesis.pdf

humans, in a reductive form of anthropomorphism.¹³ An openness to becoming vegetalised or thinking *with* plants as complex living beings comes from Hustak and Myers' reading of Darwin, which I in turn use as a prism through which to read North, both in and of herself and in relation to Darwin.

North provides an early critique of the colonial botanist and artist as mere hunter. Actor Network Theory's refocusing on non-human agency enables this view of North as inverting the human expert in relation to non-human life.¹⁴ In the process, North may be seen to contribute more than just botanical theories. In what Michna Mircan would call a 'Daphnian' transformation from woman to tree, the superiority of the human species that might be attributed to Darwin's theories does not find illustration in North's non-hierarchical gallery.¹⁵ The artist's representation of botany instead provides a counter to the colonial economic enterprise that she witnesses first-hand.

Conflict in Botanical Theories: Darwin and Malthus

Embedded into North's plant paintings are biographical and historical sources in which botany is instrumental to the beginning of the free market and evolutionary theories, which come into being at the same time.¹⁶ This section reads these theories as a context in which North composed her paintings of botany in conflict.

In 1855, North began her flower portraiture in London and her father, with whom she lived, complained of her making 'a most exclusive business of' painting.¹⁷ This focus crystallized into the proposal she sent to the director Joseph Hooker in 1879 to build the gallery in the gardens for her paintings. In Kew, the botanical sciences and the botanical arts are kept at a distance because of a seemingly unresolvable conflict over the interpretation and representation of botany.

¹³ This criticism can easily be made of Peter Wohlleben, *The Hidden Life of Trees: What They Feel, how They Communicate: Discoveries from a Secret World*, Vancouver/Berkeley: Greystone Books Limited, 2016.

¹⁴ Latour, Bruno, *We Have Never Been Modern*, trans. Catherine Porter, Harvard University Press, Cambridge, MA, 1993. Petra Lange-Berndt (ed.), *Materiality*, MIT Press, Boston, 2015.

¹⁵ Michna Mircan, *A Biography of Daphne*, manuscript shared with the author.

¹⁶ See Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World*, Cambridge, Harvard University Press, 2007; Fara, Patricia, *Sex, Botany & Empire: The Story Of Carl Linnaeus and Joseph Banks*, New York, Columbia University Press, 2004; Alana Jelinek, 'Plants in their Homes': Or the Tendency to Strangle the Other with Anthropomorphism', in Khadija von Zinnenburg Carroll (Ed.), *Botanical Drift*, op cit, p. 77.

¹⁷ Cited by Brenda Moon, in 'Marianne North 1830-90', Anthony Huxley (ed.), *A Vision of Eden*, op cit, p. 235.

North's contribution as an artist to the conflicts in historical botanical discourses that inform the field to this day has been overshadowed by being cast as merely a female flower painter of the nineteenth century. The biographical details of her class and contacts that enabled her to travel around the British Empire at the time provide an important backdrop but have narrowed the scope of the reception history of her paintings.¹⁸ Biographies tend to emphasize that North's father knew William Hooker when he was director of Kew Gardens and North later knew William Hooker's son Joseph (1814–79), who succeeded his father as director of Kew. This has the effect of presenting the unruly female artist achieving her tour de force gallery through (male) family connections, rather than agency and intentionality.¹⁹

Theories of conflict between species came to the fore in the field of botany in the nineteenth century through the work of Charles Darwin.²⁰ North received direct advice from Darwin on where to go to paint her plant protagonists and presumably how to understand her larger intellectual project through painting the plants of the world.²¹ *On the Origin of Species* was published in 1859 using material from Darwin's Beagle expedition.²² It set out the scientific theory of natural selection as the process by which populations evolve, which is considered the foundation of evolutionary biology but it also had wide influence on disciplines such as anthropology and botany.

There are at least two ways of reading Darwin's influence on North and the discourse of botanical conflicts. The neo-Darwinian one is to read *On the Origin of Species*' reception as foregrounding violent conflict and survival of the fittest. The other, in contrast, is to read the

¹⁸ Biographies to date include: Dea Birkett, *Spinsters Abroad*, London UK, Basil Blackwell Ltd., 1989, which describes the activities of a number of nineteenth-century itinerant women artists. Laura Ponsonby, *Marianne North at Kew Gardens*, Surrey UK, The Royal Botanical Gardens, Kew. Desmond, R., 1998, [1995] *The History of the Royal Botanical Gardens*, Kew, Surrey UK: The Harvill Press with The Royal Botanical Gardens, Kew. Feminist and postcolonial histories of North include: Margaret Tingling, *Women into the Unknown: A Source Book on Women Explorers and Travellers*, New York U.S.A.: Greenwood Press, 1989. Susan Morgan, *Place Matters: Gendered Geography in Victorian Women's Travel Books about South-East Asia*, New Jersey U.S.A.: Rutgers University Press, 1996. Barbara Gates, *Kindred Nature: Victorian and Edwardian Women Embrace the Tiny World*, Chicago U.S.A.: University of Chicago Press, 1998. Yet more recent relevant studies include: Isabel Hoving, *Writing the Earth, Darkly: Globalization, Ecocriticism, and Desire*, Lexington Books, 2017.

¹⁹ An earlier version of my argument in this article was presented at the conference *Vegetal Mediations: Plant Agency in Contemporary Art and Environmental Humanities*, Central European University, Budapest, 6 May 2017.

²⁰ North also knew Darwin's cousin Francis Galton, famous for his work on eugenics (1822–1911).

²¹ Darwin tells North, in her words, that she 'ought not to attempt any representation of the vegetation of the world until I had seen and painted the Australian, which was so unlike that of any other country, I determined to take it as a royal command and to go at once.' North, *A Vision of Eden*, p. 151.

²² Charles Darwin, *The Origin of Species by Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life*, USA and Canada: Bantam Classic Books, 1999, [1859].

moments in Darwin and North's works where there is an openness to influence from the plant, of the kind that does not assert the superiority of the human species. North has traditionally been aligned with Darwinism, but contemporary reappraisals of her by feminist environmental historians such as Natasha Myers place her also within the latter reading of Darwin.²³ In an article on 'Involutionary Momentum' Myers and Hustak pursue a subtle but important difference in the way that Darwin has been received by biological science. They characterize the resistance of 'Neo-Darwinians' to 'the moments of perplexity, excess, and affective pull, moments when he got caught up in the energetic momentum that ingathers organisms in complex ecological relations'.²⁴ 'Ingathering' and 'involuting' are terms that propel their counter reading of Darwin as being drawn into the plants' sexual play, hence 'involuting evolution'. The pleasure plants experience in Darwin's observations of them are reduced to a rational, calculating, functionalist logic of reproductive outputs. Chemical ecology has discovered a 'selfish gene' that regulates plants' energy expenditure and enhances reproductive fitness for long-term species survival.²⁵ Myers contrasts the chemical ecologists' instruments for capturing volatile chemical attractants to Darwin's methods of observation, in which he describes the sensual textures and colours, the tastes and smells of pollinators.²⁶ It is the difference in the language used to represent plant sex and violence, attributed to interspecies relationalities, and registered in contrasting scientific practices, that this essay also seeks to tease out.

It has been argued by Philip Kerrigan that North's paintings illustrated Darwin's theories.²⁷ The violent conflict between species has been seen as evident in paintings of the carnivorous and strangler plants. However, a rejection of neo-Darwinian theories of economic botany provides a potential counter-interpretation of North's illustration of ideas concerning continual conflict in Darwin, which can be made based on her paintings, diaries, and artistic process. The erotic charge of North's flower paintings also contributes to this argument about the 'vegetalization' of her vision.²⁸

²³ Natasha Myers, 'An anthropologist among artists in the gardens', in Khadija von Zinnenburg Carroll (Ed.), *Botanical Drift*, op cit, pp. 69-72.

²⁴ p.82.

²⁵ Carla Hustak and Natasha Myers, 'Involutionary Momentum', op cit, p 75.

²⁶ Ibid. p 75.

²⁷ Philip Kerrigan, 'Marianne North: Painting a Darwinian Vision', *Visual Culture in Britain* Vol. 11, Iss. 1, 2010.

²⁸ Carla Hustak and Natasha Myers, 'Involutionary Momentum', op cit, p. 79.

Kerrigan argues that North struggled to reconcile the natural beauty of the plants, which she saw and enjoyed around her, with the knowledge that they were continuously engaged in conflict with each other. He attributes this cognitive dissonance to a romantic and natural theological view of nature, one that wishes to equate what is beautiful with what is harmonious. In this reading of North, a moral judgement of conflict is read into the language of her diaries. North writes: 'It seemed difficult to believe that those delicate velvet leaves and crimson stalks which ornament the tree so kindly at first, should start with the express intention of murdering it and taking its place!'²⁹ In contradiction to the most obvious reading of this language, the strangler figs are not painted as a 'murderers' in *Scotchman Hugging a Creole* (fig. 4), to give one of several instances of violence in her paintings. Instead, relational stranglehold could be read as central to North's whole project, and the 'hugging' colonial Scotchman could be strangling 'a creole'. Hierarchy and domination play out between plant species but also between humans and non-humans in North's paintings and biography. 'Another day we rod father into the forest, and saw still bigger bunya tress, and great skeleton fig-trees hugging some other victim-tree to death, with its roots spreading over the ground at its base like the tentacles of some horrid sea-monstor'.³⁰

On the topic of relationality, North historiography tends to dwell on her father and her choice of painting rather than marriage after his death. Do her plant protagonists play out relationships of dependence that she experienced in life? With questions like these, which are a product of the literature on North, does the personal biography play into the depoliticization of the figure of the female artist?

North's vast oeuvre of plant paintings is a portrait of the politics of empire, including the dramatic extraction of natural resources, in cotton plantations for instance, and many other sites of colonial economic botany. The section of her diary that comes right after the account of strangler figs in Sarawak, Borneo, is rarely cited but makes a link between the felling of victim-trees and colonial genocide: 'The work of destruction had begun, and civilized men would soon drive out not only the aborigines but their food and shelter', she writes in Australia.³¹ The concerns of humanitarian discourses about indigenous poverty after

²⁹ North, *Recollections of a Happy Life: Being the Autobiography of Marianne North*, (Susan Morgan, ed.) Volume 1, University of Virginia, 1993, p. 246.

³⁰ North, *A Vision of Eden*, op cit, p. 160

³¹ North, *A Vision of Eden*, op cit p. 160.

colonization due to access to land comes clearly through her texts. The discipline of botany, which researched resource extraction through agriculture using indentured and slave labour, operated in the wider context of colonial control and North openly critiques its misuse. The commodity histories represented in the other articles of this special issue are but a sample of the vast botanical resources that the British (and other) empires researched and in part cultivated and exported (i.e. sugar, rubber, spices).

North describes indigenous brush-turkey hunting with the technical detail of a proto-anthropologist and vilifies the ‘useless murder’ of hunting of animals for pleasure.

‘Great piles of sawdust and chip, which some huge logs, told that the work of destruction had begun, and civilized men would soon drive out not only the aborigines but their food and shelter. Under the trees were many of the leafy mounds made by the brush-turkeys to put their eggs in [...] A poor little sloth-bear, was shot for me before I could say ‘don’t’ -- so soft and harmless, all wood and no body or bones. I felt so sorry for the useless murder. They [the indigenous people maintaining the land] also burned the grass [...]. When by accident the flames come too near, every white man, woman and child has to take branches and beat it out, which the blacks sit down and sigh. The young grass is stifled by the sense mass of dry tufts above it. The only way of giving it necessary room and air is by burning off the old grass, and its ashes are the best manure for the young shoots.’³²

She astutely recognizes the importance of burning off in Abogiginal land management practises which are still today struggling to assert themselves in the dominantly white parks and gardens culture of Australia. These critical sections of her diaries can also be read within the larger move to civilize the hunter-gatherer societies into becoming belated participants in the Neolithic Revolution in which settlement and new knowledge of agriculture led to the domestication of plants. Her observations as guest of the colonial elite in India, Java, Ceylon, Borneo, Australia, New Zealand, South Africa and the Seychelles during her world-wide travels around the British dominions are not confined to the quaint outputs of the picturesque Victorian flower painter on the terrace (fig. 5).³³ Her diary includes a conservationists’

³² North, *A Vision of Eden*, op cit p. 160.

³³ Gladstone writes that North was ‘an unconventional woman and a non-comformist who was often dismayed at the ignorance of her class and its ideals and avoided mainstream society whenever possible.... Nevertheless,

scrutiny of the ‘destruction’ of plants, animals and people (of the ‘native’ as they were classified together in the nineteenth century).



Figure 5. Marianne North painting a Tamil boy in Mrs Cameron’s house, Ceylon, by Julia Margaret Cameron, 1877. Wikimedia Commons.

Colonial expeditions set out especially to collect plants – Kew’s extant ‘Wardian case’ was the first portable greenhouse, the transport mechanism for economic botany (Fig. 6). What follows the cultivation of economic crops of sugar and other plants are monocultures and systems of slavery. Economic plants are said to go through four phases of becoming: domestication, exchanges, modes of production and regulation.³⁴ Kew’s Economic Botany archive is a nineteenth-century collection of materials from all around the world (that continues to collect and now holds over 85,000 specimens).

her independence was very much dependent upon her high social standing and continuing involvement in capitalist/colonialist society.’ Gladstone, *The hybrid work of Marianne North*, p. 19. □□□□

³⁴ Mélanie Bouteloup, Anna Colin, Françoise Vergès, Serge Volper, *Tropicomania: the Social Life of Plants*, <http://www.betonsalon.net/IMG/pdf/tropicomania-publication-web-2.pdf> [accessed 11 June, 2017]



Fig. 6 Member of Kew staff, possibly Harry Ruck, Storekeeper, packing a Wardian case, 1940 © Board of Trustees of the Royal Botanic Gardens, Kew.

North's paintings are hybrid also in the sense that they are composite fictions, artistic and scientific, based on the relationships of live plants and of long-dead plants that she observed. For instance, the *Amherstia nobilis* was not in flower when she was in Borneo, so she painted it from a specimen in the Kew herbarium. She sets its orchid-like blossoms in a beckoning hand gesture against a backdrop of other plants. Like Darwin's think description based on the senses, what Hustak and Myers' call 'affective entanglement' with orchids in the event of fertilization, in North's paintings we also see plants signalling and conducting interspecies communication.³⁵ This is in contrast with the contemporary neo-Darwinian reduction of plants to reactive automatons. Hustak and Myers' feminist turn to 'affective ecology' instead looks at Darwin's search for experimental proof of orchid fertilization, attuned to pleasure

³⁵ Carla Hustak and Natasha Myers, *Involuntary Momentum*, op cit, p. 79.

and play in the process. Open thereby to how plants are internalized and take effect on the human body with their ‘extensive, distributed, entangling’ plant bodies, for Hustak and Myers, Darwin’s ‘multisensory experimental techniques’ continue in a trajectory of thinking about plants that they attribute to Gilles Deleuze and Felix Guattari.³⁶

To ‘become vegetalized’ means to observe the effect of plants with a greater freedom than a scientific expert in botany or an artist in his employ had the capacity to do in the nineteenth century. While there are countless precedents of nineteenth-century amateur artists and scientists who clearly fetishize and thereby include an erotic charge in their images of nature, Marianne North unfurls flower painting as a genre beyond what has traditionally been regarded as lowly kitsch in the academic hierarchy of fine art. A lack of access to nudes – as North’s male counterparts would have had at the time – meant that Victorian woman painters were relegated to an array of ‘appropriate’ subject matter. Art history has made a lot of this limitation of only being able to paint landscapes, children and flowers.³⁷ However, just as North’s cosmopolitan thinking cannot be reduced to her class, her obsessional painting cannot be classified as part of a dilettantish array of feminine crafts.³⁸ Nor is North disabled by the genre of flower portraits, she paints plants with a dissolution of rational form comparable in its intensity to Van Gogh. Hung together as they are, the paintings overwhelm familiar formats of human perception. With them North asserts not only her own artistic agency but a coherent philosophy that is based on her own take on what we might in retrospect call the ‘affective entanglements’ and of a vegetalized Darwinism.

Naturalizing rapacious competition and violent hierarchies is one aspect of Darwin’s theories that is read from North’s paintings by Alana Jelinek and Philip Kerrigan, for different reasons.³⁹ Jelinek emphasises that North and Darwin were working at a time governed by liberal economics. In botanic economy, as in the financial predictions for future populations, the fittest and strongest were seen to win out over the weaker in the competition for

³⁶ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, vol. 2. Minneapolis: University of Minnesota Press, 1987, pp. 5-15. See also Matteo Pasquinelli, ‘The Arborescent Mind: The Intelligence of an Inverted Tree’, *Botanical Drift*, op cit, pp. 164-173.

³⁷ Linda Nochlin: ‘Why Have There Been no Great Women Artists?’ (1971), in: Linda Nochlin, *Women, Art and Power and Other Essays*, New York 1988, 147-158.

³⁸ I use cosmopolitanism in the sense that Nicholas Thomas, *Islanders: The Pacific in the Age of Empire*, London, Yale University Press, 2010, does to describe the cross cultural exchange of knowledge between islands during the long nineteenth century.

³⁹ Jelinek, Kerrigan, Carroll, *Botanical Drift*, op cit, pp 73-84.

resources. This idea can be traced from Darwin back to Thomas Malthus' *An Essay on the Principle of Population* (1798) in which he argues that population growth tends to outpace its means of subsistence unless kept in check by factors such as disease, famine or war, or else by lowering the birth rate through such means as sexual abstinence.⁴⁰

The ontology of neo-Darwinian science is of a fully mechanized set of narratives about reproduction and economy. If inverted, Kerrigan's theory about the influence of Darwin's science on North's anthropomorphism of plants instead visualizes how Darwin was taken in or vegetalized, as Myers has put it, by plants.⁴¹ North's paintings can then be read as visual evidence of plant protagonists' agency to 'involute evolution'. Darwin was anthropomorphizing the plants with human-like intelligence, but even more so, their plant intelligence took Darwin in.

Plant sentience that is not human is made visible in North's oeuvre. This is possible in painting because it is not bound to the same conventions that the scientists are in claiming that plants are non-sentient.⁴² North picks up the non-conventional Darwin that recognized plant sentience. Responding to North, Natasha Myers has argued that theories of mechanism fail because of the contradiction between views of organisms as rational actors making choices but also as blind automatons without agency.⁴³ North's storytelling through these images is not a simple illustration of conflict in Darwin's theories of evolution but a fully-fledged vegetal philosophy that runs counter to mainstream botanical historiographies. Philosophers like Michael Marder draw mention of botany from far and wide to illustrate philosophical concepts, a research process that has to be distinguished from observing a plant, as far as is possible, in its own terms.⁴⁴

Colonial Classification: Colenso and Hooker

⁴⁰ As Alison Bashford and Joyce Chaplin's rereading of Malthus emphasizes, the global reach of Malthus' references in the theory of population also influenced Darwin. Alison Bashford & Joyce E. Chaplin, *The New Worlds of Thomas Robert Malthus: Rereading the Principle of Population*, please give full references.

⁴¹ Natasha Myers, 'Sensing Botanical Sensoria: A Kriya for Cultivating Your Inner Plant,' Centre for Imaginative Ethnography, 2014, <http://imaginativeethnography.org/imaginings/affect/sensing-botanical-sensoria/>

⁴² Natasha Myers, *Rendering Life Molecular: Models, Modelers, and Excitable Matter*, Durham, Duke University Press, 2015.

⁴³ Conversation with Natasha Myers in the Marianne North Gallery, June 3, 2014.

⁴⁴ Michael Marder, *The Philosopher's Plant: An Intellectual Herbarium*, NY: Columbia University Press, 2014.

Reverend William Colenso arrived as a missionary in *Aotearoa* (New Zealand) in 1834, was defrocked in 1852 for fathering an illegitimate [Māori](#) son, and went on to become a politician, activist for [Māori](#) causes, translator and botanical specimen collectors for Kew using [Māori](#) names for New Zealand species. Colenso and North's work and lived experience both operated within and contributed to imperial categorisations of life forms, and variously challenged imperial hierarchies from within, having to negotiate the conflicts between botanical theories that animated the nineteenth century. Bringing North together with Colenso is a juxtaposition that reflects my methods as an (art) historian who is also an artist and a curator. The form of historical revisionism in my practise aims to enliven the significance (now and then) of North and Colenso's mis-recognition and omission from their privileged, colonial peers.

North already commented as she travelled past hop-gardens in the colony of Victoria that 'it is curious how we have introduced all our [British] weeds, vices, and prejudices into Australia, and turned the natives (even the fish) out of it.'⁴⁵ In this register of complaint about the environmental impact of the colony on local life her writing resonates with many other botanists and collectors such as Wilhelm von Blandowski. Blandowski's career ended spectacularly in the colony of Victoria Australia after pitting Aboriginal nomenclature against colonial scientific nomenclature.⁴⁶ North was not alone – as a collector of specimens, a plant hunter, for Kew from the British Empire – in finding Kew's economic botany at odds with the local plant hunting practises. Her experience of not being taken seriously as a scientific collector of specimens for Kew's herbarium was also not only because she was a woman and an artist. There was great competition among botanical collectors at the time because of the honour of discovering new scientific type specimens. Money could be made from collecting in the colonies and that put North again outside of her field, which was a mix of paid 'Artisan' collectors and 'Gentlemen'.⁴⁷ They circulated the globe collecting botany for the scientific centres of empire that they would send specimens back to. In these centres, the specimens would be assessed by the experts in charge. In London's Kew it was the Hookers (father and son) who established and controlled the collection.

⁴⁵ North, *A Vision of Eden*, p. 177.

⁴⁶ Khadija von Zinnenburg Carroll, 'What would Indigenous taxonomy look like? The case of Wilhelm von Blandowski, *Arcadia*, online journal (2014).

⁴⁷ See A. Secord, 'Corresponding Interests: Artisans and Gentlemen in Nineteenth-Century Natural History', *British Journal for the History of Science* 27 (1994): pp. 383–408.

While in Melbourne, the renowned botanist Baron von Mueller ‘calmly pocketed’ the *Eucalyptus macrocarpa* that North had collected and ‘was saving for Kew’.⁴⁸ These complaints in her diary reflect the network of colonial botanists operating both in conflict with the local indigenous populations and their botanical practises and with the lesser collectors for Hooker in Kew. In the Kew Gardens archives there are many more letters accompanying plant specimens from collectors frustrated by colonial botany. A digression into the letters from *Aotearoa* sent by just one such collector, Colenso, gives further detail to the context in which nineteenth-century conflicts over botany were being administrated in the centres of empire. In his letters to Hooker (Fig. 7), Colenso argued persistently for the inclusion of Māori names for the plants he was collecting.

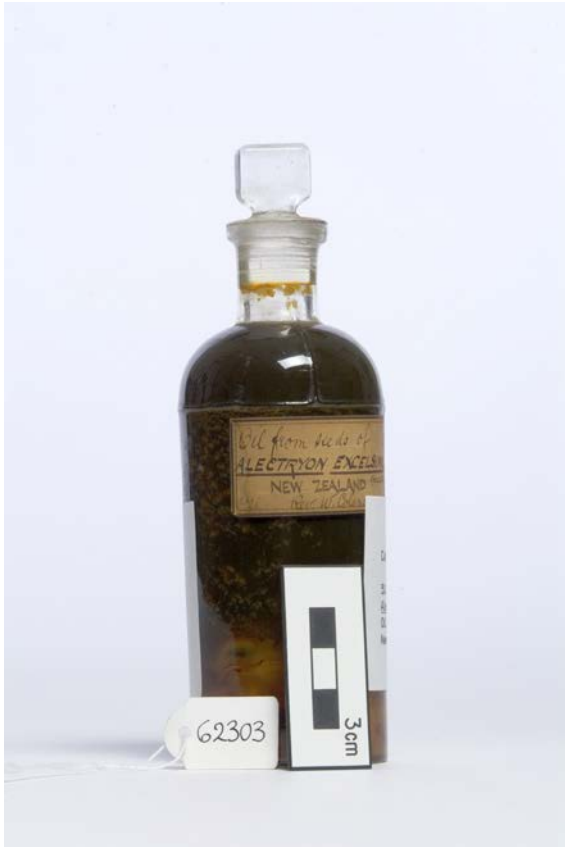


<Insert Fig.7 Letter - or specimen, or both -

⁴⁸ North, *A Vision of Eden*, p. 177.

Vegetable, — I will be sure to send you
some at the right time.

In my paper on the Kumara,
in Vol. XIII. "Trans. N. Z. J." (above men-
tioned), I have said, that I had good
reason for believing that the var. cal-
led Parakaraka was the identical
one which Cook & Banks saw, and
named Spon. chrys. — but, from fur-
ther conversation with my old ^{Maori} ac-
quaintance (whom I have known for
39 years!) I find, that the sort named
Kiokiorangi (p. 35, loc. cit.), is still
more likely to have been that sort;
its Maori name, also, bearing an in-
dication that way: — Kiokio =
the 26th. or 27th. night of the moon, when
it appears on that night; and
rangi = sky; indicative of the whence,
or the great goodness, or the nobility,
of this var. of tuber; — i.e. long, narrow,
(curved, golden — the best)



His letter from Monday 3 August 1846 is a prime example:

My Dear Hooker

[...] I have sent you portions 2/3rds and more of everything I have laid hands on, and have numbered them all, or nearly so; and that, principally, for this reason – should you wish to get any better specimens of any of the scraps, in your sending me the No. I shall be the better able to secure them for you, I have, also, given you a List (in the Case) with a few remarks en passant which, brief as they are, may not altogether be unacceptable. You will also find a few Bones for Prof. Owen...

Having written so very much (considering how greatly pressed I am for time) for you, in the 'List' – this letter will necessarily be short. How is it, my dear Sir William that so many of the Native names of places and things get so often misspelt – both in 'the Lond. Jour. of Bot.' and in the 'Icones plant.'? – I can but think that I wrote them plainly. If it be at all desirable to make known the locality, such can only be attained by strictly adhering to the orthography; for such is the construction of the N.Z. language (possessing only 14 letters) that the omission or alteration of a single

letter in a word is sufficient wholly to destroy its meaning, or (what is worse) to transform it into a word of more than equivocal sense. –Allow me, also, to request, that you will be pleased to turn to Cunn’s Ms., for the specific name of his N.Z. *Persoonia* which cannot (must not) be ‘Tora’ (a most obscene word); Toru is the Native name of the Tree, and Cunningham, who had all the names either from, or corrected by, the Missionaries, – must have written it Toru. If you find it to be as I suppose, you can easily alter it; and if not, do try to change its nom. sp., for any person, however respectable, using such a word to a Native (in enquiring after the Tree), would infallibly insure to himself anything but a good reputation.⁴⁹

In over 50 years of correspondence with his ‘Dear Hooker’, Colenso recurrently urged him in this tone to adopt local names and hence systems of thinking about botany. By learning the Māori language, Colenso began to see the mistakes that were being made in the classification of local plants. The implication was that they were being named wrongly, which in nineteenth-century Natural History was part of global centre-periphery conflicts about the power over botanical rules and definitions.⁵⁰ In this context, challenges to European science stemming from colonial expeditions resulted in the establishment of a British Association for the Advancement of Science commission in 1842, which proposed rules for nomenclature in natural science, aiming to counter uncontrolled proliferation of naming in the colonies.⁵¹ Hooker described the problem in regards to the Australian botanist Ferdinand von Mueller, saying he ‘keeps vomiting forth new genera & species with the lack of judgement of a steam dreading machine’.⁵² In the literature this is presented as a result of ignorance, the young colonies presenting excess and chaos to the imperial scientific system. It can also be seen as systemic difference through which local observation produced a plant knowledge that did not align with imperial botany.

‘Language arises from landscape’, Colenso wrote in his essay on the failures of colonial nomenclature.⁵³ He was infuriated by the lack of his suggested indigenous names being adopted and was unrelenting throughout his life in lobbying Kew to change. However,

⁴⁹ Ian St George (Ed.), *Colenso’s collections including the unpublished work of the late Bruce Hamlin on William Colenso’s New Zealand plants held at Te Papa*, Wellington, The New Zealand Native Orchid Group Inc., 2009, p. 196-197.

⁵⁰ See Khadija von Zinnenburg Carroll, *Art in the Time of Colony*, Farnham, Ashgate, 2014, esp. ch. 3.

⁵¹ Gordon R. McOuat, ‘Species, Rules, and Meaning: The Politics of Language and the Ends of Definitions in Nineteenth-Century Natural History’, *Studies in History and Philosophy of Science* 27 (1996): pp. 473–519.

⁵² Peter Wells, *The Hungry Heart: Journeys with William Colenso*, Auckland, Vintage, 2011, p. 363.

⁵³ William Colenso, ‘On Nomenclature’, *Three Literary Papers*, Daily Telegraph Office, Napier, 1883.

burdened by unequal power relations, there is a settler-colonial sense for the hilarity and anger with which colonial botany will be received by the locals. Peter Wells's biography of Colenso reads his relationship to Hooker from their exchange of letters and against the shifting power relations between them. While once Colenso had been grovelling in his offerings of plant specimens to Kew and Hooker harsh in his criticism of them, later Colenso funded Hooker's book. Wells reads Colenso's critiques of Hooker's *Hand Book of N. Zealand Flora* (cited at length below) as payback for the way he rejected the names and species of new botany that he had proposed to Kew.

Specimens, when sent to London, were to be classified as Hooker saw fit, and none of their indigenous names or taxonomic relationships were maintained in Kew's records, which meant that the same mistakes continued over and over. On 29 November 1865, Colenso sent name-by-name errata of 'Dr. Hooker's *Hand Book of N. Zealand Flora*', in which he returns again to the *Persoonia* he wrote to the author's father about twenty years earlier:

Discaria Toumatou (!! I hate this sp. name. It is a great pity you did not earlier make this a sp. I found it in 1838, and sent it early to Cunningham [Allan, 1791-1839, Government Botanist for New South Wales, visited NZ twice, the second time spending 3 months with Colenso: *Floræ Insularum Novæ Zelandiæ Precursor*, published piecemeal between 1837 and 1840], and to Sir W. Hooker, pointing out certain differences: (vide, L. JI. Botany, vol. iii. p.17) 'Toumatou'! (if it means anything, means Anus albus tuus!! ('Your white bum.') its native name is expressive, Tumatakuru (Matagouri, a thorny bush: tumatakuru also means to show consternation, to be apprehensive.) (The French have invariably made gross mistakes in attempting to give the Māori name of anything).⁵⁴

Likely Colenso's own 'white ass' was an object of ridicule for the Māori, and the tragic comedy of the colonial archive was never more pronounced than in this passage. The missionary's anxiety over decorum is formalized in taxonomic terms, conveyed with a complaint for remaining peripheral to the British establishment. As Wells rhetorically asks, is this 'a version of Colenso baring his colonial buttocks to his one-time metropolitan master?'⁵⁵

⁵⁴ Joseph Hooker, 'Hand Book of N. Zealand Flora', part I, page 44. Cited in Colenso p. 317, transcribed from Kew Plant Determination Lists (PDL) XXVIII: p53; ATL Micro-Ms-Coll-10 Reel 35: E678.

⁵⁵ Peter Wells, *The Hungry Heart*, p. 367. This seems a vulgar and juvenile revenge for a missionary priest come politician, but not far from what emerged in Botanical Drift's research on Economic Botany as an array of fun

The historian of science James Endersby, one of Joseph Hooker's biographers, while acknowledging keen interest in Colenso, only spends a page in his volume on him. However critical, the great-man-biography becomes dominated by its central subject with whom author and reader often begin to identify. The Hookers furthermore dominate the historiography of botanical science because of the volume of material collected and preserved at Kew. It is more difficult to read behind this archive, into the lost responses and archives outside the centre of empire botany. Yet in the living practices and plant cultivation that continues, ethnobotanists and artists continue to study and expand their relationships with plants.

Colenso's letters are written in desperate snatches, formal and respectful as a servant, laying specimens, botanical knowledge and these letters at the Hookers' feet. On the other hand, Colenso becomes more and more embedded in his local *Aotearoa*. He lives with the Māori and works on a Māori dictionary, but is to this day treated with local contempt by Māori.⁵⁶ Within the cross-cultural context of the settler colony, Colenso's lobbying for the recognition of Māori terms in established botany allies itself with indigenous interests. We can only speculate, since he doesn't relay to Hooker what he learns from his Māori wife about the mysteries of the verdant islands. But he readily betrays his erstwhile mentor Allan Cunningham's confusion, and claims that learning the Māori language was the only way to understand another order of living things. What ways of collection and cultivation, let alone didactic botany did his Māori family teach him? Through the names he lists in his letters and dictionary there is a sense of a rich ecological knowledge imparted to Colenso. Within Māori meeting houses and territories, there is an elaborate system for growing and keeping the livelihood of plants.⁵⁷ Women know where and when to gather the flax for their weaving and we can imagine that Hooker felt responsible to his local community to ensure the records he and the Hookers took so seriously in Kew were not full of the mistakes easily made by an outsider.

made of the sexist, racist, classicist figures of history.

⁵⁶ Author's conversation with Megan Tamati-Quennell, Te Papa Curator Modern & Contemporary Māori & Indigenous Art, at the Modernists & Mentors Indigenous and Colonial Artistic Exchanges conference, 7 November 2013, Cambridge, England. See also Peter Wells, *The Hungry Heart: Journeys with William Colenso*, Auckland, Vintage, 2011, p. 13.

⁵⁷ Author's interview with Jody Toroa, community elder, Te Whai Ora, Gisborne, New Zealand, October 31, 2016.

The mesh of people, plants, places and the ways they mutually feed off each other had their influence on the collector. Greeting and *haere ra* (Māori departure) to show respect to ancestral plants, as also to people, is imparted in *Aotearoa* along with the names learned. Colenso spoke to plants; he confessed late in life to Hooker how vocally vegetalized he was:

My choices hours (days) are spent far away in the solitary sub-alpine forests, whither I generally resort 2-3 times in the year, far from the haunts of man. I have said ‘solitary’ -- but I am never solitary there, -- all know me & welcome me (don't laugh) -- the ancient trees, shrubs, ferns, plants, mosses, Hepaticae, etc. etc., we know each other and I often speak to them, & not unfrequently your name is mentioned aloud & much oftener thought on.⁵⁸

How did Colenso's thinking contrast with the sanitized manicure of plants in Kew Gardens that is so alien to the *Aotearoa* he knew? His archive provides a background to the parameters of exclusion that were maintained in the Economic Botany archives, and is comparable to North's gallery in its subversion of typical (colonial) modes of respectful address, modes of collection and politics of display. In both of their projects at Kew the antipodean taxonomies shadow the hierarchies in the colonial system. These exclusions were not only carried out towards its ‘others’ (i.e., colonized, or non-human objects) but also internally, towards women, artists, or the kind of deviant (to the formal order of botany and clergy) Colenso. Just as de Candolle's taxonomy was embodied by the viewer who walked through the Kew museum's display, the North Gallery and Colenso's archive of letters, specimens and especially his suggestions for indigenous nomenclature present expansions within their botanical and epistemic conflicts. One might even go so far as to say that Kew's lack of a response to and exclusion of Colenso's suggested Māori nomenclature represents an ‘epistemicide’ in Boaventura de Sousa Santos' terms.⁵⁹ Though the Māori language retains local names and knowledge of plants to this day, the classifications Colenso was writing about are not straightforward to reconstruct over a century later. For instance, during fieldwork in Colenso's part of the North Island of *Aotearoa*, I found that any knowledge of

⁵⁸ Letter from Colenso on 22 January 1883. Kew JDH/2/1/4 Letters to Joseph Hooker, Vol IV: p120; ATL Micro-Ms-Coll-10 Reel 27: E440

⁵⁹ Boaventura de Sousa Santos, *Epistemologies of the South: Justice Against Epistemicide*, Boulder: Paradigm Publishers, 2014.

the significance of the *Tumatakuru*, *Matagouri*, or *Persoonia*, the honour of which Colenso was defending so adamantly to Kew, was gone or was withheld, at least as far as I could see.

Conclusion

The 'useful' and the 'curious' have been the two guiding categories of collecting plant specimens and conducting botanical research in centres of laboratory science and biology. The 'curious' camp, which art traditionally inhabits, is a wide catchall category for aberrations to the European scientific academy, from which the global south and its epistemologies are excluded. Colenso can be reread through Santos' 'southern epistemologies' that have recently been avowed as ongoing casualties of the colonial project, and other contemporary postcolonial frameworks for dealing with what Gayatri Chakravorty Spivak, in 'Can the Subaltern Speak?', called 'epistemic violence'. Strictly exclusionary, the space of once economic expansion in the nineteenth century in Kew might be thought to maintain a resistance to a perceived botanical conflict, the conflict in botanical theory in which, a Māori classification system, for instance, threatens the established order. However, with the changing use of the economic botany archive, an increasing number of Māori visiting researchers work with the curator Mark Nesbitt to find meaning in the collections.⁶⁰

Looking from the nineteenth century forward, North can now be read instead through twenty-first-century postcolonial, decolonial and feminist critiques of science. North's gallery is, anachronically, an immersive installation and vegetal embrace of the human viewer, which is both in conflict with Kew's exhibition of plants and with the neo-Darwinian botanical theories of conflict between species that have dominated since Malthus. When considered in relation to the lobbying of Kew by the artisan collector William Colenso, the struggles that the Victorian plant hunter Marianne North had as she exhibited her paintings show some historical basis for the conflicts between art and science, in which botany as a discipline in service of economic gain is in conflict with a recognition of plants as sentient and intelligent.

⁶⁰ Conversation between Keren Ruki, Mark Nesbitt and the author, May 1, 2017. See also Caroline Cornish & Mark Nesbitt, 'The Life Cycle of a Museum', *Botanical Drift*, op cit, p. 19-28.