‘Plants That Perform For You’? From Floral Aesthetics to *Floraesthesis* in the Southwest of Western Australia

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Writings on landscape tend to express engrained human attitudes towards plants. The theme ‘thinking about writing for the anthropocene’ suggests that, for us to explore new models of writing landscape that give agency to plants, we need first to explore the philosophical underpinnings of our varied relationships to flora. This need is especially evident in the branch of ecological philosophy known as ‘landscape’ or ‘environmental aesthetics’. The flowering plant has been represented textually and visually with vocabularies inherited from the appreciation of artistic objects. In the Southwest of Australia, plants have been objectified, dismissed or aestheticised in representation, depending on their adherence to traditional ideas of beauty. A more enlivened writing about plants emerges from new conceptualisations of the human perception of flora. The act of writing itself becomes a form of enquiry into the human-plant relationship.

In Kojonup, a small Western Australian town and regional hub for the wool industry, on an early winter afternoon, I decided to seek contact with a local expert to learn about native plants. The staff at the tourism office brusquely told me ‘The show hasn’t started. The wildflowers aren’t out yet, you won’t see anything’. Nevertheless, venturing into the small bush reserves around town, my guide and I uncovered a world of sensory and cultural richness. Selecting nuts from the base of a quandong (*Santalum acuminatum*), we cracked open the convoluted outer shells to expose the crisp, white inner flesh tasting of macadamia. We then scrambled across the highway to a marri (*Corymbia calophylla*) to taste the medicinal kino, or gum resin, oozing from the bark. Back around town, we spotted a plant with distinct cylindrical fruits. My guide coyly told me that varieties of this plant with white flowers are known locally as a remedy more effective than Viagra! As the sun began to set, we discussed a species of gum, which can be used to assuage the sting of an ant bite, as we crushed the fragrant leaves in our hands and rubbed it all along our forearms. Whilst there were few flowers in Kojonup that day, there were instead a myriad of textures, tastes, smells and sounds emanating from the plant life. In fact, the show had never stopped.

What does it mean to say that ‘a plant performs for you’, a catchphrase used by at least one Australian nursery to market its native seedlings?¹ This paper poses an interdisciplinary response at the margin between philosophical aesthetics, landscape poetics and botanical science. Along the way, the difficulty of representing living beings, through the vocabularies of the visual and performing arts, becomes apparent. A performative model of aesthetics constructs hierarchic relationships between the plant and the human. It enframes the plant within a picture postcard, puppeteers the plant to perform for an audience, or evaluates the plant for its formal beauty as an object in the landscape. The concept of ‘plants performing’ suggests a dynamic of spectatorship between plants and people. In other words, the catchphrase originates in the relation between the artistic botanical object and the rational human subject.

The southwest corner of Western Australia (the ‘Southwest’) provides a poignant study in the human perception of plants as performers. The monochrome of the Southwest landscape in the intense heat of mid-summer follows a brilliant emergence of variegated blossoms in the spring. This succession of ecology and aesthetics has given rise to wildflower tourism, a seasonal industry based on the timely performances of the flowering parts of plants. Flowers, often frozen in space and time as photographic snap-shots, compel the ritualistic aestheticisation of indigenous flora by human visitors each year. The landscape after flowering, however, has been characterised as valueless, monotonous, empty, ugly, poised for conversion by agriculture, or in need of resuscitation through the artist’s touch. In other terms, the landscape post-flowering has been perceived as both *unaesthetic* (confounding aesthetic tastes) and *anaesthetised* (lacking a whole sensorium beyond mere visual qualities of form and colour).

Through historic visual and textual sources as well as references to contemporary wildflower tourism, this essay first defines the botanical aesthetics of the Southwest region. It traces in these sources a trajectory of subjectivism that judges and represents plant species as ‘horticultural objects’ (Lindley xxvii). Plants are, however, temporal ecological phenomena linked to both the human subject and the environment. Considering this gap in representation, the essay suggests a more experiential and multi-sensory aesthetics of open sense immanence, or *aesthesis*, rather than an aesthetics of privileged perception in which living beings are regarded as performing objects. Simply put, this essay offers the possibility of an *aesthesis* of human experience and perception of plants.

The flower dominates our aesthetic sensibilities and holds firmly in the popular human imagining of nature. However, natural cycles of growth, such as flowering and decay, such as the dehiscence of fruits, are integrated aspects of

1 Redlands Nursery: <http://www.redlandsnursery.com.au>

plant ecologies. In the context of ecological cyclicity, the explosion of colour and form during wildflower season is always connected to the less colourful landscape in its post-flowering character. An *aesthesis* of flora, in contrast to an aesthetics of flora, considers the sensuous life patterns of plants in relation to their ecologies and to the human subject. A *floraesthesia* involves seasonal, multi-sensory and *poietic* perception and representation of plants. It ultimately points to a possibility of deeper engagement with the more-than-human. After the bloom, we find other sights, sensations, smells, tastes and sounds related to our experience of plants. As interpreted by Heidegger in *Poetry, Language, Thought*, 'making is, in Greek, *poiesis*' (214). Plants, as multi-sensory ecological beings, are in-the-making rather than merely in-bloom. Fruits dehisce, seeds disperse, leaves rattle, bark sheds, sap sticks. The *poietic* focus of this perceptual model reflects the ecologic and aesthetic patterns of living flora. The essay concludes in hope that dialogic engagement with plants will lead to a renewed conceptualisation of the human relationship with flora. Such engagement positions the human subject as a participant in a shared performance, based in the rhythm of ecology.

Visual inversions and the perceiving subject in floral aesthetics

Australian plants tend to defy visual preferences inherited from European landscape tastes, and representations by many colonial artists and writers express the curious and frustrating inversion of nature (Elliott; Arthur). The flora challenges modernist visualism and, given the sexualised origins of universal taxonomic nomenclature, it perverts botany insofar as it corrupts botanical conventions (Schiebinger). In the words of early writers and artists, Australia as the Antipodes, as the land of contrariety, harboured an inverted, uncongenial and uncooperative nature where thin-leaved evergreen eucalypts afforded paltry summer shade in a climate of intense solar exposure (Elliott). The appearance of the vegetation to settlers had much to do with characterisations of the environment as a whole. In the 1876 'Preface' to Adam Lindsay Gordon's poetry collection *Sea Spray and Smoke Drift*, author and literary critic Marcus Clarke encapsulates the character of the Australian landscape as 'weird melancholy' where 'from the melancholy gums strips of white bark hang' (45). In short, the unfamiliar terrain and its flora lacked familiar markers of beauty.

George Seddon in the 'Foreword' to *Sense of Place* offers an autobiographical snippet of his arrival in the Southwest and expresses some initial aversion towards its plant life: 'The country was all wrong. ... The jarrah was a *grotesque parody* of a tree, gaunt, misshapen, usually with a few dead limbs, *fire-blackened trunk*, and barely enough leaves to shade a small ant' (xiii-xiv; emphasis added). Contrast this to almost 25 years later when Seddon arrives upon a lucid, visual

language of revelation and a flowering of ecology into the senses: '*Melaleuca huegeliiflora* ... with a profusion of creamy spikes. *Acacia rostellifera* is common, wind-sheared into a dense mound, which protects the soil and moulds the landscape. Cockies Tongue (*Templetonia retusa*) puts out its brick-red pea flowers in spring' (*Landprints* 173). The making of home within the new place for Seddon had much to do with reappraising the disappointing and contradictory appearances of the indigenous flora.

Floral aesthetics is concerned with the perception through the human senses of the intrinsic beauty of plants as artistic objects. To consider an object 'aesthetic' is, most commonly, to deem it optically beautiful by virtue of its features of grace, harmony, symmetry, smoothness or colour. An aesthetic object invigorates a feeling of attraction or pleasure, whereas an unaesthetic object reviles or stimulates no response in the viewer. Although Alexander Baumgarten's eighteenth-century neologism takes as its root the ancient Greek term 'aesthesis', aesthetics in modernist terms has come to denote 'a sensible image of perfection' rather than generalized sensory perception (Caygill). Through an emphasis on the power of sight, modernist aesthetics has been a 'triumph of a pure visuality, concerned solely with formal optical questions' (Jay 160). *Aesthesis*, as the exploration of 'perceptual complexity' through sense immanence, has been eroded as the originary meaning of aesthetics by the power given to the 'aesthetic subject' in determining states of artistic beauty (Singer 14-5). Stolnitz remarks that 'any object at all can be apprehended aesthetically, i.e. no object is inherently unaesthetic' and that the percipient needs only to adopt an 'aesthetic attitude' (83). Nevertheless, in opening the domain of aesthetic appreciation to higher inclusivity, Stolnitz reaffirms the binary opposition inherent in the positioning of an aesthetic subject to a perceptual object.

Various philosophers have discussed the privileging of sight and the distancing function of visual perception in replicating the dualisms of object and subject, consciousness and matter, normally thought to have originated in the seventeenth-century philosophy of Descartes.² Visuality, or 'the distinct historical manifestations of visual experience in all its possible modes' has given rise to *ocularcentrism*, or the dominance of vision and the attendant marginalisation of the other senses (Jay 9). Visualism goes back to the classical Greek partiality for sight over the other senses and has a close functional association to language (9). An imagistic culture can visualise the world in the mind's eye only insofar as it can construct the image in words.

2 For a classic study of the distancing function of sight, see Hans Jonas' essay 'The Nobility of Sight: A Study in the Phenomenology of the Senses' in Jonas 135-56.

Beauty consisting of the mutable features of living creatures is ephemeral and unstable, unlike a work of art or performance.³ This is particularly true when we consider, as Western Australian artist Gregory Pryor describes, 'the loaded aesthetic appeal of the flower' (Pryor). The aesthetic appeal of the flower engages the most traditionally beautiful (graceful, symmetrical or colourful) phase of the plant's lifecycle, but lasts for a relatively brief time and is only one feature of an integrated ecology. Unlike most sculptures or paintings, plants engage multi-sensory experience through the faculties of touch, taste, smell and sound in addition to sight. Nevertheless, it is unusual to refer to non-visual senses as 'aesthetic' although pleasurable experience surely stems from senses other than the visual. As Aristotle in *The Nicomachean Ethics* remarks, 'That pleasure is produced in respect to each sense is plain; for we speak of sights and sounds [alike] as pleasant' (256). The visualism of aesthetics and the exclusion of diverse sensate experience is a performative model of spectatorship, in which the object dazzles or pleases the subject's tastes. An aesthetics of flora, as outlined here, sees the closing in of the senses upon the observer in service to a rational subject of artistic appreciation.

Plants and performance: the wildflower spectacle

The Southwest of Western Australia is one of the most floristically diverse places in the world. In the late nineteenth century, botanist Baron von Mueller identified the Southwest region as a 'botanical province' owing to the distinctiveness of the flora (Beard 107). The floristic province, including the metropolitan area of Perth, stretches from Shark Bay to Israelite Bay east of Esperance and has long been isolated from the rest of southern Australia by the aridity and the limestone soils of the Nullarbor plains (Seddon, *Sense of Place*; Hopper, *Kangaroo Paws*). It presently is the only 'biodiversity hotspot' in Australia with 80% of its plant species occurring nowhere else on Earth outside of cultivation (Conservation International). Incredibly varied and venerable botanical communities have evolved here through a rare combination of stable climate and geographic isolation. There are 8,000 total classified species of plants in the Southwest, one-third of which have been scientifically identified only in the past three decades (Hopper, 'What Lessons').

The sheer species diversity and unusual adaptative ecologies of the flora have given rise to a richness and variety of floral colour and form. Neville Marchant, former director of the Western Australian Herbarium, remarks on the connection between species numbers and diversity of perceptual morphologies:

3 That is, a performance is judged according to certain fairly stable standards of beauty, grace or harmony.; thus, we have poor or excellent plays or concerts. Performances in themselves are typically set, staged, rehearsed, and standardized in order to become works of art.

Apart from high species numbers, this diversity is also expressed in the myriad of plant forms that abound in the south western flora; a huge array of plant form, branching patterns, stem shapes, leaf types and flower shapes go hand in hand with species diversity. (19)

The Southwest's internationally renowned wildflower season satiates a visual hunger for intriguing flower shapes and arrangements and variegated colouration. From June through September each year, wildflower species 'explode across the state' of Western Australia, and wildflower viewers, hungry for sensuous stimuli, are beseeched to 'forget drab days and bleak landscapes' and 'add colour to [their] winter blues' (Tourism Australia). The booming colour and forms of the spring blossom season are represented in a language of portraiture, and the painterly act animates and infuses a drear, slumbering landscape with artistic elements: 'the state's south-west springs to life with grand, Picasso-style strokes' ('Western Australia's Wildflowers'). The spectacle of flowering casts the plant in the role of the performer, and the tourist becomes the audience, as 'wildflowers continue to dance south along the coast' ('Western Australia's Wildflowers').

Through these images, the resplendent succession of flowering in Southwest Australia transcends the state's coastlines and is effused throughout the world. As they attract bees and other pollinators, the blossoms similarly garner the attention of an international contingency of wildflower tourists. Kings Park and Botanical Garden in Perth reported over half a million visitors to its Wildflower Festival held throughout the month of September ('Kings Park'). Additionally, approximately one in five Perth residents had visited botanic areas between 2001 and 2003 to behold the diverse aesthetics of Western Australia's flora, as indicated by a study of public perceptions of the region's wildflower tourism industry (Western Australian Tourism Commission 3). In the same study, the sole suggestion for increasing the 'motivational appeal' of the annual *WA Wildflower Holiday Guide* is to 'focus more on larger photos of expansive, scenic and experiential wildflower imagery rather than micro photos of individual flowers' (5). The intention of the visual imagery of the publication could be described as sensory enticement. Wildflower imagery, to borrow Mules' term, is 'the mediation of presence through images' ('Contact Aesthetics' 2). The spectator is lured to a scene and the visual experience of wildflowers through an aesthetic appreciation of performative flowering. The spectacle of fantastic form and compelling colour is both an optical and evanescent one in which the landscape, or *seen*, is often in the role of setting.

A recent quick survey of postcards at Kings Park in Perth identified only two images that did *not* in some way depict the flowering parts of the plants. The most interesting and suggestive exception, of *Acacia* sp., shows two curvaceous tawny seed pods split open and exposing a black array of seeds. The caption on

the postcard notes the 'diversity of form and unique colour' of the indigenous flora ('*Acacia* sp.'). Through an ahistoric kind of visual aesthetics, the image conceals the rich history of wattles as a staple food for Noongar people who baked the ground powder of the seeds into cakes (Daw, Walley and Keighery 30-1). On a different postcard, the Mangles Kangaroo Paw, the emblematic state flower of Western Australia, is cut off from the rest of the plant and washed in the pure azure blue of the sky ('Kings Park and Botanic'). The Western Australian photographer whose work appears on the *Acacia* sp. postcard, Jen Grey Wilson, attributes visual appearance (colour, flamboyant display, exquisite visual detail, grace and harmony) to the evolutionary strategy of the flora:

They are the oldest plants on earth, and when you get close and you find the most exquisite detail [sic]. They had to attract the pollinators because there were so few, they had great competition and they had to get more attractive colour-wise and more flamboyant in displaying themselves. (Wilson)

The profusion of flowering images on postcards could be considered an outgrowth of visualism or an outcome of an ocularcentric culture, but regardless of its derivation, it entails the aestheticisation of the native flora.

The aesthetic of portraiture and the 'horticultural object'

In Western Australia, since the formation of the Swan River Colony in 1829, there has been a notable tendency in its literature to represent plants as purely visual constituents in a beautiful scene. This *aesthetic of portraiture* is the frozen moment, the synchronic visual glimpse of the plant largely excised of its ecology. Visual representation serves the imagistic compulsions of tourism, botanic desideratum, or pastoral utilitarianism. The emphasis on plants as optical objects has resulted in a surface-oriented aesthetics in which the flora is bound as if within the frame of a painting. Jay (517) describes this as an *aesthetic discourse of framing* and cites Heidegger's critique of the *Gestell* (the enframing) in which landscapes become scenes, or *seens*, to be beheld from an appreciative and disengaged distance. The flowering period of native flora is the enframed bloom, or the visual spectacle bound by the postcard.

The diaspora of visualism and ocularcentrism is also noted in the literature designed to entice settlers to the antipodal Swan River colony. *The Colony of Western Australia* published in 1839 to attract 'emigrants', 'capitalists' and 'the younger branches of the higher classes' to the fledgling colony similarly evidences a visually-oriented aesthetic vocabulary with the speaker situated at a perceptual distance: 'The earth is *enamelled with flowers*; at some seasons the

meadows have been compared, when at a distance, to *surfaces of golden chintz*' (Ogle 260; emphasis added). Fred Davis, cited in Thomas Groser's 1927 *The Lure of the Golden West*, reproduces visual values with 'pictorial statements' (Ivins 3; qtd in Jay 69) depicting a drive alongside the edge of the Blackwood River as 'what is indeed a charming picture. How a landscape painter would revel in these lovely spots!' (qtd in Groser 245). A concatenation of reasoning begins with an aesthetic judgement and terminates in the broad-scale conversion of the wild to the pastoral. The drive is interspersed with cleared areas and 'beautiful as [the forest] undoubtedly is in its natural state, yet, from a utilitarian point of view, it will be more beautiful still when all under cultivation' (Davis qtd in Groser 245). This is the problematic contradiction of sense knowledge gained exclusively through the eyes bringing to rise, as an imperative, the conversion of an idle-looking scene into productive, techno-industrialised land. This is one of the primary ethical concerns that makes this research critical. Aesthetic values, based in artistic form and colour, often conflict with values of conservation and ecosystem integrity. Landscapes that look idle, unproductive or repulsive, such as wetlands, are often biologically critical to a host of organisms, including human beings (Giblett, *Postmodern Wetlands*). A counter-aesthetic, or conservation aesthetic of plants, would restore the full gamut of senses to the appreciation of plants.

John Lindley, a British horticulturalist and editor of the journal *Edward's Botanical Register* (1815-1847), published the first significant European account of the flora of the Southwest province in 1840, *A Sketch of the Vegetation of Swan River Colony*, within which 283 new species of plants were identified scientifically. The publication aimed to distribute information on the potential to cultivate certain aesthetically worthy Southwest plants in European gardens, with only minor reference to potential climatic or habitat differences between the hemispheres that would affect cultivation:

The frequent arrival of seeds from this Colony, the excellent state in which they are received, and the facility with which further supplies can be procured, appear to render some Botanical account of this remarkable country a desirable appendage to a work which, like the Botanical Register, forms an original record of new plants introduced, or worthy of introduction, to our Gardens. (Lindley i)

Lindley's textual accompaniment to the hand-coloured lithographs considers the beauty, prettiness, strikingness, colour and brilliance of different species in determining their suitability for European horticultural preferences. Some are 'species of no beauty' (i.e. referencing the *Stackhousias* on p. xxxviii). He engages clearly what I refer to as 'aesthetic language' whose referents are 'horticultural objects' (Lindley lviii). Lindley's *Sketch* is unusual for its mixture of aesthetic language and standardized botanical nomenclature, but

it's important to recognise that his purpose was to disseminate information on the horticultural viability of the plants. He describes the tribe Chamaelauceae within the Myrtle family as 'bushes with small heath-like leaves, and white, yellow, or purple flowers, of great brilliancy' forming 'a most striking object in the vegetation' (v). Lindley dismisses the horticultural and appreciative potential of other plants. Speaking of the Goodeniaceae family, aside for the royal blue *Lechenaultia* and the indigo *Dampiera* spp., 'all the other species, and there are many, are by no means *beautiful objects* [emphasis added]' (Lindley xxvii). The confoundingness of some of the region's species is suggested in his description of *Daviesias quadrilatera*, whose leaves 'look more like *objects* prepared to puzzle a geometrician than any thing already known in the vegetable kingdom' (Lindley xiv).

The nine hand-coloured lithographs done by an unnamed botanical artist exemplify some of the objectification of plants hinted at in Lindley's textual descriptions. Botanical illustration, allied to scientific taxonomy as both a record of and an instrument for probing into the gross morphology of flora, also captures aesthetic features and is an artistic form in itself (Hewson). This fusion of graphic art and botanical science for the purposes of plant species identification tends to function along ocularcentric lines requiring the distancing of the human from the 'horticultural object', although the work itself was made possible, presumably, through intense and careful visual scrutiny and actual dissection of plant specimens. A plate of *Laxmannia grandiflora* and Pipe Lily (*Johnsonia pubescens*) exhibits cross-sections of plant organs almost as numbered footnotes at the bottom of the plate. Single idealised species against a white backdrop with reproductive parts flayed open form a kind of botanic portrait, extruding the plant from its seasonality and the wholeness of its floral community. The exposed and dissected specimens of botanical illustration parallel anatomical illustration, such as the écorché renderings of the human body by Vesalius and da Vinci.⁴

The frontispiece of Rica Erickson's 1968 *Plants of Prey in Australia* depicts the Western Australian Pitcher Plant (*Cephalotus follicularis*) and the Rainbow Plant (*Byblis gigantea*), the latter identified by Lindley in his 1840 *Sketch*. The flower head of the Pitcher Plant hangs suspended in the ethereal blank whiteness of the plate and the intentionally enlarged, out-of-proportion organs of flowers, stamens, styles and ovary dominate the composition of plants swollen by a kind of *flora-titis*. The aestheticisation of the plant is the sole emphasis on form and colour and the distortion of the plant's reproductive structures for purposes of enhancing identification. Linnaean taxonomy, allied to botanical illustration

4 Écorché, literally meaning 'flayed' in French, refers to a 19th century school of anatomical illustration that favoured depicting the muscles and bones of the body without the skin. See Saunders and O'Malley.

though taken as scientific objectivism, is based upon the sensorially limited and culturally selected visual differentiation according to sexual anatomies (Schiebinger).

Botanical illustration exemplifies the concept of the 'synoptic tableau'. Regarding the relationship between scientific classification and representation, Latour writes 'once classified, specimens from different locations and times become contemporaries of one another on the flat table, all visible under the same unifying gaze' (Latour 38). The synoptic tableau of the botanical plate engrains the anatomical plant. Through illustration, comparisons between plants are made feasible that, in the field, are impossible. Scientific knowledge, therefore, relies on the movement of signifiers, such as species names and technical images of plants, or 'circulating references' (Latour 38). Illustrations are part of scientific networks of knowledge based in standardisation and universalisation. In Latour's view, the relationship between representation and the plant is dialectic. The locality, particularity and materiality of a plant in its environment are reduced to the compatibility, standardisation and circulation of scientific knowledge. The process is, however, reversible and invariably reduction leads to an amplification of knowledge. Botanical schemata, for instance, can be used to identify a plant in the field and to begin to understand its attributes.

Outside of the circulating references of scientific discourse, however, aesthetic images risk becoming conflated with actual plants. Hence, form and colour, rather than the sensory manifold of the plant, fall under the gaze of knowledge. In contrast to works of traditional botanical illustration, the installation art of South-west Australian visual artist Gregory Pryor responds to the 'loaded aesthetic appeal of the flower' through a direct evocation of the ecological precariousness of many indigenous plants. Pryor cites the aesthetic magnetism of the floral form as the primary challenge to a contemporary visual artist's treatment of flora (Pryor). His 2005 exhibition *Black Solander* is a physically immersive memoriam involving 10,500 Western Australian plant species, each painted in black ink on a square of black sugar paper to create a mausoleum effect within the gallery space. Shadowy profile portraits stand in for idealised renderings of flowers to elicit the imminence and urgency of native species extinction. Pryor's method, which required frequent visits to the Western Australian Herbarium to depict pressed specimens, comments on the traditions of John Lindley and early regional botanical illustrators, artists and collectors for whom balanced (or imbalanced, in the case of the enlarged plant organs of Erickson's plants) proportions and flower colour reigned.

Pryor furthermore interrupts and extends the scientific lineage starting with state botanist Charles Gardner whose specimens in the 1920s formed the initial collection of the Western Australian Herbarium. The artist's inversion of the conventional aesthetic of flora is made obvious through the shutting out of

the sun, an ever-present intensity to which Southwest plants have adapted so well and on which the entirety of life rests. The visitor experiencing the exhibition enters into the body of the immediacy, recreated as a mausoleum within the darkened gallery enclosure. An engaged relationship between the plant image and the visitor creates an empathic feeling for the threatened flora. The exclusion of light and colour especially create a sombre visceral response. Yet remaining impending, but hidden still, is a feeling for—a waiting for—the sensory pleasure that is yet to come, the diverse pleasures of form, colour, harmony, balance, sound and touch that too are threatened. Pryor effectively deconstructs the disengaged viewership model of floral aesthetics that places the distanced subject at a comfortable and appreciative remove from the 'horticultural object'. His work represents a transition from floral aesthetics as suggested by Lindley, Seddon, Wilson and the wildflower tourism industry and into the milieu of a floral *aesthesis*.

Towards *floraesthesis*: Practical *aesthesis* and the open-whole

The tradition of floral aesthetics that Pryor upturns is a determinate discourse of visual beauty rather than an openness of sensory contact with plants, or *floraesthesis*. Pryor's exhibition moves beyond the mediation of plant presence through images and towards sensory engagement through a representation of flora that invigorates the body. Sense, of this kind, as immanence, is sense embedded in the field of contact, representational or actual, rather than sense collapsed upon the inward-turning rational subject. An *aesthesis* of flora is multi-sensory immanence leading to an outward-extending field of sense contact with the plant phenomenon into an open and 'meaningful perceptual whole' (Jonas 153). The field of contact at the liminal edge between bodies, botanical and human, obviates the subject-to-object directionality residual, and arguably unavoidable, in the traditional notion of aesthetics.

What is *aesthesis* and how does it relate to the idea of 'the open'? *Aesthesis* has thus far been defined as the ancient root of the term 'aesthetics'. However, whereas *aesthesis* signifies generalised, open sensory apprehension, 'aesthetics' implies closed categories of taste based on predetermined features, such as balance and symmetry. Accordingly, something can be unaesthetic, or even ugly, if it fails to meet established, visual criteria of beauty. Moreover, something can be objectified as an object of aesthetic appreciation. If *aesthesis* is liminally open-sense, aesthetics is categorically closed-sense. Whereas *aesthesis* holds the possibility of wholeness, aesthetic judgement has resulted, especially in the representation of Australian flora, in fragmented and, at times, destructive conceptualisations of the landscape. It is therefore necessary to discuss *aesthesis*

in terms of the open-whole and to consider that objectification, of floral species as 'horticultural objects', is a state of closedness to the unbounded experience of plants.

Aesthesis, as defined by Mules, is immanent sense, or 'the gathering of the senses in contact with the absolute as an open-whole (i.e. the immanence of sense to itself within an open field)' ('Contact Aesthetics' 3). Sense, in Mules' terms, is the field of contact or the edge of intersection between bodies; sense is location, it is where engagement between beings occurs. Moreover, sense is unified experience in a field of contact, or the open-whole, gathered through the sensate faculties of seeing, hearing, tasting, touching and feeling. Multifarious sense experience of fruits dehiscing, seeds dispersing, leaves rattling, bark shedding and sap sticking coheres as an open-whole, as sense itself. Simply put, the world makes sense through a sensory experience of plants. Additionally, *aesthesis* is bodily contact or 'the openness of the body to the outside, the gesture that makes contact with the world' (Mules, 'Contact Aesthetics' 6). Sense experience reaches a resolution, unfragmented by prejudgements or epistemological contradictions, and embedded, paradoxically so, within an irresolute experience of gesture. Sense emerges from the senses as a bodily *aesthesis* signifying open-wholeness (Mules, 'Open Country').

The kind of knowledge of plants suggested by Mules is based in the multitude of senses. Sense perception is the foundation for knowledge culminating in wisdom. Aristotle in the *Metaphysics* defines *aesthesis* as generalised sensory apprehension belonging intrinsically to living beings (McNeill 24). In human beings, however, the senses constitute the foundation for the final state of knowledge: *sophia* or wisdom (McNeill 26). As Aristotle states, on the limitations of sense perception, 'Wisdom, again, is not to be identified with sense-perception which, though it is our primary source of knowledge of particulars, can never tell us why anything is so (e.g. why fire is hot) but only that it *is so*' (*Metaphysics* 52). The raw senses alone do not lead to *sophia*. For Aristotle, *aesthesis* is an attribute of all living beings, but it is vision which distinguishes human perceptivity and wisdom, because 'sight is the principal source of knowledge and reveals many differences between one object and another' (*Metaphysics* 51). Aristotle's account of *aesthesis* privileges the optical acuity of human perception in differentiating objects. Vision, hence, proceeds to create discrete objects out of a network of ecological relationships in a landscape.

According to William McNeill's interpretation of *Nicomachean Ethics*, Aristotle characterises 'practical *aesthesis*' as beyond mere sense perception; the object is apprehended as a whole (in all of its particularities) and vision reaches a kind of culmination (39). This kind of apprehension of the whole occurs through a state of openness to perceptual experience, rather than through the predeterminations inhering within aesthetics. Certain forms of botanical illustration and Lindley's

'horticultural object' are both examples of closed aesthetic models, made to fit, in these instances, within the objectifications of science and horticulture. It is, however, unclear if visual perception for Aristotle is a kind of metonymy for sense perception as a whole. The other senses are described as base faculties, especially insofar as they are shared amongst different creatures, and vision alone valorises human perception. 'Seeing' in an open-whole sense encompasses sight, along with the other sense faculties in general, as well as an ultimate state of perception: knowing, wisdom or *sophia*.

Heidegger interprets practical *aesthesis* as the perception of sensory particulars. He translates the Greek *boule* as 'open resolve' or 'resolute openness' with openness being a kind of disclosedness of the sense world or exposure of the individual to perception (McNeill 41). Hence, for Heidegger, *aesthesis* is 'circumspective seeing' that is inclusive and open and is not speculative or just 'mere looking' or visual apprehension (39). In short, the object is 'seen' within its situation as a whole (its environment, ecology, seasonal or climatic situation) and within its unique particularity (as a species and particular individual living being). The situation as a whole (the plant within its ecological circumstances) constitutes the field of practical *aesthesis* rather than the sense-object itself alone extruded from its whole. Perception as practical *aesthesis* is the *making sense of* a phenomenon and, in this regard, perception approaches a culmination or eschaton.

Aesthesis, or open-whole sense perception, as described here is the foundation of experience (*empeiria*) and wisdom (*sophia*). Heidegger in *Poetry, Language, Thought* describes the Open 'as the pure forces serried, boundlessly flowing into one another and thus acting toward one another. The widest orbit is the wholeness of the whole draft of attraction' (124). Furthermore, 'objectification ... blocks us off against the Open' (120). Sense perception is whole, *poietic* and unfolding, as well as indeterminate, 'open, at stake, yet to be decided' and hence dynamic (McNeill 36). 'Seeing' then also involves the situation of the human subject such that, in our perceptions, we are 'present to ourselves immediately, without any contemplative distance or objectification' (McNeill 36). The particular situation of the sense phenomenon within its milieu is so unique that it can only be apprehended by this kind of practical *aesthesis* (McNeill 43).

An *aesthesis* of flora, thereby, differs from an aesthetics of flora. An aesthetics of flora privileges the appreciative powers of the human subject to isolate sensual features within the plate of botanical illustration, the bounds of the camera shot, or the cursory gaze of the eye over a carpet of wildflowers. *Floraesthesis* is more of a counter-aesthetic of plants. Giblett describes a multi-sensory counter-aesthetic of conservation that engages the body: 'Rather than appealing to aesthetics and so predominantly to the sense of sight, a conservation counter-aesthetic would appeal to all the senses' (*Living with the Earth* 57). *Floraesthesis*

is sense experience of plants in relation to the open-whole: the environment, the habitat, the ecosystem and the planetary biome. However, in the early Aristotelian view of *aesthesis*, we find traces of visual hegemony. A restoration of all the senses in a counter-aesthetic of plants towards a 'meaningful perceptual whole' would need to draw from bodily engagement and gesture in the open-whole, as suggested by Heidegger and furthered by Mules.

Reciprocal engagements: 'botanic field aesthetics'

Floraesthesis, as it has been defined here, is a liminal state of sense openness and indeterminacy outside the constructions of aesthetic criteria. In order to ground a philosophical model of the human relationship to plants, I now outline a qualitative methodology of *floraesthesis* that I have been developing. 'Botanic field aesthetics' works from living plants in their biodiverse native habitats, rather than from dried herbaria specimens, cultivated plants in public or private gardens, or popular horticultural images. The methodology explores three connected approaches. The first, poetic enquiry, extends to the study of flora recent scholarship on the value and efficacy of the process of poetic creation in the social sciences. The second, ethnography with botanists and wildflower enthusiasts, explores local botanical knowledge and the language used to communicate sense-based knowledge of native plants. Lastly, embodiment practice theorises the act of walking as a performative gesture, in Mules' sense, for situating the human into an embodied engagement with flora. The resultant sensory openness lends itself to reciprocal, even dialogic, performances with plants.

For research started in June 2008 and continuing until June 2011, I have been surveying remnant sites of high botanical diversity in the Southwest. Instead of scientifically-based vegetation surveying techniques, the project employs a mixed field methodology drawing from philosophy, cultural studies and creative writing. The purpose of this methodology is to substantiate the role of interdisciplinary, non-scientific enquiry in the study of flora. 'Botanic field aesthetics' experiments with the implementation of *floraesthesis* at regional sites of intact native species richness. In April 2009, I chose to study two sites of contrasting floral composition, aesthetic character, topography and frequency of human usage: Anstey-Keane Damplands in the southern metropolitan Perth area near Armadale and the Stirling Range National Park, one hour's drive north of Albany, WA (Figure 1). These two sites differ in how the public perceives their respective aesthetic values. Anstey-Keane has been called 'a seemingly unremarkable parcel of land in Forrestdale' with an abundance of flora species that require a delicacy and attentiveness of perception to appreciate (Giblett and James). Unlike the flat, 'unremarkable' coastal plain habitat of Anstey-Keane,

the Stirling Range and its endemic floral species, however, have always had a prominent physical and metaphoric position in the European imagining of the Southwest.

Figure 1: Between 2008 and 2011, I will survey four sites of significant botanical diversity in the Southwest of Western Australia. Anstey-Keane Damplands, south of Perth, and the Stirling Range National Park north of Albany are two sites of contrasting character. (Map adapted from 'Figure 1: Western Australian Biogeographic Regions and Botanical Provinces' (after Thackway and Cresswell, 1995) in Paczkowska & Chapman, inside cover).

Situated between the Wheatbelt of inner Western Australia and the coast, the Stirling Range National Park harbours the only major mountain range in the region. As John Septimus Roe, an early European venturer to the region, exclaimed in 1835, 'The Stirling Range burst on our view in great magnificence as we rounded the crest. ... The whole extent of the conical summits were spread before us' (qtd in Thomson *et al*). The Range consists of about 1,500 plant species, or about one-third of the flora in the Southwest province, including 87 endemic species throughout five main botanical communities (Keighery and Beard). A recent walk up Bluff Knoll reminded me that poetry is the act of presencing to sense experience of the immediate environment. The process of poetic creation, as aesthetic awareness, asks for close attention to the momentary subtleties of perception. As an ongoing record of experience, poetry quite effectively traces

the sensory nuances of plants and the environment, and our own situation within the overall ecological dynamics of revealing (e.g. flowering, booming, titillating) and concealing (dehiscing, going drab, busting). Heidegger comments on the obverse nature of the relationship between concealing and revealing: 'But in presence there is concealed the bringing on of unconcealedness which lets the present beings occur as such' (*Poetry* 123). Successional engagements, rather than single instance perception, make possible a *sense* of habitats as they change through the seasons.

Anstey-Keane Damplands is one of the most floristically diverse areas in the metropolitan Perth region. Keighery (cited in Payne) suggests that the number of indigenous plant species could be as high as 381, including rare and endangered orchids (Payne). Anstey-Keane Damplands is, however, under threat from road development, off-road vehicle damage and other pressures of suburban expansion. Aesthetic discourse is involved in the protection of the damplands. Local policy makers consider the predominant look of the damplands mundane, although it goes through a succession of flowering throughout the year with the most intense blossoming in September.⁵ On an April 2009 field visit to Anstey-Keane, I was surprised to find several plants in brilliant flower and other interesting textures and smells, including the roughened charcoal exterior of the balga tree. As a non-expert in the plants of Southwest Australia, and hence being someone with little foreknowledge of the flora, I realised the importance of intersensory mixing, where one sense is referenced to another. Vision is typically cross-referenced with the other senses, but it can also be compartmentalised (Gibson). In making my way on foot through Anstey-Keane, I required touch to ascertain if the spikes of a certain plant were stiff and thorny or more bristle-like and soft, and if passage around the plant would prove uncomfortable or relatively painless.

'Botanic field aesthetics', as delimited here, involves recurring visits to sites based on the indigenous Noongar calendar to record successional changes in both the aesthetic (the synchronic visual appearance) and the *aesthesis* (the diachronic intersensory mix) of the native flora. According to Colleen Hayward, a senior member of the Noongar nation, the traditional Aboriginal calendar of the Southwest recognises six seasons through changes in the flowering, fruiting, seeding and other aspects of the life cycles of native plants. The six seasons, each with distinguishable climatic and botanical variables, are demarcated by ecology rather than the preset numerical standards of the European calendar. The approximate, yet always fluid, correspondences are *Djeran* (April-May), *Makuru* (June-July), *Djilba* (August-September), *Kambarang* (October-November), *Birok* (December-January), *Bunuru* (February-March) ('Aboriginal Life'). For instance, during *Kambarang* the Wonil, or Peppermint Tree (*Agonis flexuosa*), would have

5 R.J. Giblett, personal communication, 12 September 2008.

a high concentration of aromatic oils that would waft in the hot air, imparting a distinct olfactory experience to the season. Additionally, the Mudja, or Christmas Tree (*Nuytsia floribunda*) flowers during *Birok*, signalling the time for migration of the Noongar people to the coast. During *Djilba*, the Bohn, or Bloodroots (*Haemodorum spicatum*) have been harvested for their peppery roots, which are used as a food seasoning. Hence, the Noongar calendar encodes a history of regional knowledge of local plants that, unlike the contemporary wildflower tourism phenomenon, draws from a manifold of sensory experiences linked to cultural practices. It proves a useful model for a regionally focused research project into diachronic perception of plants and their ecologies.

How do plants perform over the seasons, how do these performances change based on topographic, environmental or perceptual factors, and how does an aesthetics of performance become an *aesthesis* of dialogic engagement? More importantly, what mode of representation best fits these goals? I suggest the role of poetics in responding to this query and in engaging a practical *aesthesis* of plants. *Poiesis* is making or becoming; poetry is a method of becoming; and plants are always already in the process of becoming. The term *poetry* is derived from the Greek *poiein* 'to make' (Leggo 166). Poetry is what Heidegger, time and time again, refers to in *On the Way to Language* as 'an experience with language' (59). Poetic process, as a form of enquiry into flora, is the undergoing of an experience with plants and language. In considering this conjunction, it is interesting to note Heidegger's choice of botanical metaphor to qualify language as 'the flower of the mouth. In language the earth blossoms toward the bloom of sky' (*On the Way* 99). Heidegger even goes so far as to claim that 'all reflective thinking is poetic' (136) and that language, in the final analysis, is the essential holding vessel for open-wholeness: 'language is the house of Being' (63). The process of concealment (dehiscence, the bust after wildflower season) and unconcealment (flowering, the boom of floral forms) is evoked and etched in the poetic nuances of language. According to Leggo, a prominent voice for poetry as a qualitative methodology of research, 'poetry is a way of knowing, being, and becoming in the world' (168). Poetry, therefore, is an aesthetic modality, but not in the manner of painting or photography in which images can be perceived as frozen, single instances. In poetry, the perception of pleasing sensory features mingles with the human subject's position in the environment. Poetry turns to narrative. 'Knowing, being, and becoming' through poetry are parts of an integrated process of ecological awareness beginning in the plant world.

A 'botanic field aesthetics' further involves ethnographic interviews with Noongar, eclectic, amateur and scientific botanists, as well as wildflower enthusiasts. The insider approach to ethnography shifts the emphasis towards expressive speech and gesture as well as multi-sensory narratives of experience towards a kind of ethnographic phenomenology. Johannes Fabian argues that the

truth of vision in Western cultures has predominated over sound, touch, smell and taste in ethnographic narratives: 'the taxonomic imagination in the West is strongly visualist in nature, constituting cultures as if they were theatres of memory, or spatialized arrays' (Clifford 12). Interviews reveal the possibility of a *floraesthesia* by giving primary data on the categories of aesthetics commonly reiterated by those deeply familiar with the flora. Ethnography, as multi-sensory and open-ended, discloses tendencies towards composing the flora as if in a painting, as well as the relationship between the senses and body experience in constituting knowledge of plants. Local knowledge of this kind might reveal the usage of pre-Linnaean taxonomies, or non-hegemonic but structured systems of knowing the natural world. Most importantly, ethnographies expose the significance of local expert knowledge of plants. Some experts will be more rooted in botanical science, but more typically, the research expects to identify the usage of diverse sources of information such as taxonomic keys, Aboriginal stories of plants, artistic images and bush tucker anecdotes.

Places of high botanical diversity are usually national or regional parks requiring travel by foot. Walking from plant to plant creates continuity and situates the researcher within a sense of the whole place or ecosystem through the body. Movement by foot also invokes the tradition of the plant collector, such as Georgiana Molloy whose 'collecting walks' in Augusta and Vasse in the Southwest helped her to learn the native flora, connect with knowledgeable Noongar botanists, and overcome isolation in the nineteenth-century settler frontier (Harper 8). Walking, then, is an embodied experience of plants that puts us in touch with the landscape and disrupts the hierarchies inherent to the faculty of vision. Solnit cogently explains that 'an apotheosis of speed makes those bodies seem anachronistic or feeble. In this context, walking is a subversive detour, the scenic route through a half-abandoned landscape of ideas and experiences' (12). Walking is the practice of being embodied and orienting human action in the world through the senses; the act of walking demands that the body is present and taken into the account. In ascending to the montane reaches of the Stirling Range's higher peaks, Bluff Knoll and Toolbrunup Peak, during *Djeran*, I experienced an elevated heart rate, sweating, invigorated breathing, occasional cramping in the diaphragm and the cooling effect of the wind. At Anstey-Keane Damplands, I experienced different corporeal sensations unrelated to elevation gain and montane exposure. I became wearied by long undulations of sand and pestering flies along with a surprising humidity for what started off as a cool and overcast day. Hence, an aesthetic of flora that is solely about the pleasing visual or other single sensory features of the plant alone excludes the varied natural and cultural relations of the plant as well as the body of the human.

'Botanic field aesthetics' brings alternate, non-scientific knowledge to our engagement with plants and their ecologies. The methodology, by going beyond the 'loaded aesthetic appeal of the flower', to borrow again Pryor's apt phrase, situates our aesthetic engagement with flora in a multi-sensory, diachronic, embodied and locally-focused appreciation of the plant world. Poetry, walking and ethnographies used in combination reveal the possibility of deep, sensorily-rich relationships to plants that go beyond the visually-privileged, closed categorical system of floral aesthetics. Through such a practice, within the philosophical model of *floraesthesia*, new understandings, based outside of hierarchical subject-to-object dynamics, may emerge. Yet, the ideas are not entirely new. John Clare, the nineteenth-century English writer who preferred non-Linnaean classificatory systems, employed something which may be called an early 'botanic field aesthetics'. His poetry draws from his conversations with locals and his routine of walking as a means for understanding the flora of the pastoral countryside (Mahood 112). He is also known for having referred to taxonomic classification as 'Linnaeus's dark system' (qtd in Mahood 3). Without coincidence, the methodology described herein occurs entirely under the light of the Southwest sun. As a 'field practice' it seeks the interdependencies between plants, people, the sense faculties, knowledge systems and the language of representation.

Conclusion: towards diversified appreciations of indigenous plants

The idea of a plant, or any living being, performing for you originates in the subject-to-object binary inherent to floral aesthetics, as I have outlined it, as a visual mode of appreciating plants for their suitability as aesthetic objects. The flora is expected to put on a show, to erupt in colour and form, and to flower in a brilliant array. This is a performative and horticultural expectation with the audience poised for entertainment. A performing plant is an aesthetically pleasing, even compelling, one, if it is a good actor, or a good work of art. An aesthesis of plants, or *floraesthesia*, however, is open sense appreciation that perceives the interdependencies between the bloom and the bust. Flowering, as the most visually captivating phase of the plant's seasonal cycle, is no more compelling than seed dispersion, or other less visual but more tactile features.

An *aesthesis* of plants requires seasonal, successional, embodied and narrative awareness of sense experience, whereby the performance is more of a dialectic exchange with living beings. It is a state of multi-sensory intermixture between the human and the plant in which the 'rational subject' and the 'perceptual object' find contact in a liminal field of unresolved openness. Plants are always in the process of eliding synchronic forms of representation, but *poietic* representation entails sense immanence as what is to come. Instead of a focus on

single species flowering, such as that represented by botanical illustration, an *aesthesis* might consider the succession of flowering between different species over various temporal and spatial dimensions.

To understand how an *aesthesis* of plants might lead to diversified economies and appreciations of indigenous plants and a brighter outlook for botanical conservation, consider micro-enterprises based around the non-visual experience of native flora. Mt. Romance, near Albany, Western Australia, is a small-scale industry that sustainably harvests native Australian sandalwood (*Santalum spicatum*) for processing into essential oil.⁶ For every sandalwood tree harvested, the company plants twelve seedlings to ensure the survival of the slow-growing hemiparasitic trees. Although the focus of the enterprise is on the single sense faculty of smell, the educational experience at the centre brings the visitor into the domain of *aesthesis*. Visitors are invited to touch living sandalwood trees and to get as close as possible to hearing, seeing, smelling and even tasting the living tree, considering that the factory itself is outside the natural distribution range of sandalwood.

We might also consider regional micro-enterprises incorporating the taste of indigenous flora into food products and educational tourism centred on multi-sensory experiences of indigenous flora with long histories of usage—sensuous and palpable histories that too risk being lost before being fully appreciated. Diversified forms of appreciation, such as wildflower tourism in tandem with bush tucker education and essential oil enterprises, are in urgent need. Marchant writes, ‘A sombre thought is that the diversity of WA plants will decline significantly before its forms and survival strategies are fully appreciated in Western Australia’ (20). Part of species diversity is sensate diversity, which too risks decline: smells and tastes that no longer exist, and foods and fibres whose histories are no longer connected to our postmodern means of sustenance.

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6 See <http://www.mtromance.com.au>

Works Cited

- 'Aboriginal Life.' West Perth, WA: Kings Park & Botanical Garden, n.d.
- 'Acacia sp. Postcard.' *Aspects of Kings Park*. Perth, WA: Kings Park, 2007.
- Aristotle. *Metaphysics*. Ed. and trans. John Warrington. London: J.M. Dent & Sons, 1961.
- . *The Nicomachean Ethics*. Trans. David Ross. Oxford: Oxford UP, 1925.
- Arthur, JM. *The Default Country: A Lexical Cartography of Twentieth-Century Australia*. Sydney: U of New South Wales P, 2003.
- Beard, John S. 'Phytogeographic regions.' *Western Landscapes*. Ed. Joseph Gentili. Nedlands, WA: U of Western Australia P, 1979. 107-21.
- Caygill, Howard. 'The Alexandrian Aesthetic.' *The New Aestheticism*. Ed. John J. Joughin and Simon Malpas. Manchester: Manchester UP, 2003. 99-118.
- Clare, John. *For John Clare: An Anthology of Verse*. Ed. John Lucas. Peterborough: The Society, 1997.
- Clarke, Marcus. 'Preface to Adam Lindsay Gordon's "Sea Spray and Smoke Drift".' *The Penguin Book of Nineteenth Century Australian Literature*. Ed. Michael Ackland. Ringwood: Penguin, 1993. 43-6.
- Clifford, James. 'Introduction: Partial Truths.' *Writing Culture: The Poetics and Politics of Ethnography*. Ed. James Clifford and George E. Marcus. Berkeley: U of California P, 1986. 1-26.
- Conservation International. 'Southwest Australia.' *Biodiversity Hotspots*. <http://www.biodiversityhotspots.org/xp/Hotspots/australia/Pages/default.aspx> Accessed 10 October 2008.
- Daw, Brad, Trevor Walley and Greg Keighery. *Bush Tucker Plants of the Southwest*. Kensington, WA: Department of Environment and Conservation, 1997.
- Elliott, Brian. *The Landscape of Australian Poetry*. Melbourne: F.W. Cheshire, 1967.
- Erickson, Rica. *Plants of Prey in Australia*. Osborne Park, WA: Lamb Publications, 1968.
- Giblett, Rod. *Living with the Earth: Mastery to Mutuality*. Cambridge: Salt, 2004.
- . *Postmodern Wetlands: Culture, History, Ecology*. Edinburgh: Edinburgh UP, 1996.

- Giblett, Rod and David James. 'Anstey-Keane: Botanical Jewel.' *LANDSCOPE* Winter 2009 reprint. <http://www.sercul.org.au/docs/2009241-Anstey-Keane%20bro1.pdf>. Accessed 5 October 2009
- Gibson, James. *The Ecological Approach To Visual Perception*. Boston: Houghton Mifflin, 1979.
- Groser, Thomas. *The Lure of the Golden West: Experiences and Adventures in a Bush Brotherhood of Western Australia: Early Problems and Conquests: All About Group Settlements of the West: The Land of Sunshine and Opportunity*. London: Alexander-Ouseley, 1927.
- Harper, Melissa. *The Ways of the Bushwalker: On Foot in Australia*. Sydney: U of New South Wales P, 2007.
- Hayward, Colleen. 'Engagement and Partnership.' CREATEC Special Workshop. Edith Cowan University, Mt. Lawley, WA, 25 June 2009.
- Heidegger, Martin. *On the Way to Language*. Trans. Peter Hertz. San Francisco: Harper & Row, 1982.
- . *Poetry, Language, Thought*. Trans. Albert Hofstadter. New York: Harper Colophon, 1975.
- Hewson, Helen. *Australia: 300 Years of Botanical Illustration*. Collingwood, Victoria: CSIRO Publishing, 1999.
- Hopper, Stephen. 'What Lessons Are Coming Out of Western Australia?' *Interview With Steve Hopper 17/7/08*. <http://media.geopix.net/seedsofhope/080717shopperkew.htm> Accessed 1 October 2008.
- . *Kangaroo Paws and Catpaws: A Natural History and Field Guide*. Como, WA: Department of Conservation and Land Management, 1993.
- Ivins, William M., Jr. *Prints and Visual Communication*. Cambridge, MA: MIT Press, 1969.
- Jay, Martin. *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought*. Berkeley: U of California P, 1993.
- Jonas, Hans. *The Phenomenon of Life: Toward a Philosophical Biology*. Westport, CT: Greenwood Press, 1966.
- Keighery, Greg and John Beard. 'Plant Communities.' *Mountains of Mystery: A Natural History of the Stirling Range*. Ed. Carolyn Thomson, Graham Hall and Gordon Friend. Como, WA: Department of Conservation and Land Management, 1993. 43-54.

- 'Kings Park and Botanic Garden, Western Australia Postcard.' *Aspects of Kings Park*. Perth, WA: Kings Park, 2007.
- 'Kings Park Festival Over All Too Soon!' Botanic Gardens and Parks Authority. <http://www.bgpa.wa.gov.au/o/content/section/14/74/> Accessed 15 May 2009. Link no longer available.
- Latour, Bruno. 'Circulating Reference: Sampling the Soil in the Amazon Forest.' *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press, 1999. 24-79.
- Leggo, Carl. 'Astonishing Silence: Knowing in Poetry.' *Handbook of the Arts in Qualitative Research: Perspectives, Methodologies, Examples, and Issues*. Ed. J. Gary Knowles and Ardra Cole. Thousand Oaks: Sage Publications, 2008. 165-174.
- Lindley, John. *A Sketch of the Vegetation of the Swan River Colony*. London: James Ridgway, 1840.
- Mahood, Molly. *The Poet as Botanist*. Cambridge, UK: Cambridge UP, 2008.
- Marchant, Neville. 'Documenting the Diverse Western Australian Flora.' *Black Solander*, Gregory Pryor. Perth, WA: Perth Institute of Contemporary Arts, 2005.
- McNeill, William. *The Glance of the Eye: Heidegger, Aristotle, and the Ends of Theory*. Albany, NY: State U of New York P, 1999.
- Mules, Warwick. 'Open Country: Towards a Material Environmental Aesthetics.' *Continuum: Journal of Media & Cultural Studies* 22.2 (2008): 201-212.
- . 'Contact Aesthetics and Digital Arts: At the Threshold of the Earth.' *Fibreculture*. 9 (2006). http://journal.fibreculture.org/issue9/issue9_mules.html Accessed 12 May 2009.
- Ogle, Nathaniel. *The Colony of Western Australia: A Manual for Emigrants 1839*. Sydney: John Ferguson, 1977.
- Paczkowska, Grazyna and Alex R. Chapman. *The Western Australian Flora: A Descriptive Catalogue*. Perth: Wildflower Society of Western Australia, Western Australian Herbarium, CALM, and Botanic Gardens and Parks Authority, 2000.
- Payne, Joan. *Wetlands in the City of Armadale: A Report to the Water Authority of Western Australia and the Environmental Protection Authority*. Leederville, WA: Water Authority of Western Australia, 1993.

- Pryor, Gregory. 'Black Death: Species Extinction in WA.' *Artlink* 25.4 (2005). <http://www.artlink.com.au/articles.cfm?id=2227> Accessed 23 May 2009.
- Saunders, J.B. de C.M. and Charles D. O'Malley. *The Anatomical Drawings of Andreas Vesalius*. New York: Bonanza Books, 1982.
- Schiebinger, Londa. *Nature's Body: Gender in the Making of Modern Science*. New Brunswick, NJ: Rutgers UP, 2004.
- Seddon, George. *Landprints: Reflections on Place and Landscape*. Cambridge, UK: Cambridge UP, 1997.
- . *Sense of Place: A Response to an Environment, the Swan Coastal Plain, Western Australia*. Perth, WA: U of Western Australia P, 1972.
- Singer, Alan. *Aesthetic Reason: Artworks and the Deliberative Ethos*. Pennsylvania: Pennsylvania State UP, 2003.
- Solnit, Rebecca. *Wanderlust: A History of Walking*. New York: Penguin, 2000.
- Stolnitz, Jerome. 'The Aesthetic Attitude.' *Aesthetics: The Big Questions*. Ed. Carolyn Korsmeyer. Malden, MA: Blackwell Publishing Ltd, 1998. 78-83.
- Thackway, R. and Cresswell, I.D., eds. *An Interim Biogeographic Regionalisation for Australia: a framework for establishing the national system of reserves, Version 4.0*. Canberra: Australian Nature Conservation Agency, 1995.
- Thomson, Carolyn, Graham Hall and Gordon Friend, eds. *Mountains of Mystery: A Natural History of the Stirling Range*. Como, WA: Department of Conservation and Land Management, 1993.
- Tourism Australia. 'Western Australia's Wildflowers.' *Tourism Australia*. http://www.australia.com/articles/wa_wildflowers.aspx Accessed 28 April 2009.
- Western Australian Tourism Commission. *Research into the Wildflower Tourism Industry: An Exploration of Consumer and Industry Perceptions*. Perth, WA: Western Australian Tourism Commission, 2003. http://www.tourism.wa.gov.au/Research_and_Statistics/Specialised_Research/Pages/Wildflower_research.aspx Accessed 12 May 2009.
- Wilson, Jen Grey. 'Capturing the Beauty of Wildflowers in Photos.' *ABC Online Stateline Western Australia*. 9 September 2005. <http://www.abc.net.au/stateline/wa/content/2005/s1458437.htm> Accessed 12 May 2009.