The force that through the green fuse drives the flower
Drives my green age; that blasts the roots of trees
Is my destroyer.
And I am dumb to tell the crooked rose
My youth is bent by the same wintry fever.

-(Dylan Thomas, 1952)

Green Tropism

Why are green landscapes considered beautiful? Why does the colour green, above all other colours on the spectrum, evoke associations with fertility and growth? Every backyard gardener knows that green leaves are healthy, whereas yellow leaves are withering and in danger of dying. When a plant turns yellow, a sensible 'green thumb' waters it urgently to quash the colour change and restore the foliage to a healthy greenness. The colour green indicates the growth, vitality and fertility of landscapes and plants, but brown and yellow – I will call them the dun colours – tend to signify decay, senescence and barrenness. In temperate parts of the Northern Hemisphere, arboreal shades of brown and yellow follow the brilliant flush of autumn crimsons and oranges that herald the seasonal dying back of foliage – the fall – and the subsequent hibernation of trees during winter. In dry climates of intense heat, such as the desert regions of the western United States and many areas of Australia, however, the perceptual predictability of greenness becomes disjointed or inverted as the landscape adapts to severely dry conditions, in part, by altering the colour and size of its foliage (for example, see Seddon, 2005).

Green tropism is a tendency towards greenness, both biologically and metaphorically, or a leaning towards the colour green, just as phototropism is the pull of a plant towards light. American author Wallace Stegner (Stegner, 1992a) in his essay 'Thoughts in a Dry Land' first published in 1972, however, takes the position that ideas of greenness formulated in temperate climates are complicated and often reversed in dry habitats. In Stegner's view, in order to appreciate the character of the American West, 'you have to get over the color green' (p. 54). Stegner argues that arid landscapes require an adjustment in human perceptual

faculties, and that green associations forged in other climates just don't apply to arid habitats. Nature is neither 'red in tooth and claw' (Tennyson, 1850) nor 'green in leaf and branch' (Giblett, 2004, p. 240) but often brown and yellow in bark and foliage. A deficiency of green visually apprehended is not a lack of value, nor is dunness the dying exhortation of an infertile and barren land. Dry, drought-prone landscapes, or xeriscapes, are often in states vacillating between brown, yellow and orange interspersed with seasonal irruptions of green verdure after rain.

So, here is a bold contention: green is one of the most complex and semantically rich descriptors in the English language. Green, as both a noun and adjective, has been connected symbolically to vegetation, nature and fertility, and particularly since the 1970s, the colour has become a synecdoche for environmentalism and land consciousness (for example, see Herndl & Brown, 1996), ecological politics and social change (see Reich, 1970) and the revisioning of science towards a sacred conceptualisation of nature (Sheldrake, 1991). In contemporary discourse, 'greening' is used as a popular trope to describe greater ecological consciousness in industrial practices, and the modification of various corporate, institutional or political paradigms towards minimizing environmental impacts and energy consumption (for example, see Sarni, 2010). Greening as a progression towards sustainability has become an increasingly accepted, and contested, turn-of-phrase (Herndl & Brown, 1996). The colour green and its implicit associations are more nuanced than the conventional symbolic significations: vegetation, nature, fertility and environmentalism. Green speak can have destructive consequences when unrealistic expectations gestated in other climates are imposed upon dry landscapes.

This paper addresses the complexities of green tropism in relation to the perceptions of the botanical biodiversity and ecological value of arid places, with particular attention to the Southwest of Western Australia, which is often fully alive, vegetated, and even spectacularly biodiverse by global standards, but often not green (Seddon, 1972, 2005). After presenting the multifarious symbolic aspects of green, focusing on greenness as beauty and fertility in nature, I give an interpretation of green tropism in A.D. Hope's poem 'Australia', which I argue encapsulates and satirises greenness as a mode of perception that has been forced upon Australian landscapes. In the Southwest – an international biodiversity nexus of world-

wide significance – green values have factored into written representations of the area's most botanically important subregions. Places such as Lesueur National Park are biodiversity 'hotspots' within the larger regional Southwest hotspot. Historical representations of Lesueur, one of the richest botanical areas in the Southwest, evidence overtones of green tropism. Returning to Stegner's call to 'get over the color green', the paper concludes by intimating that the appreciation of arid landscapes begins with an expanded perceptual vocabulary and an aesthetics of xeric places, as botanist Alex George (2002a), zoologist Barbara York Main (1967) and essayist George Seddon (2005) all suggest.

The Positive-Negative Nature of Green

The word 'green' is derived from the Old English term *growan* or 'to grow' (Online Etymology Dictionary, 2010). In addition to growth, green has had various symbolic nuances. Table 1 distributes green symbolism across five categories – bodies, cultures, emotions, environments and politics – to show the diversity of meanings for the colour. Inherently dichotomous, green signifies both the appearance of verdure and the advance of decomposition, as well as all meanings on the spectrum between growth and decay. De Vries (1974) lists nearly thirty variants of green symbolism, including positive associations, such as growth and fertility in nature – 'earthly, tangibly growing things, *vegetation*' – but also negative connotations of poison and jealousy (pp. 226-27).[1]

Since de Vries' dictionary was published nearly thirty-five years ago, new symbolic dimensions for green have been forwarded. Green as vegetative growth – or in Stegner's (1992a) terms, green as the term for 'universal chlorophyll' (p. 53) – has been advanced politically and socially, especially since the environmental movements of the 1970s, to encompass environmental consciousness and the eco-politics of the Green party, the Greens, or even 'greenies' with ecological sympathies (for example, see Burchell, 2002).

[1] By comparison, brown, with only ten entries enumerated, symbolises melancholy and barrenness, and yellow, which was rarely distinguished from green in Antiquity, symbolises death and decay (De Vries, 1974). Moreover, the colour red—a historically significant colour which would seem to have commensurate symbolic density to green—has only eighteen variants entered in de Vries' compilation.

Table 1 Dichotomous Colouration: The Positive-Negative Structure of Symbolic Green		
Bodies	the productive body	the toxic body
	fertility	sickness
	vegetation	pus and bile
	chlorophyll	chlorosis
Cultures	ancient	inexperienced
	nature-aligned	unproven
	green man	green horn
Emotions	neutrality	envy
	harmony	monstrosity
	virtue	jealousy
Environments	spring growth	noxious proliferation
	remediation	green-washing
	biodiversity	green wood
Politics	environmental movement	capitalism
	ecopolitics	the greenback

On a contrary or anti-ecological note, green conjures the American dollar or greenback as a metonym for capitalism and Western mass consumption and the exploitation of natural resources. Moreover, green signifies positive reconstruction of abused landscapes in the form of environmental remediation, or mine-site revegetation, as in the greening of the landscape.[2] Additionally, the malevolent twin of green remediation – or partner in crime – is the practice of 'greenwashing' in which 'green sheen' companies deceptively advertise the environmental integrity of their products (for a review, see Firestein, 2009, pp. 196-235).

Green has diverse cultural meanings. In Antiquity, green represented harmony, balance and nature. The colour embodied the Greek idea that vision depends on variations between light

[2] Sarni (2010) opens his book on the remediation of 'brownfields' – abandoned industrial sites typically in urban areas – through initiatives in sustainable development with an expression of rapprochement between corporate and environmental interests. The greening of abused urban areas, in Sarni's view, can be economically lucrative, and also environmentally and socially gentrifying: 'a powerful green wave is moving through the business world and society at large—a rising interest in and concern about the environment' (p. xi).

and dark. During the classical era, green, as an intermediate between white and black, was regarded highly for its pleasing and soothing qualities. Aristotle considered green a particularly restful colour between the white of water and the black of earth (Gage, 1993, p. 13). Echoing Aristotle, medieval French Scholastic philosopher William of Auvergne (1190-1249) considered green beautiful because it 'lies between the white which dilates the eye and the black which contracts it' (quoted in Gage, 1993, p. 82).[3] In the thirteenth century, Pope Innocent III sanctioned the colour green as a liturgical colour for its balanced, pleasing qualities (Gage, 1993, p. 82). Hence greenness signifies clarity of vision, virtue, piety and power throughout the history of cultures.[4]

While green has meaning as a distinguished colour of power and balance, it is also linked animistically to the living essence of nature. The archetype of the green man—the carving of a foliated head in medieval churches—is an historically recurring motif linking green colour to the natural world in European tradition (Basford, 1978). In his exposition of archetypes and the collective unconscious, Jung (1959) refers to the Russian fairytale 'King of the Forest' as expressive of the relationship of the unconscious mind to green symbols. A peasant in the forest encounters Och, a little wrinkled old man whose 'green beard hung down to his knees' (quoted in Jung, 1959, p. 222). The peasant's son accompanies Och to 'a green hut…In the hut everything was green: the walls were green and the benches, Och's wife was green and the children were green…and the little water-women who waited on him were as green as rue' (p. 222). In Jung's interpretation of the fairytale, Och, the green man, symbolises vegetation or the woodland numen. The conducting of the peasant into an underground world of green is the capacity of the unconscious for transformation in the vegetable world of nature, or even transmutation into the vegetative.

Embodied in the archetype of the green man, the colour green, as Gage (1993) observes, has 'an indissoluble association with nature' and the fertility of the plant world (p. 258). In

[3] Moreover, during Antiquity, green was associated with gems imbued with supernatural virtues, such as emeralds, which were pulverised and applied to the eyes to balance the faculty of vision as curative salves (Gage, 1993, p. 61). Green, therefore, symbolises clarity of sight.

[4] Green New Zealand jade, also known as greenstone or *pounamu*, is significant in Maori culture as a symbolic colour for virtue and power (Keane, 2009). Similarly, jade in Chinese traditions represents virtue, imperial power and piety; the Jade Buddha for Universal Peace, exhibited in Perth in 2009, is carved from a rare piece of translucent jade found in Canada (Buddhist Council of Western Australia, 2009).

ancient Egypt, green was used extensively in fertility rites (De Vries, 1974, p. 226). The Southwest Australian Aboriginal Noongar word *won-gin*, according to Moore (1846), means 'living; also green, when applied to leaves or wood' (p. 78). In ancient Chinese five phases medicine or *wu xing*, green is associated with the wood element, which further corresponds to the emotion of anger, the organs liver and gall bladder, and the growth of the spring season (Kaptchuk, 2000 p. 439). In Europe, by the thirteenth century, the term 'sinople' came to stand for the vibrant green of nature in contradistinction to the rudimentary green of paints and dyes (Gage, 1993 p. 82). Throughout different cultures, green is indistinguishable from nature, growth, fertility and the spring season.[5]

The colour green has a complex history as a potent symbol in various cultures, but its associations with growth in nature are the most contradictory, for whilst green indicates growth and fertility, it can also evoke decay and toxicity (see Table 1). For instance, Hippocrates coined the word 'chlorosis' to denote the green colour of the skin during sickness associated particularly with excess bile in the Greek humoural system of medicine, and eventually greenness of the skin came to symbolise love sickness and jealousy (King, 2004).[6] Folklorist John Hutchings (1997) describes this as the irreconcilable 'positive-negative nature of symbolic green' and argues that 'all common symbolic meanings are derived either from the green growth that occurs in springtime or from the green mould of decay' (p. 55). Hutchings recognises the symbolic dichotomies of the colour, signifying that which is both beneficial and destructive to nature: 'not only is green seen as natural and good for the environment (as in "green" farming), but it is also used to symbolise noxious growth (green for poisonous packaging and for atomic power stations) (p. 61).

Green is ultimately a dichotomous descriptor, a fluid perceptual category full of simultaneous contradictions. The positive associations of green with growth and fertility account for only a small part of the spectrum of green symbolism. Though not referring specifically to green, in his discussion of dreams, Freud (1997) in the essay 'The Antithetical

[5] The twentieth-century Dutch painter Mondrian found the color green hard to bear, as it represented the landscape of green pastures and trees of his native Holland, which were perceptual elements antagonistic to the non-representational art forms he sought (Gage, 1993, p. 258).
[6] Paradoxically, however, the root of 'chlorosis' can also mean flourishing, in the shared sense that chlorophyll undergirds the greenness of plants.

Meaning of Primal Words' identifies the tendency of older languages for 'combining contraries into a unity or for representing them as one and the same thing' (p. 94). In the ancient Egyptian language, according to Freud's reading of classic philologists, words combine contrary meanings to highlight the shades of difference between the words, or the contrasts that give meaning to each through the juxtaposition of their opposite meanings. Hence, flourishing encompasses a recollection of sickness, growth a recollection of decay, or neutrality a recollection of jealousy when expressed through the descriptor 'green'. Freud's discussion of antithetical meanings suggests the moving, relational nature of language, expressing concepts through a kind of chiaroscuro between diametrically opposite meanings. Green is only green in relation to dun; fertility is only fertile with respect to sterility.[7]

Green Fertility, Dun Sterility: Southwest Australian Contexts

Turning from the historic and cross-cultural meanings of green, I look towards the associations of greenness to fertility and dunness to sterility in historic representations of the Southwest of Western Australia. Greenness has been symbolically connected to fertility, productivity and biodiversity in the Southwest Botanical Province, a region with the unusual combination of a Mediterranean climate and extraordinary floral diversity (for example, see Corrick & Fuhrer, 2002). As cued by Stegner (1992a), a perceptual inversion occurs when biodiverse arid landscapes fail to exhibit states of green lushness, an association gestated in tropical or temperate climates. The disjunction between biodiversity and greenness – and the correlation of dun colours to barrenness and sterility – is evident in the early writings of European explorers and visitors to Western Australia, such as Charles Darwin (Armstrong, 1985), Captain Stirling (1827) and the Gregory brothers (1884). A barren landscape is thought to be infertile, incapable of producing offspring, and more specifically in the colonial agenda, unable to support agricultural enterprise. The value of the Australian flora generally

[7] The concept of contrary meanings unified in the descriptive term for flora is given botanical resonance later through the work of Southwest Australian botanists and writers, especially Alex George's concept of diallagy, which marks the ability of Southwest vegetation to re-green after rain.

has often been diminished or at least misjudged for its lack of greenness (Seddon, 2005). In Western Australia, with increased attention to the indigenous flora in the last forty years through concerted global scientific focus, however, a greater appreciation of native plants has emerged in the environmental ethos of the dryland region (Hopper, 2008). Native plants have come to symbolise the kinds of successful adaptations to climatic constraints that human societies in xeriscapes are now confronted with.

Some early European explorers and settlers arriving in Western Australia were shocked by the drab monochromes of the indigenous vegetation and the arid conditions of the habitats in which the plants grew. Rose Saulces de Freycinet, onboard the French vessel the *Uranie* in September 1818 with her husband the explorer Louis Claude de Saulces de Freycinet, was repulsed by her first stark and unwelcoming glimpses of Shark Bay, in the upper northwest corner of the Southwest Botanical Province: 'It is without a single regret that I left that hell on earth, the west coast of New Holland…My courage forsook me utterly, and I could see nothing but horror about me' (quoted in Seddon, 2005, p. 34). Approaching the tropical islands of Simão and Timor, she finally is relieved of her horror and eases into the pleasing verdant scene before her: 'Imagine our satisfaction at seeing the lovely vegetation of these islands. Our eyes were pleasantly rested by this greenery after the sand dunes and the dry or stunted shrubs of New Holland' (p. 34). Rose Saulces de Freycinet replicates the view of classical Antiquity, espoused by Aristotle and others, of green as a harmonious, pleasing and restful colour. Whereas the greenness of the tropical islands welcomed, the dun coloured duns of Western Australia repulsed and threatened, creating a veritable inferno on earth for her. Nineteenth-century American geologist Clarence Dutton (quoted in Stegner, 1992a) in the canyon country of the American West, a similarly arid and stark environment, observes the shock that occurs to perceptual sensibilities acculturated in different, lusher habitats:

> The lover of nature, whose perceptions have been trained in the Alps, in Italy, Germany, or New England, in the Appalachians or Cordilleras, in Scotland or Colorado, would enter this strange region with a shock, and dwell there for a time with a sense of oppression, and perhaps with horror. Whatsoever things he had learned to regard as beautiful and noble he would seldom or never see, and whatsoever he might see would appear to him as anything but beautiful and noble. (p. 53)

Dutton goes on to identify a transformation in the perceptual faculties, in which 'some day he would suddenly become conscious that outlines which at first seemed harsh and trivial have grace and meaning' (p. 54). Perhaps Rose Saulces de Freycinet hadn't had the duration of immersion in the Australian landscape required to reconfigure European-borne modes of perceiving the attractiveness of environments.

On a related note, Captain James Stirling (1827) after a turbulent passage around Cape Leeuwin, reported on the bleak character of the landscape:

> The first appearance of the Coast we were now to explore presented nothing attractive; the monotony of its outline and the dusky hue of the meagre vegetation, it supported, at once accounted for the sterile and hopeless character attributed by early navigators to this Region. (p. 21)

Stirling associates the 'dusky hue of the meagre vegetation' with sterility. The landscape near Cape Leeuwin 'presented nothing attractive' and appeared monotonous in outline. Stirling shares the perceptual legacy of the early navigators who concurred that Southwest Australia was hopeless for agricultural pursuits. The coastline lacked beauty and possibility because it was deficient in greenness, the sinople vividness observed absent also by de Freycinet, and a perceptual divergence from the familiar verdure of Europe. The 'dusky hue' of the vegetation is interwoven with the 'dusky hue' of the Aboriginal inhabitants who lived in direct sustaining relationship to indigenous plant foods, medicines and fibres (for an example of the use of the descriptor dusky, see Hassell, 1975). The Aboriginal inhabitants and the indigenous plants of the land become the metonym of each other with the same pejorative connotations of monotony, sterility, hopelessness and lack of attractiveness attaching to both. Though appearing sterile and hopeless to explorers such as Stirling, the Southwest landscape is in reality the home of ancient human cultures and unusually biodiverse taxa.

Echoing his predecessor Stirling, in 1836, young Charles Darwin visited Western Australia and was confronted by the aridity and apparent sterility of the land as signified to him by the appearance of the native flora. Darwin (1836) observed, 'The general bright green colour of the brushwood & other plants viewed from a distance seems to bespeak fertility; a single walk will, however, dispel any such illusion…' (quoted in Armstrong, 1985, p. 35). For

Darwin's young eyes, the fertility of the landscape – signified externally by the particular shade of its greenness, the visual quality of the vegetation – was an illusion dispelled upon closer inspection. More exactly, though, for Darwin, the standard of fertility was the potential of the land to support the cultivation of European agricultural crops. Bearing these criteria in mind, the eventual proponent of evolutionary theory dismissed the Australian landscape's prospective fertility: 'I do not think this country can ever rise to be a second North America. The sterile aspect of the land, at once proclaims that Agriculture will never succeed' (quoted in Armstrong, 1985, p. 39).[8] With Darwin's northern-hemispherically trained eyes, a landscape that was not tropically or temperately green was barren and infertile, incapable of yielding the offspring of diasporic Europeans and the displaced agricultural crops of other climates. Why is the concept of fertility defined exclusively through the criteria of human enterprise? The Southwest Australian coastline gazed upon by Darwin and contemporaries would later prove to be some of the most botanically biodiverse in the world. Why did it appear sterile and worthless, by Darwin's intimation?

In responding to these questions of perception, it will be helpful to look at a particular site of high botanical diversity. Lesueur National Park (Figure 1) is one of most biodiverse places in the Southwest, though lacking the compelling greenness of the picturesque and depicted consistently in unfavourable terms throughout colonial history. In 1801, Nicolas Baudin, the post captain who kept a detailed journal aboard the *Naturaliste*, estimated that the barren harshness of the Lesueur landscape meant little value for the cause of natural history: 'As this coast appears to be of no interest for navigation and even less for Natural History, I did not think it necessary to stop there' (Baudin, 1974, p. 200). Explorers who travelled overland, physically through the environment, depicted the sand plains of Lesueur in less flattering terms. In 1837, on his southward traverse of the *kwongan*, the Aboriginal word for the sand plains, explorer George Grey (1841) refers to 'waste and barren plains' (p. 59), 'arid and barren in the extreme' (p. 66) and of a 'bare, sterile, and barren nature' (p. 118). Approaching Mount Lesueur from the south, English-born explorer A.C. Gregory (1884) wrote that 'the

[8] In sum, Darwin's opinion of the newly settled land was disparaging and dismissing, and on departing the West Coast, he writes, 'Farewell Australia…you are too great and ambitious for affection, yet not enough for respect; I leave your shore without sorrow or regret' (quoted in Armstrong, 1985, p. 40).

country traversed almost wholly worthless sand and scrub' (p. 29) and that 'the hills produced little besides coarse scrub…the land [on the banks of the Hill River] was very scrubby and indifferent' (p. 29).

Figure 1: Lesueur National Park, August 2009 (photo by J. Ryan)

The apparent barrenness and inhospitability of present-day botanical reserves like Lesueur thwarted agricultural development. The *kwongan* habitat near Mt. Lesueur was not only infertile to settler needs, it was also resistant to stock grazing, which prevented its conversion to pastoral land. Gregory and pastoralist Lockier Burges argued that the Lesueur area should be avoided, especially due to its abundance of poisonous plants: 'poisonous plant is so abundant on that part of the range of hills on which Mr. Drummond has taken up his licence near Mt. Lesueur that stock cannot be driven through it with safety' (quoted in Hopper, 1990, p. 11). Early European settlers such as Gregory found the landscape of Mt. Lesueur 'different, daunting…dangerous, and unpredictable' (Stegner, 1992b, p. 57). Inaccessibility hindered colonial incursions and allowed the original floral systems to remain intact, though presently only accounting for a meagre three percent of the original heath lands (Allan Tinker, personal communication, August 29, 2009).

To modern botanical science, places such as Lesueur are extraordinary repositories of floral diversity, dun-coloured, barren, sterile and infertile though they appear. As Bailey (n.d.) comments 'like much of the ancient WA landscape, Mt. Lesueur's treasures are subtle. The

scruffy heath consists of great diversity' [emphasis added] (p. 2). Lesueur National Park contains over nine-hundred species of plants, or ten percent of Western Australia's flora, and ranks as one of the most critical areas for flora conservation in the Southwest region (Department of Conservation and Land Management, 1995). The paradox of perception then, as intimated by Stegner, is that 'scruffy' lands of dun colours can be as rich in botanical treasures as the proverbial jungles. Perceptions trained in 'the Alps, in Italy, Germany, or New England, in the Appalachians or Cordilleras, in Scotland or Colorado' necessitate a retraining in the regional aesthetics of dry country.

Hope and Stegner: Unravelling Greenness

Australian poet A.D. Hope and American writer Wallace Stegner offer crafted examples of the shift in perception required to appreciate the dry landscapes of Australia and the American West, respectively. Both authors point to an aesthetics of xeriscapes, determined in large part through a revisioning of the traditional associations of greenness and fertility. Although markedly different literary voices—the satirical verse of Hope and the earnest prose of Stegner—both authors grapple equally with green tropism as it has been pressed upon dry lands. Hope's poem 'Australia' published in 1938 satirises contradictory views of indigenous Australian plants, both as antithetical to the familiar leafy green plants of the Old World and strangely intriguing symbols of Australian nationalism and intellectual freedom in their own right. By the conclusion of the poem, the 'drab green and desolate grey' (Hope, 1977, l. 1) of the flora instead comes to represent the inherent strength and potential of Australian culture in its departure from Old World parameters of perception. In Hope's view, dunness and drabness, rather than sinople greenness, mark the potential of the flora and the culture. The poem's dramatic tension lies in its jostling of the truisms of greenness and fertility and its satirising of the feminine body trope that connects dryness to sterility and infertility. Additionally, Hope pushes the edges of green tropism by connecting the colour green with the stifling intellectual environment of the Old World, evoking instead arid fields of brown

and yellow and invoking the biblical association of 'from the deserts the prophets come' (l. 24).[9]

'Australia' could be interpreted as the pejorative, Eurocentric prattle of a cloistered academic writing about a nation and a landscape with which he has lost touch. Considering the satirical slant of much of his writing (McLeod, 1980), however, a closer reading shows Hope's crafted iconoclasm. The poem begins with 'A nation of trees, drab green and desolate grey/ In the field uniform of modern wars' (ll. 1-2). Australia as a nation is already bound interchangeably to its indigenous flora and, more implicitly, the campaign against native trees, shrubs and herbs. The colour of the trees conjures images of army-issued green; here, the perception of colour ignites militant antagonism against the trees as impediments to the conversion of the land to pastoralism. A war is raging, and the landscape is dressed in the uniform of the enemy. Additionally, one of Hope's more controversial iconoclasms in the poem is his description of the nation as a post-menopausal woman incapable of bearing progeny. Rather than in its vigorous prime of life, Australia is 'the last of lands, the emptiest,' (l. 6) and the drab green quality of the flora signifies a declining fertility, barrenness, senescence and dryness. The nation is 'a woman beyond her change of life, a breast/ Still tender but within the womb is dry' (ll. 7-8). The ensuing three stanzas are dense with images of imbecility and futility, a torrent of cynical diatribe against the nation, but more likely Hope's regurgitation of all the stock biases and misconceptions he had encountered in 1930s Australia: 'the river of her immense stupidity' (l. 12), 'monotonous tribes' (l. 13), 'the dying earth' (l. 16), 'And her five cities, like five teeming sores' (l. 17), and 'a vast parasite robber-state/ Where second-hand Europeans pullulate (ll. 18-19).

By the sixth stanza, we reach the turning point, or volta of the poem, in which the author suggests a perceptual and values-based change, argued for by Stegner and Dutton earlier, in which a hopeful feeling for the nation and the potential of the land to support an emerging population supersedes the cynicism of the earlier five stanzas. The 'lush jungle of modern

[9] On his desire to impart texture and sensuousness to his novels, Patrick White commented dismissively on twentieth-century Australian literature through the use of colour symbolism: 'Above all I was determined to prove that the Australian novel is not necessarily the dreary, dun-coloured offspring of journalistic realism' ('The Prodigal Son', *Australian Letters,* April 1959, p. 39.)

thought' (l. 22) refers to the Old World, the sinople European green countryside, which Oscar Wilde excoriated as 'too green and badly lit' (quoted in Seddon, 2005). Hope proffers the view that from the dry lands, the xeriscapes, the intellectual and cultural pioneers still come like prophets, not from the dense thickets of stifling Old World ideas and the claustrophobic quarters of European traditions. The poet turns 'gladly home' (l. 21) to 'the Arabian desert of the human mind' (l. 23) away from 'the learned doubt, the chatter of cultured apes' (l. 27). Indeed, the sarcasm of the earlier stanzas is the learned doubt of the Old World, and Australia offers new paradigms of living and perceiving, not from clutching to engrained modes of seeing , but from reappraising perceptions of arid lands where 'no green hills dare' (l. 25).

Through the shroud of excoriating images and green assumptions, Hope sees the potential of Australia. Similarly, Stegner (1992a) calls for an aesthetics of arid landscapes in which the deficiency of greenness is not necessarily indicative of sterility: 'you have to get over the color green; you have to quit associating beauty with gardens and lawns; you have to get used to an inhuman scale; you have to understand geological time' (p. 54). In his seminal essay on perceptions of the American West, 'Thoughts in a Dry Land', Stegner argues for revisioning that is suited to the arid expanses, phantasmagoric landforms, and harsh light of the American West. Culturally engrained modes of seeing the world engender predictably unsympathetic responses to dry landscapes: 'to eyes trained on universal chlorophyll, gold or brown hills may look repulsive' (p. 53). Rather than moisture, aridity shapes the character of the xeric landscape and 'exposes the pigmentation of the raw earth and limits, almost eliminates, the color of chlorophyll' (p. 46). Greenness, indicating the presence of plant chlorophyll, is not a predictable aesthetic quality of the ecology of dry places.

Stegner's assertions are about perceptions, or the ways we view the land, and the decisions about how the land should be used based on how it appears. Stegner goes on to say, 'perceptions trained in another climate and another landscape have had to be modified. That means we have had to learn to quit depending on perceptual habit. Our first and hardest adaptation was to learn all over again how to see' (p. 52). In 'Living Dry', Stegner (1992b) further points to the relationship between the mistreatment of arid landscapes and habits of perception:

> [The American West] has been misinterpreted and mistreated because, coming to it from earlier frontiers where conditions were not unlike those of northern Europe, Anglo-Americans found it different, daunting, exhilarating, dangerous, and unpredictable, and entered it carrying habits that were often inappropriate and expectations that were surely excessive. (p. 57)

Accustomed ways of seeing arid landscapes as barren and desolate can have devastating consequences. An aesthetics of dry places is therefore not merely an exercise in redefining perceptual states but also an exertion of social and environmental justice.[10]

Towards an Aesthetics of Xeriscapes

> They say here the world's upside-down,
> And in summer it is true I find
> All the green lawn covered in the morning
> With the close pattern of what seem autumn leaves.
> The eucalypts, wiser than the trees of the old world,
> Ancient in sacrificing to the sun what is due,
> This way will find new strength to put out afresh
> Tawny young leaf-sprays when the first autumn rains come.
>
> -(Glen Phillips, 1988)

Several Southwest Australian writers and scientists have responded to Hope and Stegner's call for a shift in the traditional perception of dun-coloured arid landscapes as infertile wastelands. The works of botanist Alex George, ecologist Barbara York Main and geographer and essayist George Seddon all evidence a grappling with green tropism as it has been invoked in the Southwest. The historic representations of the flora through the journals of de Freycinet, Stirling, Darwin and Lesueur area settlers show the tensions and reticence of acclimating perception to dry landscapes. Arid, dun-coloured environments, such as the Southwest, require revised vocabularies of seeing and expanded perceptual linkages between colour and ecology. By no means an exhaustive summary, Table 2 compiles some

[10] For example, established in 1951, the Nevada Test Site, one hundred kilometres south of Las Vegas in the expanses of the American desert, was the proving ground for nuclear technology, leading to high rates of leukaemia among children in neighbouring states in the mid twentieth-century (Clarfield & Wiecek, 1984). Similar nuclear testing sited in the arid lands of Western Australia had severe health effects on Aboriginal inhabitants, whose xeric home lands were looked upon as uninhabited *terra nullius* (for an account, see Lindqvist, 2007).

of the aesthetic qualities of the region, distributed across the five senses. An aesthetics of xeriscapes takes into account the peculiar qualities of dry landscapes before forging judgements of beauty or worthiness in matters of conservation.

New descriptive terminologies and neologisms have entered into the botanical science of the Southwest to account for the colour variation of the flora. In his study of autumn foliage change and the variable green colouration of plants, botanist Alex George (2002a) proposes the term 'diallagy' to describe colour reversibility in which 'plants show an ability to change leaf colour and reverse it according to the weather' (p. 2). Diallagy is derived from the Greek *diallage* for interchange, and suggests the inherency of green within variable colour states. For George, the unusual strategy of retracting green colour during dry conditions and then re-greening after the arrival of autumn rain is indicative of the successful adaptations evolved by Southwest plants, which further constitute their visual peculiarity and uniqueness. The autumn, after a typically long dry summer, has been considered a time of dormancy or decline – an aesthetic monochrome – yet according to George (2002b), it is a richly interesting time for flora:

> In south-western Australia, few people venture into the field during the autumn season. It is usually the end of a long, hot, dry summer, and there is still a widely held view that little is happening in the bush at that time; spring is the wildflower season, though some flowering continues into summer. Consequently, little has been written about the bush in autumn, or about the effect of drought. (p. 1)

After observations of autumn leaf colour change in response to rain levels at sites such as Lesueur, George (2002b) further defines diallagy as 'the strategy of reversible change between the green and coloured states' (p. 1). Diallagy accounts for the autumn colouration of the flora, exhibiting a wide range including brown, orange, purple, red and yellow that would normally indicate that the plants are dead or dying, but instead signify a state of decreased metabolic activity. Leaf colour changes gradually as the summer progresses in response to diminished soil moisture, and is generally reversible after ten to fifteen millimetres of rainfall within a twenty-four hour period.

Thirty-five years earlier than George, zoologist and ecologist Barbara York Main (1967) reported the phenomenon of diallagy in *Between Wodjil and Tor*, her study of a remnant

parcel of native bushland in the Wheatbelt. As with George, close recurring study of the vegetation revealed a pattern of visual change connected the environmental adaptation of summer colouration: 'these bushes had now assumed their characteristic summer colour—no longer green, the copses were now splashed with russet and purple and burgundy…the change in colour of the "foliage" of tamma copses is as dramatic as that of any deciduous tree' (p. 9). The perception of the drama in the first place required concerted, diachronic and close engagement with the bush as a living and mutable community. In the text, Main puts into regional practice Stegner's claim that 'our first and hardest adaptation was to learn all over again how to see'. *Wodjil and Tor* embodies a learning to see the native flora of the Wheatbelt with fresh eyes and through an attitude of awe and intrigue, rather than animosity and mistrust as physical impediments to the agricultural colonisation of the land. Main (1967) goes on to say, 'the sudden contrast in colour of the eucalypts accompanying the sloughing of their bark is as spectacular, as much anticipated, as the autumnal transformation of any truly deciduous forest of the northern hemisphere' (p. 145). Through new habits of perception, the Old World, as the default mode for seeing the Australian flora, diminishes in influence.

Essayist and geographer George Seddon (2005) also invokes a new sensibility for colour in the Western Australian bush. His earlier work *Sense of Place* (1972) and most of his writings in the intervening thirty-five years have dealt, in some form, with issues of perception of the Southwest. Native flora, as constituting a major element in the perceptual scape of a region, has figured prominently into Seddon's work, which has been a primary impetus in dispelling misconceptions about the landscape:

> The colour range is highly distinctive: grey, grey-green, blue-green, and then translucent copper reds in the new flush of growth (because in nutrient-poor soils, the production of anthocyanin outstrips that of the more nutrient-demanding chlorophyll)…what we do not commonly find in this world of the sun are plants with large mid-green leaves, wilting as soon as their water-filled cells are thirsty. (p. 20)

TACTILE	dryness
	solar exposure
	prickliness
VISUAL	flat expansiveness
	harsh light
	dun colours
OLFACTORY	menthol
	sandalwood
	eucalypts
AUDITORY	sibilant wind
	gum nuts
	banksia birds
GUSTATORY	root starch
	quandong tang
	native plum sweetness

Table 2: Multi-Sensory Perceptual Qualities of Southwest Australian Landscapes

Seddon is selective with his choice of words and progression of ideas. The 'highly distinctive' colour range of native plants results from botanical adaptation: anthocyanin rather than chlorophyll. Eyes habituated to 'universal chlorophyll' (Stegner, 1992a) would naturally perceive sinople shades of vegetation as verdure, as healthy, as productive, welcoming and reminiscent. In Seddon's terms, it is only when we comprehend the physiological underpinnings of plants in dry climates that we begin to appreciate the differences. Our eyes entrain to anthocyanin and the transformation of seeing judders into movement. Table 3 lists a few ecological and morphological qualities of the Southwest that, in part, also determine the perceptual nuances of the landscape.[11]

[11] German architect Peter Latz has rehabilitated abandoned industrial sites through brownfields. Rather than squalid wastelands, brownfields such as Emscher Park in the Ruhr region preserve industrial heritage and allow progressive, slow regeneration of the site, rather than aggressive re-greening. (for more info, see http://www.epa.gov/brownfields/partners/emscher.html).

ECOLOGICAL	aridity
	endemism
	diallagy
MORPHOLOGICAL	irregularities
	small leaves and flowers
	schlerophylls

Table 3: Ecological and Morphological Qualities of Southwest Australian Flora

Figure 2: The Ravensthorpe Woman, September 2009 (photo by J. Ryan)

Getting over the colour green in the Southwest has required the united literary and scientific perspectives of regional botanists and writers. An appreciation for the flora's globally significant diversity, rather than an excoriation of its recalcitrance and barren appearance, its 'drab green, desolate grey', engages a repositioning of perception within the region. The Ravensthorpe Woman (Figure 2), rather than the Green Man, offers an archetype for the post-colonial era. Her image is a new paradigm of colour, invoking reappraised associations of greenness and other-than greenness, and positing a situated metonym of aesthetics,

defined by the uniqueness of the Southwest region itself. Her elegant, imbricate and diverse dun-coloured image, created from the native plants near the Fitzgerald River National Park near Hopetoun, counterpoises the foliated head of the Green Man. The perception is not of warring against, but symbiotically aligning to, the indigenous plants of the Southwest of Western Australia.

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