

Making the most of ‘nothing’: astro-tourism, the Sublime, and the Karoo as a ‘space destination’

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Abstract

In recent years perceptions of South Africa’s arid Karoo have been radically transformed. Whereas the Karoo was once regarded as a desolate wasteland, it is now being punted as a positively trendy region, both to live in and to explore. Many enterprising niche tourism operators have positioned themselves to profit from this phenomenon. This article briefly articulates the concept of ‘the Sublime’ and shows how the nexus of cognitive associations suggested by ‘space’ and ‘nothingness’ is being harnessed to rebrand the Karoo as a dynamic and desirable destination. The paper also reflects on how these developments might redound to the benefit of local communities and flags some of the tensions occasioned by the intrusion of tourism into a relatively undeveloped region.

Introduction

This article records how the quality of nothingness, which characterises South Africa’s arid Karoo in the public mind, has been transformed in recent times from a perceived liability into a touristic asset. It seeks to show how this metamorphosis is being facilitated by creative tourism entrepreneurship, and speculates on what the impact of niche tourism, and specifically ‘astro-tourism’, might be for the local inhabitants.

The discussion commences with an analysis of how open spaces came to be venerated as integral to the nineteenth century Romantic movement, and introduces the concept of ‘the Sublime’ in nature. The early history of astronomy at the Cape is briefly summarised to contextualise current astronomical developments taking place in the Karoo. It is shown how neatly these initiatives dovetail with current government policies intended to

secure South Africa's participation in the global knowledge economy.

The paper then turns to a discussion of niche tourism which leads into an account of the recent rise in prominence of 'space tourism'. It is argued that this phenomenon opens the way for the Karoo to capitalise on 'astro-tourism', conceived of as an earthbound form of space tourism. Astro-tourism, if used as a lead sector, has the potential to activate a range of other niche tourism possibilities in the Karoo. The planned-for upgrading of roads could have the effect of establishing Sutherland as a portal to draw tourists from the Western Cape up onto the escarpment and into the interior.

Tourism entrepreneurs have shown themselves to be alive to the marketing possibilities held out by the motifs of 'nothingness' and 'space' and the article provides selective illustrations of this. The concept of 'Karoo space' is revealed as itself being multi-faceted in that it marries externals with thoughts and feelings evoked by the experience of the Sublime.

The article concludes with a short assessment of how astro-tourism might contribute towards the socio-economic upliftment of the Karoo communities affected by it. This is not so much an account of the usual benefits believed to flow from tourism (although these are not necessarily discounted), as it is an exploration of the more indirect means by which tourism may precipitate the creation of the human capital so essential to South Africa's participation in the knowledge economy.

The plenitude of 'nothingness'

The Karoo, given its marginal status, is well-served by a disproportionately large body of travel and fictional writing. The accounts of early travellers such as Campbell, Thunberg, Thompson, Farini and Lichtenstein (then, as now, often traversing the Karoo en route to somewhere else) are supplemented by scores of others still readily available in the Van Riebeeck Society series or in Struik's *Africana Collectanea*. While the ideological presuppositions supposedly contained within this body of writing have been subjected to stringent critique by Pratt (2008), there are scholars who bring an altogether different set of critical faculties to the genre (see for example Belich 2009, Sachs 2006, Schama 1995, Schoeman 2003). Suffice it to say of the 'hermeneutics of suspicion' (Gere 2009:170) that the interpretation and 'writing of history is largely a matter of what filters you use' (Porter 2009:8). Insofar as Karoo-based fiction is concerned, recent works by Galgut (2008) and Rosenthal (2004) have served to confirm Heywood's (2004:107) observation that 'numerous South African writers have found inspiration in

the Karoo'. These include Olive Schreiner, Pauline Smith and Guy Butler, to mention but a few.

In recent years South Africa's Karoo has come to acquire a definite cachet (see for example Deal 2007, Marais and Du Toit 2009, Naude-Moseley and Moseley 2008, Rogers 2008). Increasingly, the Karoo is regarded as having, in Richard Florida's words, an 'authenticity of place' (Florida 2002: 231,308). This stands in stark contrast with the view of earlier travelers to the Karoo. Charles Darwin, after an excursion to the edge of the Karoo in 1836 (James 2009: 5), said that 'he had never seen such an uninteresting country' (Browne 1995: 328); while a century later a contemporary tourist described the Karoo as 'one of the most forsaken and depressing spots on this earth' and as '... one of the most desolate places in the world' (Wright 1929:135). But since then, it is this very sense of *verlatenheid* (desolation), in an increasingly noisome and crowded world, that has come to feature as an attraction.

Throughout the world, open spaces now command a premium (Jamie 2008, Macfarlane 2007, UNEP 2006). While Europe's remote places become increasingly congested (Ousby 2002), the apparent emptiness of the Karoo semi-desert is becoming a significant attraction. As Peter Myles of the Nelson Mandela Metropolitan University's Tourism Research Unit has remarked:

Whenever I think of the Karoo and its body, mind and soul healing properties of silence, solitude and space (the three 'S's') then I am reminded of the hit song from Porgy and Bess, 'I got plenty of nothing and nothing is plenty for me'. There will come a time, if it is not here and now, when 'nothingness' will become a valuable commodity. (Karoo Space 2009)

Any celebration of space, even if it does not pointedly articulate it, draws on the *leitmotif* of 'the Sublime'. As Johnson (1991:158) explains: 'The connection between visual astonishment and the emotions – indeed between sight and spirit – had been perceived even in antiquity. Longinus defined it as a lifting up of the soul to ecstasy so that it took part in the splendours of divinity. Sheer size was clearly a major element in this process'.

John Ruskin said, 'Anything which elevates the mind is sublime, and elevation of mind is produced by the contemplation of greatness of any kind... [including] space' (quoted in Johnson 1991:158). In this regard it is important to note Marjorie Nicolson's observation in her seminal environmental text, *Mountain Gloom and Mountain Glory: the development*

of the aesthetics of the infinite, that we tend to ‘see in Nature what we have been taught to look for’ and to ‘feel what we have been prepared to feel’ (Nicolson 1997:1). The implication of this is that the apprehension of the Sublime, *qua* sublime, is a determined construct. Similarly, while the Karoo’s expansiveness and aridity are natural facts, its demographic profile is rather less so. This point will be returned to below.

The Romantic movement, with its origins in the late 1700s, saw the quest for ‘the Sublime’ being venerated, one might almost say fetishised, in a way that was quite new. Until then, areas such as the Alps, for example, had typically been experienced as fearsome, if not downright repellent (Nicolson 1977:18, Ousby 2002:101, Uglow 2002:138, Urry 2002:147). The Romantic poets, however, exalted the spiritual qualities of lofty mountain peaks. As Nicolson (1977: 25) puts it, ‘Imagination was learning to “feel through the eyes”’. Poets such as Coleridge and Wordsworth, in their compulsive ramblings across the English countryside, are described by Holmes (1989: 328) as ‘in effect inventing a new kind of Romantic tourism’ – one which was instrumental in making ‘the cult of mountain-tops, of spiritual communing with nature in her remotest places... a characteristic of Romanticism as a whole’ (Holmes 1989:324n). This new approach to unspoilt nature reads very much like the precursor to modern day backpacking (for which see Rogerson 2008): ‘Young men from the universities dressed as tramps and wandered over the countryside, staying at local inns, talking enthusiastically with “the common people”, hill-climbing, swimming, star-gazing and communing with nature’ (Holmes 1989:60).

JM Coetzee (1988:51) in a consummate analysis of the sublime in the South African context poses the question, ‘Why, at a time when the notion of the sublime had not exhausted its potency, was it not applied to the vast “empty” spaces of the hinterland?’ He corroborates the general perception, cited earlier, of the interior as a sterile, brown waste land (1988:52-3) and writes that, ‘the reclamation of this nameless wilderness... in the name of the sublime’ never occurred. Although this essay cannot hope to do justice to the many nuances of Coetzee’s argument, his claim that ‘in European art the sublime is far more often associated with the vertical than the horizontal’ (1988:54) is suggestive. Coetzee is primarily concerned with tracing the development of an aesthetic sublime as mediated by landscape, and as apprehended by the ‘botanical gaze’ (1988:172) of poets and artists conditioned by European ways of seeing and who are repelled by the ‘paucity of greens’ (1988:44) displayed by flat, rocky landscapes. He is

according little exercised by the possibility of a 'scientific sublime', discussed later in this paper, that is engendered by the immense upward sweep, and depth, of the astronomer's gaze.

According to Urry (2002:141-61) 'photography is central within the modern tourist gaze' which gaze had its genesis in the 'romantic gaze' – sight being 'viewed as the noblest of the senses'. Spatiality thus came to be packaged and 'consumed', in the touristic sense, and spatial novelties have ever since been experienced with delight (Johnson 1991:154-8), and photographed with enthusiasm, by modernising sensibilities (Robinson and Picard 2009). The element of *interiority*, stimulated by the apprehension of vastness, is important in understanding the new-found appeal of the Karoo. As Du Toit (2008) so aptly expresses it, 'All that space allows *you* space'. Humankind has always stood in awe of the celestial, from the ancient Egyptians' worship of the sun disc to the reverence with which the self-professed atheist and renowned cosmologist, the late Carl Sagan, invested the universe. In 1802 William Paley in his *Natural Theology* wrote that astronomy 'raises to sublimer views of the Deity than any other subject affords' and 'shows, beyond all other sciences, the magnificence of his operations' (Goodman 2008:191). This upwelling of religious feeling, of whatever form, in the face of immensity is well attested to and need not be elaborated on here.

Furthermore, the concept of 'space' provides a unique instantiation of a concept, namely infinity, which cannot be comprehended in thought (Kaplan 1999:218-9), but which can be visually appreciated. Never-ending space gives us a glimpse into infinite time (Chown 2007:148-9). We can experientially apprehend infinity, from within our subjectivity, without being able to 'fix' or circumscribe it in thought in the same way that we can with other visible objects. Thus it is that, in apprehending the cosmos, the infinite made manifest, we internalise it as the Sublime within our finite understanding.

This ability of the finite to represent the infinite to itself is the very wellspring of awe and wonder. As Chown (2007:258) remarks, it raises that most puzzling question of all: 'Why has the Universe given rise to matter that contemplates its surroundings and asks "why"?''. Consonant with Myles's sentiments expressed earlier, profound questions of this nature are readily suggested by the spatial depths of a region such as South Africa's arid Karoo. What is the immanence, the hidden 'palimpsest' (Hauser 2008:88, Schama 1995:16), that awaits decoding within this ostensible 'nothingness'?

The Karoo has increasingly come to serve as a *tabula rasa* onto which

authors, artists and journalists inscribe the products of their creative imaginations. While this is surely an inevitable development, it is one of the aims of this article to show that the *tabula rasa* is in fact a palimpsest, and that the apparent ‘emptiness’ of the Karoo is an imaginative blind-spot. Brooks (2000:64) has cautioned against just such a misrepresentation in the context of game reserves being construed as ‘natural’ spaces stripped of their ‘human historical context’. Since at least 180-million years ago, during the Early Jurassic period when what is now the Karoo was swampland teeming with pre-historic life (Rubidge 2009), through to the legendary migrations of the *trekbokken* (Roche 2005) so graphically described by Fraser (1922:14-15), the Karoo has never been ‘empty’ in the sense of the existentialist Neant. Even though it has usually been experienced in modern times as relatively thinly populated on account of its aridity (Coetzee 1988:182), there is abundant evidence of human settlement stretching back to the Stone Age more than a million years ago, with climatically-induced ‘boom and bust’ cycles sometimes resulting in periods of ‘extensive settlement’ by San hunter gatherers (Parkington et al 2008:83-101). In what has been characterised as ‘a guerrilla war stretching over generations’, by the early nineteenth century these original inhabitants of the Karoo were ‘slowly and surely being dispossessed’ and eliminated by *trekboers* (nomadic pastoralists) and colonists advancing north from the Cape (Schoeman 1998). They have bequeathed to posterity their rock art and engravings as a valuable source of national heritage (Morris 2003). These then are but a few dimensions of the adumbrated palimpsest that on closer inspection displaces the *tabula rasa* of the Karoo.

Astronomy at the Cape and the Karoo

The early history of astronomy in South Africa is dominated by the figure of John Herschel. Herschel was one of the most eminent scientists of his day – this to the extent of his being buried alongside Isaac Newton in Westminster Abbey (Buttmann 1970:12, Clark 2007, Holmes 2008). Herschel set out to complement his father’s mapping of the northern hemisphere’s skies by doing the same for the southern hemisphere. His observations at the Cape were conducted between 1834 and 1838 but took almost a decade to write up for publication, so voluminous was the data he collected.

Unlike the northern hemisphere, only a fifth of the path traced by the 30th degree of latitude in the south consists of land mass, the remainder being ocean (Evans et al 1969:xxiv). In an interesting anticipation of the current

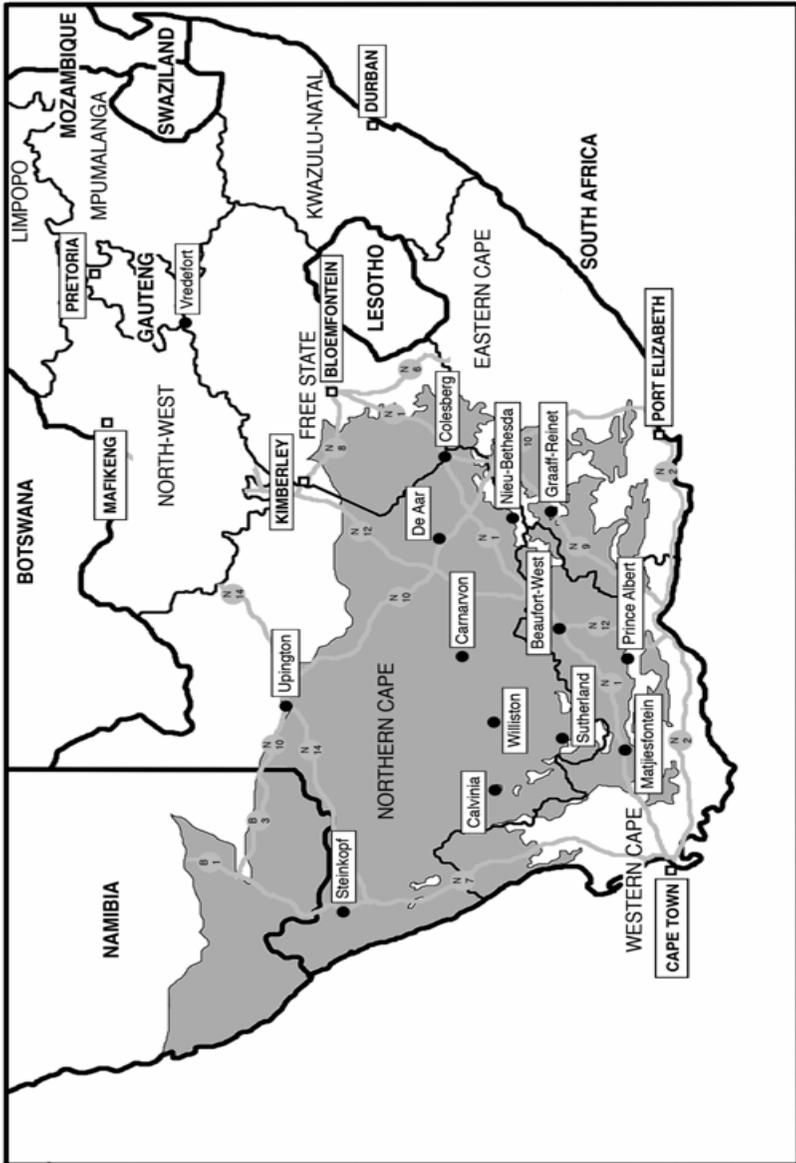
competition between South Africa and Australia for the Square Kilometre Array (SKA) bid, which is described later in this article, Herschel had to choose between Australia and South Africa to establish his observatory. He fortunately (for South Africa), decided on the Cape because of its better amenities – a Royal Observatory had been established in 1820 – and his presence there served as a drawcard for many distinguished travelers (Warner 2009). By word of mouth, the reputation of Cape Town as a scientific destination grew steadily (see for example Browne 1995: 328-30 and Goodman 2008).

Herschel was fulsome in his praise of observation conditions at the Cape: 'The tranquility of the images and sharpness of vision is such that hardly any limit is set to magnifying power' (Buttmann 1970:90). Consequently, he presented the world with a number of 'masterpieces of celestial topography' (Buttmann 1970: 98). It helped that Herschel truly loved the Cape and wrote well of it to his many connections (Evans et al 1969) and by the time his magisterial research was published in 1847, Cape Town was on its way to becoming a significant scientific destination.

This momentum was not lost and many major observatories were erected throughout South Africa over the years. Numerous foreign institutions (Yale, Harvard, Leiden, Radcliffe, Michigan) came to maintain stations in the country (ASSA 2005:99). South Africa became a 'space destination' of note.

The scientific heritage bequeathed by John Herschel lives on in South Africa's Astronomical Observatory (SAAO). Its purpose is to conduct fundamental research in astronomy and astrophysics by providing a world-class facility and by promoting astronomy and astrophysics in southern Africa (SAAO nd.). This function is integral to the 'Ten-Year Plan' adopted by South Africa's Department of Science and Technology (DST 2007) and which is outlined in more detail below. Although the SAAO's administrative and computing facilities are still based in Cape Town, the increasing problem of light pollution in urban areas necessitated the relocation of SAAO's observational functions to a clearer, darker site. The Karoo town of Sutherland, situated at an altitude of 1,759m, was selected as the site for the new observatory. Sutherland's unique combination of topographical and meteorological attributes makes it one of the best astronomical sites in the world. The main telescope was installed at Sutherland in 1976. Initially, the effect on the commerce of the town itself was limited, since the observatory was never intended as a tourist attraction. But with the advent of the Southern African Large Telescope (SALT) in 2000 all this was set to change.

Figure 1: Southern Africa with the Nama and Succulent Karoo biomes merged



SALT, the largest single optical telescope in the southern hemisphere, gathers 25 times as much light as the previous largest African telescopes. It not only allows astronomers to probe the depths and origins of the universe, but also to explore various 'extreme environments' (SALT nd). This is strategic in the light of the South African Government's research focus on climate change (DST 2007). Construction of the telescope was started in 2000 and completed in 2005, at a total cost of some US\$32-million, including instruments. Foreign universities participating in SALT-based research are drawn from Germany, New Zealand, Poland, the USA, and the UK. Sutherland also has a 'twinning' arrangement with Fort Davis in Texas.

Recent investments in astronomy are expected to promote a range of developmental goals. Consequently, the 'SALT Collateral Benefits Plan' focuses on:

- Ensuring the advancement of the economy, technology and society;
- Providing educational and training opportunities;
- Enhancing science education and awareness throughout South Africa;
- Developing technology infrastructure, edu-tourism and educational facilities; and
- Extending the benefits of astronomy and space science to the rest of Africa.

In addition to SALT, a new initiative is the creation of a Square Kilometre Array (SKA) facility, which will monitor cosmic background radiation. SKA is a truly international initiative involving 24 institutions representing 12 countries from the developed world. In an intriguing echo of John Herschel's choice of a South African facility, the SKA project bid will be decided between Australia and South Africa in 2012, and is scheduled for completion by 2020. This project will involve the erection of some 4000 satellite dish antennae. It is envisaged that data from these dishes will be processed at a central site in Cape Town. In the meantime, until the bid has been adjudicated, the MeerKAT (Karoo Array Telescope) will function as a precursor phase of SKA.

A site 95km north-west of the Karoo town of Carnarvon has been selected for MeerKAT. The site was identified precisely because of its remoteness, in the very middle of the huge Central Astronomy Advantage Area. MeerKAT will involve 80 dishes of 12-metre height and is an integral component of the preparation phase (PrepSKA) for the awarding of the bid. In the event of South Africa winning the SKA contract, MeerKAT will be incorporated into

SKA but it could also function as a stand-alone installation in its own right (Brits 2008).

As is the case with SALT, MeerKAT is also expected to promote local developmental goals. In 2007, the Free State University's Centre for Development Support (CDS) conducted a socio-economic baseline study in the towns of Carnarvon and Williston, in order to gauge the degree to which SKA could be instrumental in uplifting local communities.

One of the substantial 'collateral benefits' that SKA will confer on Williston and Carnarvon is that residents will reportedly be able to 'piggy-back' onto a state-of-the-art wireless telecommunications system transmitting data from the satellite dishes to Cape Town. These towns will become more attractive to entrepreneurs and investors, and will enable the farming community to access international markets more effectively by means of internet connectivity. This eventuality has already begun to be factored into local property prices. Another effect will be the promotion of sorely needed computer literacy in the schools of Carnarvon and Williston.

The Karoo is becoming an increasingly important 'space science destination'. The Department of Science and Technology (DST 2007) has released a blueprint for accelerating progress towards a 'knowledge economy' in South Africa. The document, entitled *Innovation towards a Knowledge-based Economy – Ten Year Plan for South Africa 2008-2018*, highlights five 'grand challenges'. These are focus areas that the country must address in order to participate meaningfully in the global knowledge economy. One of these challenges is 'space science and technology' (DST 2007:11). (The others are: the bio-economy; energy security; climate change; and 'human and social dynamics'.) The Department claims that progress in these areas will be based on three foundations: technology development and innovation; human capital; and knowledge infrastructure.

From this it follows that the human capital the country so vitally needs might ideally be nurtured within those schools fortunate enough to be situated in the neighbourhood of these world-class astronomical facilities. It is the stated intention of the institutions involved with SALT's Collateral Benefits Plan, and SKA, to strengthen local communities by contributing in this regard. As Kahn et al (2007:185-6) point out, not only has the higher education system in South Africa remained 'essentially stuck' since 1991 in terms of research publications, but 'the school system is also "stuck"', with respect to mathematical proficiency. To enable South Africa to hold its own in the knowledge economy, the Karoo's SALT and SKA programmes present

a golden opportunity to revive scientific literacy.

Astro-tourism as a form of niche tourism

In addition to scientific education, scientific 'niche tourism' is also likely to follow in the wake of SALT and SKA. Such tourism can play a significant role in the DST's (2007:23) stated desire 'to support the public understanding of and engagement with science'.

In the American mid-West, during the tornado season, 'storm-chasers' equipped with sophisticated meteorological tracking devices, criss-cross the heartland in search of 'twisters' (Hancock 2008). A week's 'twister hunt' costs the tourist around US\$ 3,500 a head. When one such enthusiast was asked what his motivations were for signing up for such an activity he replied, 'The experience – I've seen everything else'. Duval (2005:214) cites the cathartic attraction of 'the risk element' so often sought by tourists. To fly so close to these tempestuous cauldrons of chthonic fury is to apprehend nature at its most terribly majestic – at source so to speak. And whether this source be conceived of as secular, pagan or divine, it too is evocative of 'the Sublime'.

'Twister chasing' is a prime example of a novel form of 'niche', or 'alternative,' tourism. This is a field which has attracted much scholarly attention in recent years (Novelli 2005). In South Africa too, a number of variants such as 'casino tourism', 'festival tourism', 'second homes tourism', 'gay tourism' and 'township tourism' are coming into prominence (Rogerson and Visser 2004, 2007). According to Robinson and Novelli (2007:1), 'The concept of "niche tourism" has emerged ... in counter-point to what is commonly referred to as "mass tourism"'. The word 'niche', as used in this context, has its origins in the field of ecology. Robinson and Novelli (2007:4) explain that it 'refers to an optimum location, which an organism can exploit in terms of resources in the presence of its competitors'. This chimes well with the Karoo's astral assets, and describes a competitive advantage over the light-polluted Cape Town metropolis, from which the Karoo primarily draws its tourist clientele. This development is echoed by Duval (2005:217) who cites 'substantial rates of visitation to specific tourist attractions centred upon astronomically-related educational themes'.

Niche tourism usually offers a degree of specialisation, and this often requires on-site experts, such as shark specialists, botanists, astronomers, gurus, game rangers, or authors-in-residence. These specialists *mediate* the niche to the tourist. This naturally creates a gap for innovative individuals

to carve out a 'livelihood niche' for themselves within the tourism industry. This is now happening in relatively remote areas such as the Karoo where the scope for self-employment has hitherto been very limited.

For those who wish to participate in the burgeoning interest in space, astro-tourism provides the answer. This is a 'lead' niche that the Karoo is ideally poised to exploit, and which it can leverage to promote a number of other synergistic niches within its regional 'portfolio'. These include geotourism (Hose 2005); transport or railway tourism (Hall 2005); research tourism (Benson 2005); volunteer tourism (Callanan and Thomas 2005); palaeo-tourism (Rubidge 2009); botanical tourism, eco-tourism, genealogical tourism, birding, literary tourism (Ousby 2002, Ingle 2008); 'wellness tourism' (du Toit 2008); festival tourism (Visser 2007:110-7); heritage tourism (Donaldson 2007); and very many more.

For star-gazing, the best practice is to go where there is as little artificial light as possible. According to Fairall (2006:5), the vast expanse of the Karoo offers ideal opportunities: 'That is where we astronomers migrate to when we want to study the stars nowadays'. Van Rooyen (2007) also finds that increasing numbers of star-gazers are making their way to the Karoo, especially the Sutherland area. With increasing numbers of tourists gravitating to the Karoo, astute entrepreneurs have relocated there to offer them what they want. As Novelli and Benson (2005:249) have recognised:

Private entrepreneurship seems to be a key player in niche tourism, with the establishment of SMEs based on the local resources available, often responding to the interests of an identified market segment... [and] aspiring to local development in a sustainable manner.

Nowhere has this phenomenon been better exemplified than in Sutherland during the last decade.

Astro-tourism offers a sort of 'draw-down space' and funnels the cosmos into a peephole to be 'consumed' by the tourist gaze (at a price). Barriers to entry can be fairly high (as befits the *niche* concept) with the result that it is not so easy for competitors to jump on the bandwagon. Location is critical and although the night skies can of course be observed with the naked eye, the whole point of the astronomical quest is to see ever deeper into space. To this end, the better one's equipment the pricier, and the less portable, it is likely to be. The range of telescopes and other accessories such as pointers, eyepieces, filters, and collimators is formidable (ASSA 2007) and it is apparent that some specialist expertise and guidance is critical to any astro-tourism product. This knowledge must also be commensurate with the

power of the guide's equipment, so that the guide can interpret what is viewed. The escalating expense of this magnifying power serves as a very effective bar to keep less-committed operators on the sidelines.

Van Rooyen (2007:13) reports that 85 per cent of visitors to Sutherland 'travel from the Western Cape for a breakaway'. The road between Sutherland and Matjiesfontein, which is located on the N1 highway that links Cape Town with the interior, is tarred. But other roads radiating from Sutherland are gravel roads of variable and uncertain quality, and this is a serious disincentive to travelers to penetrate further into the Northern Cape. Fortunately, the Namakwa District Council plans to address this deficiency in the near future. A tar road between Sutherland and Calvinia would encourage tourists to venture further north in the direction of Williston and Carnarvon, both of which are expected to benefit from the SKA installation to their north, even if not quite to the degree that Sutherland benefits from SALT.

The establishment of such an 'astro' route is eagerly anticipated by tourist operators within the SKA 'footprint'. The space motif has already been taken up with the inception of the Vlieënde Piering [Flying Saucer] Guesthouse in Williston (see Deal 2007:146-7). An obvious ploy for the provincial tourism authorities to resort to, in collaboration with the neighbouring provinces, would be to encourage astronomically inclined visitors to wend their way further inland, either to the Vredefort Dome in the northern Free State, or, in time, to a NASA facility that is being contemplated in the vicinity of Steinkopf in northern Namaqualand. Again, the establishment of a 'meteorite trail' might be an option with Graaff-Reinet's 640m wide Kalkkop Impact Crater, formed 200,000 years ago, serving as just one of the more salient ports of call.

The role of Sutherland as a portal to draw tourists from the Cape tourism mecca should facilitate the simultaneous promotion of the many other forms of niche Karoo tourism mentioned earlier. This would also address the problem of 'the uneven tourism space economy' (Visser 2003) – an issue which was highlighted for South Africa as far back as 1936 with the undue concentration of tourists in the Cape Peninsula (Norval 1936:130).

On a much more ambitious scale, the Karoo is also well suited to the construction of a 'spaceport' in order for it to participate in sub-orbital space flight - a new trend in space tourism which will be launched commercially by Virgin Galactic in 2010. The company's founder, Richard Branson, is pioneering the world's first custom-built spaceport in the arid, thinly-

populated, and relatively poor American state of New Mexico (Branson 2007: 200-15, Kemp 2007: 148-63). If one considers that the main requirements for a spaceport are:

- Restricted airspace from the ground to infinity, to create a natural pathway into orbit;
- High elevation which lowers the financial costs for vertical rockets and increases payload capacity;
- Sparsely populated surroundings to minimise insurance and risks;
- Clear bright sunny days;
- Dry air to minimise corrosion; and
- Securing an anchor tenant,

one wonders whether the Northern Cape provincial government might not be well advised to sound out the possibilities for a spaceport north of Sutherland.

The provision and upgrading of transport infrastructure presents a conundrum, however, which is central to development discourse and it would be a mistake to think that such tourism-friendly developments are necessarily regarded by local inhabitants as an unalloyed blessing. Some welcome improved access as precipitating economic growth, others see it functioning as a Trojan Horse that will destroy the social fabric. As experience with World Heritage Sites has shown, fragile environments can be ruined by dramatic increases in tourist numbers (Parkington et al 2008: 123-4). Rubidge (2009) also records a number of closely related such dilemmas occasioned by the rise of palaeo- and ecotourism in the Karoo. Plainly put – at what point does ‘development’ (and here one must include the promotion of tourism) harm precisely those in whose ostensible interests it is being given effect to? And where it is the environment that is at stake, at what point does development, like mustard gas when the wind blows, turn upon itself and irrevocably damage its ‘capital base’ (Porter 2000: 315-9)?

Robertson (2005) has posited an ethos of Epicurean materialism (ie a lifestyle of refined, sensuous pleasure-seeking directed at happiness) as having been ‘the midwife of [the] political economy’ that stimulated the Enlightenment. Is it too fanciful to detect a version of the same principle at work informing tourist development in arid South Africa? Just as Cock (2008) has argued that the proliferation of ‘apparently harmless’ golf courses in South Africa is fomenting a class-based ‘social polarisation’, it could be objected that the poor of the Karoo are being ‘fixed’ in their social stratum

by dint of their unwitting recruitment to a picturesque, rural *mise en scene* that commodifies poverty as something to be 'consumed' for the voyeuristic delectation, if not the actual *schadenfreude*, of a more privileged class (Cohen and Manspeizer 2009). This is an issue that has haunted the touristic sensibility since the heyday of the Grand European Tour when British travellers were confronted with hitherto unimagined levels of human misery in sublime Switzerland (Hilton 2002).

The challenge facing development in the Karoo is successfully to negotiate the above dichotomies. These may lie coiled, like Blake's 'invisible worm', at the heart of development initiatives and tourism is especially prone to exhibiting a crass lack of concern for the 'collateral damage' it can leave in its wake.

Nothingness, emptiness and space as a marketing motif

The negotiation of spatiality is so intimate a part of human beings' sensory apparatus that marketing 'space' might at first sight seem as redundant as marketing 'gravity'. But recent years have seen considerable sums invested in creating three-dimensional virtual experiences. There are now many computer applications that require a 'virtual reality' environment, and rise of the the computer games industry has been meteoric. Indeed, 'virtual tourism' (Arnold 2005) capitalises on advances in virtual reality technology by bringing images and 3-D simulations, into armchair tourists' homes (Hall 2005:92). The supply of pay-per-view, real-time, webcam telescopic images of the night skies is an obvious candidate for commercial exploitation in the present context.

The hospitality industry in the vicinity of Sutherland has not been slow to capitalise on the region's associations with astronomy. Van Rooyen (2007:14) finds that in 2006 an average of 865 people visited the SALT site every month, even though telescopic viewing using the SALT facility itself is not available to the public. Several restaurants and guesthouses have resorted to stellar imagery in naming their establishments – this includes *Skitterland* B&B, Jupiter Restaurant, *Sterreland* camping site, and Southern Cross B&B. The latter advertises its 10-inch telescope as an attraction (ASSA 2007). The *Kambro Kind* guesthouse offers very sophisticated observation facilities and hosts parties of up to 200 stargazers at a time. At the last count, Sutherland had more than 25 accommodation establishments, a very far cry from the situation in the late 1990s. The town is now in a position to host major conferences such as that of the Arid Zone Ecology Forum

(AZEF) in September 2007. This would have been unthinkable just a few years previously.

Stargazing is however by no means restricted to Sutherland (Fairall 2007). The Prince Albert Observatory caters for accommodation and hosts stargazing evenings (ASSA 2005:104) and a number of guest farms maintain their own equipment or operate in partnership with private 'Starmasters'. These star guides cater for everything from telescope sales to formal lectures and 'astronomical events'. Many farms offer 'astrophotography' as a niche activity. The economic multipliers attached to such packaged attractions are manifold, including the knitting of 'beanies' to guard against the cold, the provision of meals, and the design and maintenance of webpages. This offers opportunities for a host of diverse entrepreneurs.

Palaeontology, which resonates so well with 'deep time' (Rubidge 2009), is an obvious adjunct to astronomy and several Karoo establishments now offer lectures and excursions conducted by professionals in the field.

The images, puns and metaphors offered by the associations triggered by 'space' and 'stars' are a copywriter's dream come true, with endless latitude for wordplay. This is understandable because spatiality is so intimate a dimension of human experience that language is thoroughly imbued with metaphorical allusions to it. Western culture with its ongoing fascination for celebrities similarly provides for puns on 'star'. Marketers in the Karoo can have a field day with celestial themes - from 'reaching for the stars', to 'the sky is the limit'. Sales slogans such as 'sleep with the stars tonight' or 'experience a bit of heaven on earth' have become commonplace.

The figurative interplay between windy spaciousness, and celestial space as symbolised by the satellite dish, is brilliantly captured, in its visual aspect, in Figure 2 (below). The perspective of the photograph allows the windmills to mimic the air of open, expectant, poised listening suggested by antennae dishes.

Figure 2: Karoo farm windmills (photo: Chris Marais <http://www.karooospace.co.za>)



Space is infinitely plastic and malleable (Chown 2007, Massey 2005) and can be configured to yield myriads of possibilities. There are three dimensions to the concept of 'Karoo Space' – the exterior; the stellar; but also the *interior* as mediated by the notion of what Neeley (2001:38-43) refers to as 'the scientific sublime': a 'blend of aesthetic, religious and scientific elements'. In some sense, niche tourists are also exploring *themselves*; there is an interiority to the extending of one's personal horizons (see Sachs 2006:32, Sennett 2008:209). This is a phenomenon which is characteristic of niche tourism, and that is not necessarily implicit in the mass tourism experience.

Unlike some other parts of the world which can also boast of vast open spaces, the Karoo is fortunate in that it has very many good guest farms, and many pleasant small towns that are within easy driving distance of one another. These serve to furnish the tourist with a nodal network of comfortable overnight destinations. Mongolia, by way of contrast, is singularly ill-endowed to offer any such comforts outside of its capital (Carr 2006), and the Australian Outback (which boasts of the 'longest short-cut in the world' linking Perth with Brisbane) presents much more formidable distances between towns.

Although the Karoo is still sparsely populated it is no ‘empty meeting ground’, to adapt a trope from MacCannell (1992), and scarcely a month goes by without a Karoo feature in one or other of South Africa’s many ‘lifestyle’ magazines. During the last decade, very many new books on the Karoo have been published ranging from the scholarly (Beinart 2003) to the anecdotal (Biggs 2004), from the metaphysical (Osler 2008) to the decorative and the practical (Fagan 2008, Willis 2008). Many of the more tourism-directed publications still draw on Lawrence Green’s influential *Karoo*, published in 1955. The impact of this work, as Deal makes clear in his personal homage to Green (Deal 2007:10), has been profound, and the Karoo tourism trade is fortunate in having such a perennial work with which it can promote the region.

Potential benefits of astro-tourism for local communities

The challenge of extending the economic benefits of creative entrepreneurship to the poor is not met by simply providing people with jobs. As Florida (2002:321) has it: ‘Employing millions of people merely to do rote work like pushing brooms... is a monstrous waste of human capabilities’. Human capital needs to be developed to realise its potential and part of this process must be a drive towards personal fulfillment. Creative work adds value, pays well and is rewarding.

This is a daunting challenge, but it is where the educative aspects of tourism, and of the collateral astronomical programmes alluded to earlier, could play a major role. It is a commonplace that the Latin etymological root of the word ‘education’ means ‘to draw out’. One way to achieve this is through example, inspiration and the exposure to new ideas. As John Stuart Mill recognised, over 150 years ago, new remedies need to be sought for people living in poverty:

‘It is hardly possible to overrate the value, in the present low state of human improvement, of placing human beings in contact with persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar. Commerce is now what war once was, the principal source of this contact...’ (quoted in Reeves 2007:208)

It might not be too much of a liberty to adapt this to say that, in the twenty-first century, the tourism industry has become what commerce once was.

The construction of transport networks is a major factor in promoting all manner of economic sectors, tourism included. This has been repeatedly demonstrated in history. Johnson (1991:182-4) shows how the advance of

modernity in Wales was greatly accelerated by its much improved links with England, brought about through the Holyhead-London road built by the engineer Thomas Telford. Similarly, the contemplated upgrading of the roads in the Sutherland-Carnarvon area should have a stimulatory effect on tourism and Local Economic Development (LED), and this could profoundly affect the development of the local populace.

Quite apart from the educational programmes for schoolchildren envisaged by those agencies involved with SALT and SKA, the productive potential of the kind of social contact these initiatives will entail, in terms of project personnel and increased tourist numbers, should not be underestimated. Sentiments similar to those of John Stuart Mill are expressed by contemporary tourism analysts. Shaw and Williams (2000:28-29), for instance, point to the benefits of 'host-guest interactions which potentially bring cultures face to face', and add that, 'even if the effects are moderated by the existence of tourism enclaves... [tourism] implies transfers of consumption patterns, values, and lifestyles across international boundaries'. To these transfers one might add aspirations, expertise, and modern skills. Tourism can help break down social insularity and foment the sort of eclecticism, and tolerance of difference, that Florida (2002) finds animates his 'creative class' set.

Although the Northern Cape lacks a university, it has recently established a National Institute of Higher Education (NIHE) brought about by a programme of restructuring of university education (Atkinson 2007:34). The NIHE is a collaborative institution involving the University of the Free State, the University of the Western Cape, the University of South Africa, and the Vaal University of Technology. The presence of NIHE, together with the SALT and SKA projects, may precipitate the formation of a Silicon Valley-type cluster of high-tech scientific energies (Florida 2002) focused on the province's extreme south. This, in turn, could assist the NIHE in ultimately securing a regional university for the Northern Cape. The natural environment of the Karoo could become much more productive if it were supported by the economic and social multiplier effects of a vibrant 'space research tourism' sector. To this end, it is encouraging that the Northern Cape Member of the Executive Council responsible for tourism announced funding for the 'development of a science visitor centre in the Karoo to create a niche tourism offering' (Saaiman 2008). The tender for this project has since been awarded to a local engineering company.

The space industry is regarded by many as the next 'new-generation' sector on the cusp of 'lift-off' (Diamandis 2007, DST 2007, Musk 2009) and

it is believed that its cost structure will shadow that of the Information Technology (IT) industry where the mainframe equivalent of a standard laptop would have cost several million Rand just 30 years ago. Given the rise in profile of activities related to space exploration, in combination with the major developments associated with SALT and SKA outlined above, the people of the Karoo could hardly wish themselves better placed to benefit.

Conclusion

The Karoo is increasingly being valued as providing a bolthole from the noise and clamour of modern day life. This article has explored some of the fertile ambiguities of ‘space’ insofar as these find expression in promoting tourism in South Africa’s sparsely populated Karoo. It has looked at how landscape and wilderness came to fire the romantic imagination with intimations of ‘the Sublime’ and at how spatial perspectives became integral to the modern tourism industry.

The Karoo *zeitgeist* has been fundamentally informed by spatial and astronomical themes. The remote Northern Cape Karoo is heir to a proud astronomical heritage which is continuing in prestigious international collaborations such as SALT and SKA. These initiatives are seen as being eminently compatible with government efforts to imbue society with a culture of scientific literacy. Furthermore, the innovativeness with which tourism operators have positioned themselves, in the slipstream of these projects, has led to an astro-tourism niche, which could, in turn, serve as a catalyst for a whole range of subsidiary niche tourism enterprises in the Karoo.

Paradoxically enough, it is for the very reason that ‘nothing *happens*’ (Kaplan 1999:175-89) in the pristine Karoo that a great deal by way of scientific investigation of the universe is happening there now. This has brought in its train a burgeoning niche tourism industry that revels in the metaphorical allusions associated with space, wilderness and with stargazing. Quite apart from the need for these developments to alleviate the poverty and social dysfunction that prevail in so many small Karoo towns, the challenge is now the age-old one of ensuring that the Karoo does not become a victim of its own success. Somehow in the midst of its having been ‘discovered’ (or should that read ‘invented’?), that which attracts space agencies and tourists to the Karoo in the first instance has to be preserved.

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