



Viewpoint

A Viewpoint of Personal Aesthetic Preferences and Aesthetic Education, Landscape Theory and Survival in the Kalahari Region of South Africa: Implications for an Authentic Contemporary Curriculum

Jannie Pretorius and Okkie Combrinck, University of the Free State;
and Stephan du Toit, Australian Catholic University, Sydney, Australia

Abstract

In this study the authors explore the evolutionary origins of their personal innate landscape preferences and connect these to some of the prominent elements of current landscape theory. By considering their personal preferences for aesthetically pleasing elements of the landscapes of the Kalahari region of South Africa, the authors present a personal interpretation of what aesthetic education might have required from their ancestors in prehistoric times and what this might imply for educationalists in the 21st Century.

Keywords: Landscape theory, aesthetic preferences, aesthetic education, survival, Kalahari region of South Africa

Introduction and Aim of Study

This paper explores the evolutionary origins and development of humankind's aesthetic preferences and education. The main hypothesis guiding this paper is that humankind's aesthetic preferences had their evolutionary origins in the Pleistocene (between 2.5 million and 11 700 years ago). These preferences would have developed because of our ancestors' ability to decide whether specific habitats or landscapes would sustain them or not; therefore enabling them to reproduce and raise their children. The argument presented to support this hypothesis is simple and strongly convincing: The habitat that sustained our prehistoric ancestors became aesthetically pleasing to them. If they made the right habitat choice, they survived. If they made the wrong choice, they died and would therefore have been unable to produce offspring.

The hypothesis introduced above is called the 'The Savanna Hypothesis' and it was developed by researchers including Jay Appleton, Roger S. Ulrich, Stephen and Rachel Kaplan, Gordon H. Orians and Judith H. Heerwagen (Ruso, Renninger & Atzwanger, 2003:280–1, 284; Dutton, 2009:19). Dutton formulates the hypothesis as follows:

Orians put forward a general account of the kind of ideal landscape that human beings would find intrinsically pleasurable. In his formulation, this landscape has much in common with the savannas and woodlands of East Africa where hominids split off from chimpanzee lineages and much of early human evolution occurred; ... The ability to recognise this preferred habitat was embedded in the human gene pool and was (and is) presented in humankind's universal artwork of choice: the landscape painting. [See Figure 1.]

Figure 1. Dutton (2009: Illustration 2): ‘Grand landscapes, such as Frederick Church’s *Heart of the Andes* (1859), tend to use patterns of varied open spaces and forested areas, water, and a path that appears to lead intriguingly into the distance. The worldwide attraction of such landscapes even today is very likely an evolved trait.’



Briefly, this landscape type includes these elements:

- Open spaces of low (or mown) grasses interspersed with thickets of bushes and groupings of trees;
- The presence of water directly in view, or evidence of water nearby or in the distance;
- An opening, in at least one direction, to an unimpeded vantage on the horizon;
- Evidence of animal and bird life; and
- A diversity of greenery, including flowering and fruiting plants (Dutton, 2009:19, 20).

Orians and Heerwagen (1992:556–557) suggest that, to understand the importance of habitat selection to our hunting and gathering ancestors, one should go on an imaginative camping trip that lasts a lifetime:

You wake up one morning with an empty stomach and an empty cupboard. It is time to move on. Clouds on the horizon indicate that it has rained for many days in that area, and this is where you will head to look for food ... The small band of adults and children gradually begins the long hike across new terrain ... They discuss the route they should take, recalling where they found the best berries, fruits, and leafy greens last year.

Taking the above into consideration, we have formulated the twofold aim of the paper:

- To personally contemplate what habitat selection and survival in prehistoric times was all about; to appreciate the five elements that might have determined the habitat selection and survival of this imagined small, rather vulnerable group of prehistoric people; and
- To comprehend how they might have educated their children to survive in a rather hostile environment.

To achieve this aim we needed to consider what habitat selection and survival in prehistoric times was all about by connecting our personal aesthetic preferences to the five elements of an ideal landscape. One would have to spend some time in a comparable environment to accomplish this aim. But where would one find a suitable savannah region?

The Kalahari in southern Africa is just such a region, and includes the following sections: the eastern parts of Namibia, the north-western parts of the Republic of South Africa, the biggest part of Botswana, parts of Angola and a large part of western Zimbabwe (Erasmus, 2004:142). We needed experiences in the savanna of Africa to establish personal connections with modern landscape theory. But where in the vast Kalahari would we find a suitable landscape for our endeavours?

Setting the Scene

Koos Becker is a farmer and longstanding friend of the first author and agreed (Becker, 2010, 2012) to act as our host for the two visits. He owns three large Kalahari farms approximately 120km to the northeast of Upington in the Northern Cape Province of South Africa (see Figure 2). Koos lives here with his wife Vinie and their two adult sons Stephan and Burger. A visit to the Kalahari by the first author in July 2010 was followed by a more extensive one by all three authors in July 2012.

Koos also promised to share his knowledge of the animals and plants of the veld. This was a huge bonus, since he was born and raised in the Kalahari. Koos said that we could hunt for some springbuck to make biltong (salted, dried elongated pieces of meat enjoyed by many South Africans).

This final piece of our Kalahari puzzle fell into place, adding a very special dimension to our visit. We could hunt for food much like our prehistoric ancestors did; even if it was with a rifle and not primitive weapons. Here we could experience some of the realities of our prehistoric ancestors.

Figure 2. Exactly what we needed: ‘open spaces of low (or mown) grasses interspersed with thickets of bushes and groupings of trees’ (Dutton, 2009:19).



An Interpretation of Landscape Theory, Survival, Aesthetics and Aesthetic Education

We have structured our personal interpretation of landscape theory, survival, aesthetics and aesthetic education in the Kalahari per the five elements of an ideal landscape that appear in the introductory paragraphs. We will now consider our personal aesthetic preferences – what we consider to be beautiful in the Kalahari landscape – and embed them in the five identified landscape elements. In the process, we will highlight the possible implications of these considerations for aesthetic education in ancient and modern times, as well as for ancient and contemporary curricula.

Elements of an Aesthetic Landscape in the Kalahari and the Possibility of Prehistoric Aesthetic Education

The shape of savannas

According to Dutton (2009:20), high-quality savannas are characterised by *Acacia tortilis* or umbrella thorn, a spreading tree that branches close to the ground: ‘A climbable tree was a device to escape predators in the Pleistocene, and this life-and-death fact is revealed today in our aesthetic sense for trees (and in children’s spontaneous love for climbing them).’

In the Kalahari our preferred tree for jumping into when running away from a dangerous animal would be the camel thorn, or *Acacia erioloba* (see Figure 3). The branches of this tree are close enough to the ground for us to reach (see Figure 4).

Figure 3. A group of camel thorn trees, *Acacia erioloba*¹



Figure 4. Branches close enough for us to reach



The admiration and personal affection that we feel for the camel thorn is difficult to explain without getting too sentimental about it. Are they part of our innate landscape preferences?

Evidence of animal and bird life

During one of our visits to the veld, Koos pointed to springbuck tracks leading to a small camel thorn (see Figure 5).

Figure 5. Springbuck tracks leading to the pods of the camel thorn



Figure 6. A springbuck feeding on nourishing camel tree pods



He explained that, because the wind had been blowing strongly overnight, many pods had dropped on the sand. The tree, in order to have its seeds distributed, packs its pods with nourishing proteins – 11.4% rough protein in the pods and 33% in the seeds – and lures the antelopes into eating them, disseminating the seeds elsewhere, so they might germinate and develop into a new tree (Venter & Venter, 2009:18).

Shortly after Koos's explanation, we indeed saw a springbuck feeding on the pods under a camel thorn tree (see Figure 6). To us, this was very interesting, since this might be exactly the kind of information one would share with your children if you wanted to educate them to survive in the Kalahari. This would have been a key element of the prehistoric Kalahari

curriculum. The prehistoric man, looking for a suitable place to set his snare or wait for an antelope to shoot with his bow and arrows, would improve the survival rate of his tribe if he knew this.

By pointing out the tracks in the beautiful red sand of the Kalahari, Koos has made us aware of the multitude of other tracks and signs of life, like the dry droppings of antelope (see Figure 7) in the sand.

We gradually developed this impression: the sand of the Kalahari is like a huge canvas, with animals, humans and plants all ‘painting’ on it (see Figures 8 and 9).

Figure 7. Dry droppings of an antelope; clear indications of animal life



Figure 8. Nature’s canvas, evidence of animal, insect and bird life



Figure 9. A tapping beetle creating a small work of art in the sand



Because of the wind, these small artworks are only temporary, but they have fascinated us as they must have fascinated our prehistoric ancestors. Because each set of tracks could lead to a potential food source, we believe they would have captured the attention of our ancestors, triggering their imaginations. The Pleistocene people, by following these tracks and the other signs of life, by interpreting them, by educating their children about them, have survived for millennia in the Kalahari.

Hidden water

One might argue that, because of the almost complete absence of permanent surface water in the Kalahari, the region might not be unable to sustain human populations. This would be an erroneous argument since the Kalahari has supported human populations for thousands of years. The indigenous San people, for example, have followed the herds of antelopes during their seasonal movements and they have collected tsamma melons (*Citrillus lanatus*) to provide them with water (see Figure 10). The tsamma (San word meaning ‘speckled water’) contains a juicy meat with a water content of up to 90% (Steyn, 1984:58) and can remain unspoiled on or in the sand for months, ready to supply people and animals with water during the dry winter. The San stored these valuable fruits in holes dug by animals in the sand, and in the trees on their routes to provide them with water on their return.

Figure 10. Life sustaining water reservoirs in the Kalahari – tsamma melons



San people would have made mental maps of the positions of the tsammas over great distances, and interpreted animal tracks, the weather and all the other components of their landscapes. They also would have needed to educate their children about these things, which might be the origin of the educational experience. For the Pleistocene people, just one misinterpretation of a set of tracks, or one mistake in the interpretation of predator behaviour, might have been enough to threaten their chances of survival. Education in prehistoric times was a matter of life and death. Anyone who did not grasp the importance of education in the realities of the Kalahari did not survive, and did not reproduce. The content of the Kalahari curriculum has received meticulous and ongoing attention. It was never written down, but such was the importance of every detail, that the omission of even the slightest scrap of information might have been fatal. These arguments are probably supported by what Schadenberg (2002:11) said in 1959 about the indigenous San of the Kalahari: ‘The San are a highly intelligent, skilled and organised people who move with purpose or remain with reason.’

The unimpeded vantage

During the first author's visit in 2010, the rather basic accommodation, a cabin (see Figure 11), had two small rooms with the front facing in a southwestern direction, which was excellent, since a rather cold, strong wind was blowing from the north on that day. Not only did the cabin provide him with protection against the volatile elements of nature, but also with an unimpeded 180° view of the horizon.

Figure 11. A cabin with an unimpeded vantage on the horizon



During the second visit, we stayed in an empty farm house built in the open space between two dunes – called a street – which left us with a partially impeded view of the horizon (see Figure 12).

We contemplated the effect this had on our intuitive assessment of our accommodation and surrounding landscape and concluded that we would have preferred to stay in the cabin. Our preference was quickly supported by a surprising observation: when elevated by some of the higher dunes while walking in the veld, we were surprised by the tremendous distances over which early morning sounds and our voices were audible. We concluded that our preference for elevation was based on its ability to enable us to hear possible predators or prey – and maybe also our prehistoric tribe's communication – over great distances.

Figure 12. Our accommodation in the 'street' between two dunes



Figure 13. Stoffel (on the right), an expert at slaughtering springbuck, and Stephan, Koos's son



Further support for this was also provided by our hunting experiences: when standing on the dunes, we could detect the antelope over vast distances. Standing with your rifle on the back of a 4X4 utility vehicle elevates one even higher, and was the best way to hunt for springbuck in the Kalahari: we shot three springbuck (see Figure 13).

A diversity of greenery

We find the different plant species of the Kalahari aesthetically pleasing. Many are useful sources of medicine and food. Their presence, and knowledge about them, might contribute even to this day towards our survival. One example is considered sufficient to illustrate the importance of this element for habitat selection and survival.

The roots of the beautiful shepherd tree (*Boscia albitrunka* – see Figure 14) might be dried and used as a replacement for coffee or ‘porridge’ (Venter & Venter, 2009:72). Animals, and possibly prehistoric humans, could eat the bark to combat internal parasites (see Figure 15). The temperature in the shade of this tree might be as much as 21°C lower than in the open sun (Steyn, 1984:58), therefore the tree offers much needed protection for humans and animals against the extremely hot summer sun and potential dehydration in the Kalahari.

Figure 14. A shepherd tree



Figure 15. The shepherd tree's bark damaged by animals



Conclusion

The first part of our twofold aim was to contemplate our personal aesthetic preferences and connect them to the five elements of an ideal savannah landscape. The personal aesthetic preferences that we have unearthed during our visits to the Kalahari have indeed resonated very strongly with the five elements included in landscape theory.

The second part of our aim was to develop a comprehension of how prehistoric people might have educated their children to survive. We have recognised the importance of a detailed, meticulous education about the elements of the landscape to ensure the survival and successful reproduction of the bands of hunter-gatherers that roamed prehistoric savannah landscapes.

Reflection and Implications

We attempted to uncover any hidden remnants of the lifelong camping trip in the lives of modern families in the 21st Century: are they still studying and assessing the elements of the concrete landscapes they are struggling to survive in, and are they still taking decisions based on their observations? Dutton (2009:4) puts the questions in more specific terms: 'How do the pleasures of playing video games or listening to fugues derive from instinctive processes that were in place tens of thousands of years ago?' What about movies that are so freely available on television and the internet?

Dutton (2009:133) argues that it is easy to overestimate the importance of film and video since 'visual extravaganzas did not begin with Hollywood but very likely amazed audiences in Palaeolithic caves, with firelight and cave echoes providing their special effects.' Dutton's underlying assumption is clear, though: that film and video – and for that matter many forms of modern technology – are extensions of the play in the cave or the beautiful landscape. The television and computer screen have therefore reported themselves pertinently to us as modern equivalents of the unimpeded view on the landscape, and we are quite happy to pursue the idea further here. The universal popularity of this electronic equipment, and the sheer scale of new developments being introduced into the modern marketplace, might seem to us like indications of families' evolutionary needs being satisfied on an unprecedented level. The small group of contemporary hunters-gatherers – the family – watches television and surfs the internet to experience what their prehistoric ancestors did by walking: a camping trip that lasts a lifetime.

If one accepts an evolutionary explanation as the basis for the popularity and importance of these devices, the next step is to contemplate how they are utilised by the contemporary family during the process of habitat selection in the modern era. A comprehension of how fleeting landscapes appear at an astonishing speed on the different television channels and websites in our homes, now enables us to connect the lifelong camping trip of Pleistocene landscapes with a virtual one in the technological landscapes.

Families are still making life-and-death decisions about landscapes, and are still on camping trips that will last for their entire lifetimes; but now they are virtual trips, made in the luxurious environment of their sitting rooms. Cosgrove (2008:31) argues that the place of technology within modernity is central, practically, mythically and rhetorically, and that 'only a superficial

reading of cultural history would suggest that the mechanistic and inorganic aspects of technology have actually resulted in a lessened appeal of landscape.’

The troubling question is: are we reflecting these realities in the kind of education we present to our teenagers today?

Note

All photographs taken by Jannie Pretorius.

Notes on the Contributors

Jannie Pretorius is a senior lecturer in the School for Mathematics, Natural Sciences and Technology Education at the University of the Free State. His research interests include aesthetic education, appreciative inquiry and popular music. Email: pretoriusjph@ufs.ac.za

Okkie Combrinck is an associate professor in the School for Mathematics, Natural Sciences and Technology Education at the University of the Free State. His research interests include engineering graphics education, aesthetic education and appreciative inquiry.

Stephan du Toit is a lecturer in mathematics education on the Strathfield Campus of the Australian Catholic University. His research interests include metacognition and problem-solving in authentic situations.

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