

Namibia Wissenschaftliche Gesellschaft
Namibia Scientific Society

JOURNAL



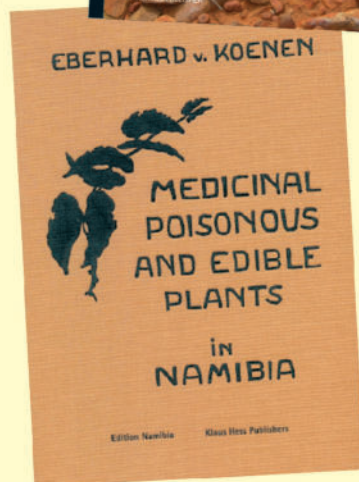
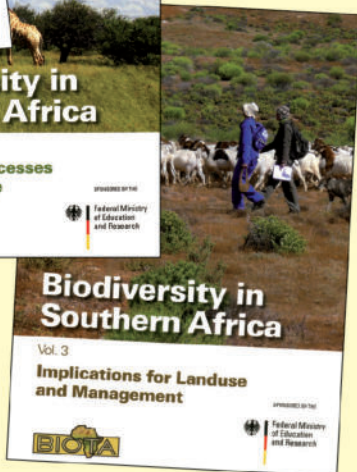
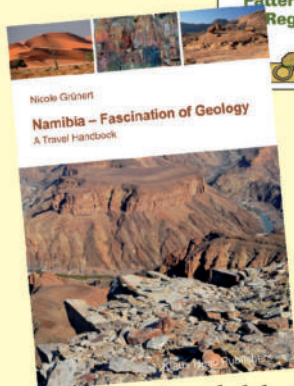
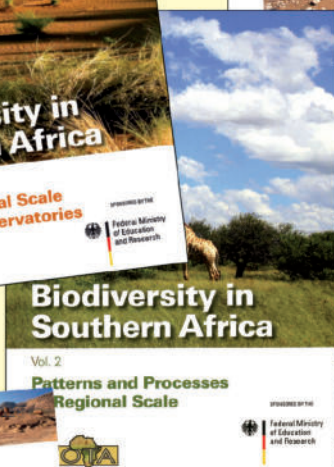
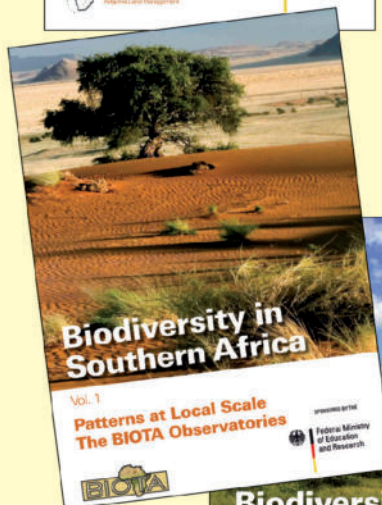
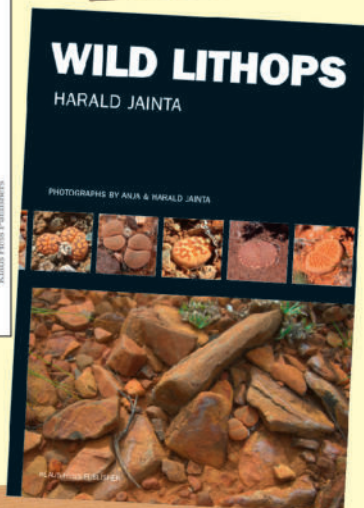
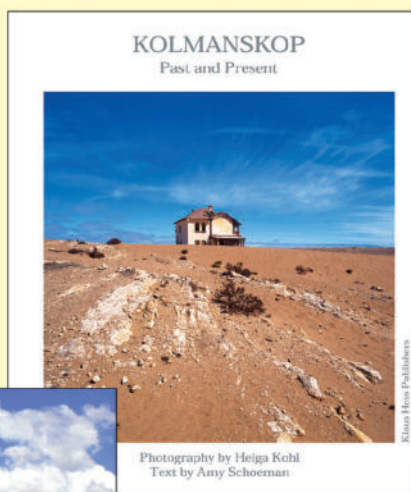
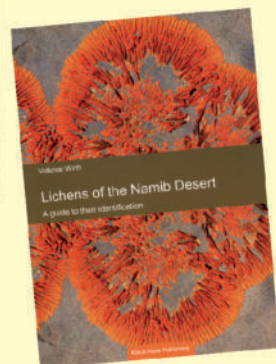
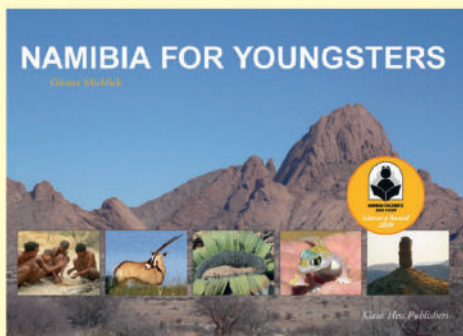
Band / Volume 68 - 2021



Klaus Hess Publisher / Verlag

English titles

for enhanced knowledge



Available at bookshops and Namibia Book Market, Windhoek
Macadam Street, opposite Obeco, www.namibiabooks.com

Journal 2021	Windhoek	ISBN: 978-99945-76-74-6	ISSN: 1018-7677
--------------	----------	-------------------------	-----------------

Author / Verfasser	Contents / Inhalt	Pages / Seiten
--------------------	-------------------	----------------

STRUCTURE OF THE SOCIETY		3
Martin Lockley, Charles Helm, Hayley Cawthra, Jan De Vynck, Michael Perrin	<i>LETTER TO THE EDITOR:</i> An extended Pleistocene Range for Sand-Swimming Golden Moles like the Namib Mole	7-12
Vonai Charamba, Haruna Mohammed Bello, Dorthea Shiimi	Assessment of the Drought Coping Strategies Practiced by the Households in the Oshipya District of Eetayi Constituency in Northern Namibia	17-36
Sanne de Jong	The Importance of being Earnest – the Relation between Hendrik Witbooi and the Gamsberg	41-55
André du Pisani	An Eye for the Cycle of Life: Exploring Rock Art in the Khomas Region	59-70
André du Pisani	On the Body in Rock Art of the Khomas Redion	73-85
Jack Fearey, Simon Elwen, Sasha Dines, Bridget James Tess Gridley	Using Signature Whistles to Investigate Population Dynamics of Locally Threatened Bottlenose Dolphins (<i>Tursiops truncatus</i>) in Namibia	89-101
Goodman Gwasira, Martha Akawa, Ndapewa Fenny Nakanyete	Cultural Villages as Drivers of Rural Poverty Alleviation in Namibia: The Case of Tsandi Royal Homestead	103-120
Michael Vaupel	Nama Aufstand ab 1904	123-135
GUIDELINES FOR AUTHORS		137

Cover Photo / Umschlagfoto Namibian Dolphin Project

Publisher & Advertising
Verlag & Anzeigenredaktion Namibia Scientific Society
Namibia Wissenschaftliche Gesellschaft
110 Robert Mugabe Ave., Windhoek
P.O. Box / Postfach 67, Windhoek / Namibia
Tel: 061-22 53 72, Fax: 061-22 68 46
E-mail: info@namscience.com
Website www.namscience.com

Editor-in-Chief Prof. Michael Backes (University of Namibia)
Editorial Board Prof. André du Pisani (University of Namibia)
Prof. Norbert Jürgens (University of Hamburg)
Dr Jane Olwoch (Southern Africa Science Service Centre for
Climate Change and Adaptive Land Management)
Alfred Schleicher (Namibia Scientific Society)
Dr Martin Schneider (Desert Research Foundation of Namibia)
Prof. Heather Throop (Arizona State University)
Prof. Piet van Rooyen (University of Namibia)
Gunter von Schumann (Namibia Scientific Society)
Dr Robert West
Executive Editor Miriam Hutterer
Assistant Editor Frieda Mukufa

Printing / Druck John Meinert Printing, P.O. Box 56
Windhoek / Namibia, Tel: 061-22 54 11



**HELPING YOU CREATE THE
FINANCIAL FUTURE YOU
DESERVE.**

BEANCOUNTER

• Accounting Services • Taxation Services
• Close Corporation Registrations • Payroll Services
• ITAS Registrations • Estate Planning • Estate Services

✉ luzane@beancounter.com.na ☎ +264 81 375 7925

NAMIBIA SCIENTIFIC SOCIETY
Structure of the Society
NAMIBIA WISSENSCHAFTLICHE GESELLSCHAFT
Gesellschaftsstruktur
2021

Committee of the Society
Vorstand der Gesellschaft

Chairman / Vorsitzender
Theo Schoeman
Vice Chairman / Vizevorsitzender
Prof. Michael Backes
Treasurer/Schatzmeister
Abrie Collard co-opted
Board Members / Vorstandsmitglieder
Michael Hasheela
Kai Kleingünther co-opted
Bertchen Kohrs
Helke Mocke
Alfred Schleicher
Heike Uhrich
Erika von Wietersheim
Frank Wittneben

Affiliated Groups
Angeschlossene Gruppen

Museum Grootfontein
Curator / Museumskustodin
Magda Klitzke
Museum Tsumeb
Curator / Museumskustodin
Anneliese Bruns
Museum Lüderitzbucht
Curator / Museumskustodin
Gisela Schmidt-Scheele

Senators of the
Namibia Scientific Society
Senatoren der Namibia
Wissenschaftlichen Gesellschaft

Helmut Bistri, Köln, Germany
Dr Kuno Budack, Windhoek
Dr Maria Fisch, Swakopmund

Honorary Members
Ehrenmitglieder

Dr Josef Brandmayr, Austria
Sonja Itting-Enke, Windhoek
Dieter Ludwig, Windhoek
Gabriele Moldzio, Windhoek
Wolfgang Reith, Neuss, Germany
Sigrid Schmidt, Hildesheim, Germany
Ilme Schneider, Windhoek
Dieter Springer, Windhoek
Helmut zur Strassen, Windhoek

Secretariat
Verwaltung

Office
P. O. Box 67
Windhoek, Namibia
Tel: 061-22 53 72, Fax: 061-22 68 46
E-mail: info@namscience.com

Manager / Geschäftsführerin

Waltraut Fritzsche

Bookkeeper / Buchhalterin

Ruth Moldzio

Library / Bibliothek

Armin Jagdhuber (Head of Library)

Gunter von Schumann

Annegret Enengl

Isdor Kamati

Johannes Willibard (Student)

Hannah Itula (Assistant)

Event Manager

Elfriede Schneider

Publishing / Verlag

Miriam Hutterer

Frieda Mukufa

Auditor / Buchprüfer

Christo Loubser

Beancounter

Study Groups

Arbeitsgemeinschaften

Astronomy / Astronomie

Sonja Itting-Enke, P.O. Box 5198, Whk.

Prof. Michael Backes, P.O. Box 90715, Whk.

Herpetology / Herpetologie

Alfred Schleicher, P.O. Box 11752, Whk.

Namibian Hydrogeological Association

Esther Gustavo, P.O. Box: 21850, Whk.

Ornithology / Ornithologie

Gudrun Middendorff, P.O. Box 81797, Whk.

Lanioturdus: Editor / Schriftleiter

Holger Kolberg, P.O. Box 3407, Whk.

**The Society is a member of
the following organisations
Die Gesellschaft ist Mitglied
folgender Organisationen**

Deutscher Kulturrat, Windhoek
South African Archaeological Society
South African Botanical Society
Van Riebeeck Society, Cape Town

**Partner Organisations
Partner Organisationen**

Botanical Society of Namibia
Gobabeb Research & Training Centre
Namibian Environment and Wildlife Society
National Commission on Research,
Science and Technology

**Corresponding Members
Korrespondierende Mitglieder**

Dr Imre Demhardt, Arlington, USA
Prof Dr. Irenäus Eibl-Eibesfeldt,
Max Planck Institut, Andechs, Germany

Corporate Members of the Society
Korporative Mitglieder der Gesellschaft



African Kirikara



ATC Namibia



Atlas Engineering Solutions



Bigen Kuumba



Cynetio Cyber Security Solutions



John Meinert Printing (Pty) Ltd



Lüderitz Nest Hotel



Matiti Safaris



Mindsinaction



Namibian Uranium Association



Ohlthaver & List Group



Ondese Safaris



Ondili Lodges and Activities



Pack Safari



Paratus



Pay Buddy



Pointbreak



Pupkewitz Foundation



Sense of Africa



Solitaire Desert Farm Namibia



Wealth Management Solutions cc

**Sincere thanks for
 your support!**
**Herzlichen Dank für
 Ihre Unterstützung!**



*Enjoy the waves
crashing at your doorstep...*



SEAFOOD RESTAURANT



www.nesthotel.com



Letter to the Editor

An Extended Pleistocene Range for Sand- Swimming Golden Moles like the Namib Mole

Martin Lockley, Charles Helm, Hayley Cawthra, Jan De Vynck, Michael Perrin

We wish to draw your attention to a peer-reviewed article that we authored, recently published in *Quaternary Research* (Lockley et al., 2021), titled: “*Pleistocene golden mole and ‘sand-swimming’ trace fossils from the Cape coast of South Africa*”. It presented the fossil evidence that our research team has found for the tracks and burrows of golden moles, and in particular of the genus *Eremitalpa*, which is exemplified by the ‘Namib mole’ or Grant’s golden mole, *Eremitalpa granti*. In this letter, we briefly review this evidence and discuss its implications for Namibia.

The Namib mole is one of the iconic Namibian desert-dwelling mammals, and has captured the world’s attention (e.g., <https://www.youtube.com/watch?v=8dP2LIUGekg>). Eighteen of the world’s 21 golden mole species occur in southern Africa. *Eremitalpa* is a monospecific genus, with two subspecies on the west coast, separated by the Orange River. *Eremitalpa granti namibensis* occurs in Namibia, south of the Kuiseb River, and *E. granti granti* occurs in South Africa, as far south as St. Helena Bay.

Although totally blind, the Namib mole has developed a search pattern that is effective in encountering patches of high prey availability. It is the smallest of the golden moles, and has limbs and claws that are adapted for burrowing in loose sand in search mainly of termites. It is acutely sensitive to vibrations as a means of locating its prey. It hunts at night, travelling through the sand at a much shallower depth than any other golden mole, in a form of locomotion known as ‘sand-swimming’.

During this activity, the mole creates distinctive raised areas with well-preserved, anteriorly-convex margins. If the consistency of the sand is less cohesive, the midline portion of the trail may collapse behind the mole, leaving a linear sulcus. Laura Fielden, internationally renowned expert on the Namib mole from Truman State University, kindly provided us with excellent images of such trails. Alternatively, if the sand is more cohesive,



Figure 1: *E. granti* sand-swimming trails with transition to a surface trackway; scale bar = ~14 cm (reproduced with permission from the Gobabeb Training and Research Centre)

the trail does not collapse and remains raised above the dune surface. Eugene Marais, Gillian Maggs and the staff of the Gobabeb Training and Research Centre were extremely helpful in providing us with photographs of this variety of trail (Figure 1).

In 1988, in an article in *Sedimentary Geology*, John Ward described fossil golden mole traces from Early- to Middle Tertiary sediments from Namibia. It was noted that “back-filled, burrow-like traces cutting cross eolian stratification in the Tsondeb Sandstone Formation resemble trackways left by the golden mole, *Eremitalpa* sp., that today is endemic to the Namib Desert”. In Figure 2, we reproduce the photograph from Ward (1988).

Prior to our work, that was the only reported fossil description of golden mole traces. Since the inception of our fossil tracks project on the Cape south coast of South Africa, we have identified more than 300 vertebrate track sites over a 350km coastal stretch. Numerous fossil burrow traces are also present, and not surprisingly, given that golden moles occur commonly in the area today, some of these can be attributed to the golden mole family (Chrysochloridae). What we did not expect to find, however, were typical sand-swimming fossil traces, yet we have identified three definite sites (two on the south coast and one on the southeast coast) where these occur, as well as a number of possible sites. And remarkably, we identified cases where the roof was preserved and also where it had collapsed. Because *Eremitalpa granti* and its mode of locomotion are so unique,

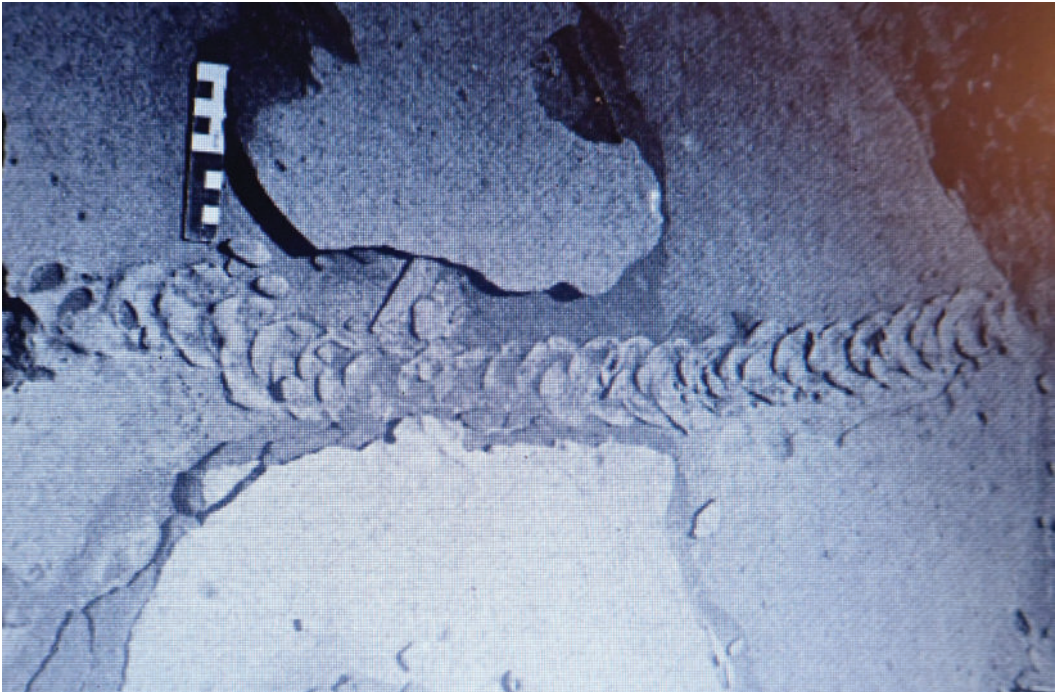


Figure 2: Trace fossil attributed to *Eremitalpa* sp. by Ward (1988); reproduced with permission from John Ward

it is no surprise that, apart from Ward's 1988 site, nothing like this has been described anywhere else in the fossil record. We therefore erected a new ichnogenus, *Natatorichnus*, meaning "swimmer trace", with two ichnospecies, *N. subarenosa* ichnosp. nov. for the trail type where the roof is preserved (Figure 3), and *N. sulcatus* ichnosp. nov. for the trail type where the roof has collapsed (Figure 4). Translated from Latin, these mean 'swimmer trace under the sand' and 'swimmer trace with a sulcus' respectively.

The holotype site for the *N. subarenosa* traces was remarkable: a huge block had tumbled down from coastal cliffs, and come to rest at the high tide mark, having split in two (Figure 5). Fortunately, the sand-swimming fossil traces occurred right at the level of the split, and could therefore be examined in both epirelief (the original surface) and hyporelief (the layer that filled in the original surface). The trail extended for more than 130cm in a curved fashion, and was 8-10cm in diameter.

These trails were probably made between 80,000 and 130,000 years ago; we have submitted samples for Optically Stimulated Luminescence dating, and anticipate receiving the results soon. While some of them exhibit a diameter of 5-7cm, similar to the *E. granti* trails and the fossil trail from Namibia described by Ward (1988), others are wider, with a diameter range of 8-12cm. It seems likely that these trails were made by a larger golden mole with a means of locomotion similar to that of *Eremitalpa granti*. However,

Figure 3 (right):
Photogrammetry colour mesh
of hyporelief surface showing
the holotype of *N. subarenosa*;
vertical and horizontal scales
are in metres

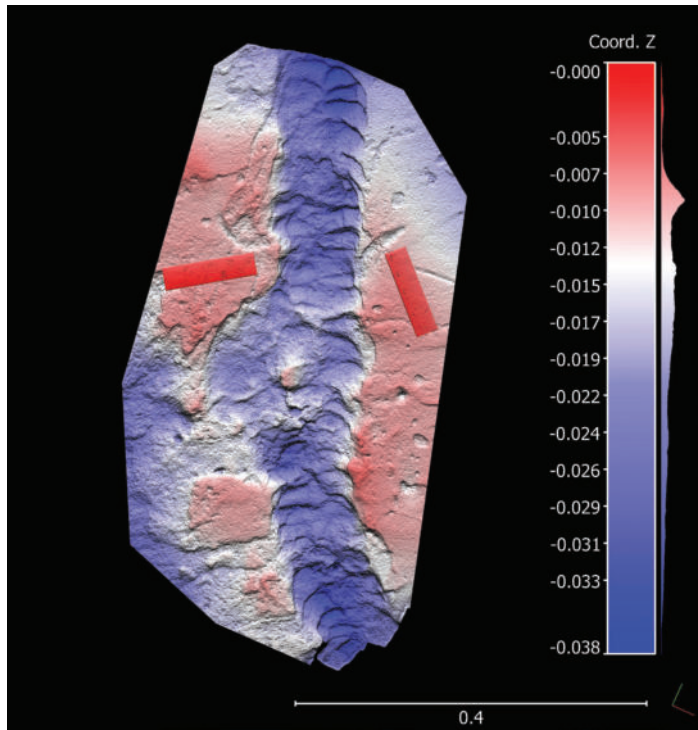


Figure 4 (below): Part of holo-
type of *N. sulcatus*, preserved
in epirelief and showing the
characteristic median sulcus;
scale bar is in cm





Figure 5: The holotype site for the *N. subarenosa* traces

convergent adaptation to similar dune conditions is possible, and sand-swimming locomotion by other fossorial groups cannot be completely excluded.

E. granti inhabits areas characterised by extensive dune fields, and this is apparently a requirement for the species. The presence of tracks of the extinct giant Cape zebra on one of the surfaces containing sand-swimming fossil traces is of potential significance, as this species is generally characteristic of more arid environments. While it is thus tempting to infer widespread arid paleoenvironmental conditions in the Pleistocene on the Cape south coast, based on the discovery of these fossil traces, extensive dune fields can also be the result of persistent strong winds. One of the sites lies close to the largest coastal dune field in South Africa (>15,000ha). *Eremitalpa granti* is a poor thermo-regulator, and if such a species existed at times on the Cape south coast during the Pleistocene, it is conceivable that a long period of cooling associated with a glacial phase ('Ice Age') may have led to its extirpation from a region situated so far south.

Through our published work on this topic, we have tried to shed light on the distant past of a fascinating and enigmatic species, which in many ways epitomizes the wonders of adaptation to the harsh desert world of Namibia. It appears, though, that the current distribution of the *Eremitalpa* genus is unexpectedly smaller than it was in the past.

References

- LOCKLEY, M.G., HELM, C.W., CAWTHRA, H.C., DE VYNCK, J.C., PERRIN, M.R. 2021. Pleistocene golden mole and ‘sand-swimming’ trace fossils from the Cape coast of South Africa. *Quaternary Research*, 1–18. <https://doi.org/10.1017/qua.2020.97>
- WARD, J.D. 1988. Eolian, fluvial and pan (playa) facies of the Tertiary Tsondab Sandstone Formation in the central Namib Desert, Namibia. *Sedimentary Geology*, 55, 143–162. [https://doi.org/10.1016/0037-0738\(88\)90094-2](https://doi.org/10.1016/0037-0738(88)90094-2)

About the Authors

Martin Lockley is Professor Emeritus Geology and Director of the Dinosaur Trackers Research Group, University of Colorado Denver, and also Associate Curator at University of Colorado Museum (Boulder Campus) and Museum of Western Colorado.

Charles Helm is a Research Associate with the African Centre for Coastal Palaeoscience. He is an ichnologist, explorer, family physician, and author. He lives in Tumbler Ridge, Canada.

Hayley Cawthra is a marine geologist at the South African Council for Geoscience and a Research Associate at the African Centre for Coastal Palaeoscience. She studies the ocean and coasts and lives in Cape Town.

Jan De Vynck is a palaeo-anthropologist and Director of the African Center for Coastal Palaeoscience, Nelson Mandela University, and studies resource economies.

Michael Perrin is Professor Emeritus (Zoology) at the University of Kwa-Zulu-Natal, where he continues his research in the School of Life Sciences.

Addresses

Martin Lockley
Dinosaur Trackers Research Group, Campus Box 172, University of Colorado Denver, PO Box 173364, Denver, 80217-3364, USA.

Charles Helm
African Centre for Coastal Palaeoscience, PO Box 77000, Nelson Mandela University, Gqeberha, 6031, South Africa.

Hayley Cawthra

Geophysics and Remote Sensing Unit, Council for Geoscience, Western Cape regional office, PO Box 572, Bellville, 7535, South Africa.

Jan De Vynck

African Centre for Coastal Palaeoscience, PO Box 77000, Nelson Mandela University, Gqeberha, 6031, South Africa.

Michael Perrin

School of Life Sciences, University of Kwa-Zulu Natal, Private Bag X01, Scottsville, Pietermaritzburg, 3201, South Africa.

TSUMEB MUSEUM



Kultur, Technik, Geschichte –
alles unter einem Dach!

Wir freuen uns auf ihren Besuch, es lohnt sich!

Culture, Technology, History, Geology –
all under one roof!

We are looking forward to your visit, it is worthwhile.



TSUMEB MUSEUM

Tel./Fax: 00-264-67-220447 • P.O. Box 884 • Main Street 613 •
TSUMEB • NAMIBIA
tsumus@twgny.na

Visiting hours: Mon.-Fri. 09:00-12:00 and 14:00-17:00

Saturday 09:00-12:00

Sun. & Holiday's only by appointment

Son. & Feiertage nur mit Absprache

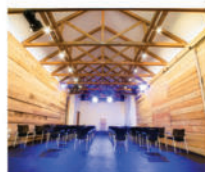
the
VILLAGE

18 LILIENCRON STREET | EROS | WINDHOEK



BOARDROOMS
CO-WORKING SPACE
VENUE HIRE
SELF CATERING APARTMENTS
RESTAURANTS
OFFICES

AT THE VILLAGE WE EMBRACE THE SYNERGIES BETWEEN NATURE AND THE CITY



VENUE HIRE

Our Opera House is the ultimate conference, corporate and social event venue of your choice!



BOARDROOMS

We offer you 3 boardrooms (including a zoom room) of which 1 of them overlooks the Kai ponds and tranquil garden.



CO-WORKING

12 hot desks, 3 private desks and 7 private offices available in our Village Hub.



SELF-CATERING

Our designer self-catering Village Suites are perfect for business stays.

Das Alte Fort Museum Grootfontein



1896-1900

Building of Fort by Schutztruppe as a Military Station

1905-1908

Magistrates Offices

1908

Renovated under supervision of Government Master builder Redecker

1920

School and hostel. More renovations and alterations

1960

A hostel until 1967, decays thereafter

04.08.1972

Local chemist Young starts the initiative "Save the Fort"

November 1972

Idea of establishing a Museum

21.03.1975

Building resorts under jurisdiction of the Monuments Council

1975-1976

± 2000 Portuguese refugees from Angola are housed in the Fort

18.02.1977

Tower roof replaced with concrete free of charge by company MLS

July 1977

Quote for renovation – R 16,481.00 received. Bulk paid by Monuments Council, balance settled by donations

23.01.1978

Monuments Council takes over the renovated building

26.07.1978

Namibia Scientific Society officially accepts Umbrella Organisation

August 1978

Founding of Museums Committee, collection of display items

23.10.1983

Official opening of Museum

www.altefortmuseum.de



BIGEN[®]
KUUMBA

YOUR PARTNER IN ACHIEVING

SUSTAINABLE DEVELOPMENT GOALS

FOR NAMIBIA



We transform our world



We push development impact
 in Namibia

We craft infrastructure
 development solutions to
 achieve the sustainable
 development goals set for
 the African Private Sector



Clean water & sanitation (SDG 6)

Good health & well-being (SDG 3)

Infrastructure (rail, roads and ports - SDG 9)

Industry, Innovation and infrastructure (SDG 9)

Climate change (SDG 13)

Zero hunger/food security (SDG 2)

Sustainable Cities and communities (SDG 11)

Life on land (SDG 15)

Affordable and clean energy (SDG 7)

Gender Economic Participation (SDG 5)



Assessment of Drought Coping Strategies Practiced by the Households in the Oshipya District of Etayi Constituency in Northern Namibia: An Item Response Theory Approach

Vonai Charamba¹, Haruna Mohammed Bello², Dortehea Shiimi³

¹Department of Animal Science, University of Namibia, Windhoek, Namibia

²Department of Economics, National University of Lesotho, 0180 Roma, Lesotho

³Ministry of Agriculture Water and Land Reform, Katima Mulilo, Namibia

Keywords: drought vulnerability and adaptation, coping mechanisms, smallholder farmers, item response theory.

Abstract

The study objective was to estimate the level of vulnerability and resilience to drought for households in Oshipya District in the Etayi Constituency in northern Namibia. Levels of household resilience and vulnerability to drought shocks were estimated from ex-ante and ex-post coping strategies respectively, using the Rasch item response theory model. The study showed that risk reduction coping strategies are poorly implemented, thus, making the communal households vulnerable to drought consequences. Instead, households resorted to impact management strategies like disposal of assets. It is encouraged that households prepare for drought by stocking crop residues, planting early maturing drought resistant crops, irrigation and diversification of livelihood activities and sending livestock to cattle posts. After the development of several policies and programmes on disaster risk management, thorough assessments of utilization and impact should be done regularly to reduce the expenditure on drought relief programmes as households will be more drought resilient.

Abstrak

Die doel van die studie was om die vlak van kwesbaarheid en weerstand teen droogte vir huishoudings, in die Oshipya-distrik in die Etayi kiesafdeling in Noord-Namibië, te skat. Die vlakke van huishoudelike veerkragtigheid en kwesbaarheid vir droogteskokke is onderskeidelik geskat aan die hand van strategieë vooraf en agter poste, met behulp van die Rasch-reaksie-teorie-model. Die studie het getoon dat strategieë vir die vermindering van risikovermindering swak geïmplementeer word, wat die gemeenskaplike huishoudings kwesbaar maak vir droogtegevolge. Huishoudings gebruik eerder impakbestuurstrategieë, soos om bates te verkoop. Dit word aangemoedig om huishoudings voor te berei op droogte deur oesreste op te hou, droogtebestande gewasse met vroegryp groei, besproeiing en diversifisering van lewensondernemings te plant en vee na veeposte te stuur. Na die ontwikkeling van verskeie beleide en programme rakende rampriskobestuur, moet deeglike assessering van die benutting en impak gedoen word om die uitgawes aan droogte-hulpprogramme te verminder, aangesien huishoudings bestand is teen droogte.

Introduction

Drought has been categorized as the most frequent climatological tragedy ahead of other natural disasters such as floods and earthquakes (Masendeke & Shoko 2013 Mdungela *et al.* 2017), affecting more people than other natural catastrophes (Agazzi, 2013) and more distressing effects for rural people especially those practicing rain-fed agriculture (African Adaptation Project 2010, Ndlovu, 2009). Agazzi goes on to say that half of the world's population will live in areas of high water scarcity by the year 2020. According to UNISDR (2013), economic losses by drought add up to hundreds of billions of dollars and are estimated to double by 2030. Drought directly affects production, livelihoods, assets and infrastructure as lives may be lost and social networks and capital investments may be destroyed while government funds may be diverted to emergencies. These may contribute to food insecurity and poverty. Namibia is the most arid country south of the Sahara and is vulnerable to undependable and erratic rainfall patterns, persistent droughts and high temperatures (Kaundjua, Angula & Entombed, 2012). A study conducted in Kunene Region found that poor rainfall continues to negatively impact on pastures, resulting in diminishing perennial water in most villages (Deon, 2016). Despite the country being susceptible to drought and other natural hazards, agriculture is still one of the main income sources, with 57% of its rural population relying heavily on agriculture as the main livelihood source (Namibia Statistical Agency (NSA) 2011).

Drought losses have long been attributed to poor vegetation, soil and water management and the absence of effective management strategies (Seymour & Desmet, 2009). Namibia is exposed to recurrent droughts (Amadhila, Rooy & Siyambambo 2013), making subsistence agriculture highly susceptible as it is mainly rain-fed, resulting in devastating impacts

on both livestock and crop production. As a result, there is need for communal farmers to have risk reduction mechanisms to guard against the shocking effects of drought. Such measures should include risk reduction measures in preparation for, and crisis control measures to mitigate shocks after the drought has already occurred. Drought and other risks management have constituted integral part of policy formulation in Namibia through the designing of The National Drought and Policy Strategy (NDPS) (1997), the National Disaster Risk Management Policy and the Hyogo Framework for Action (HFA), which seek to develop the resilience of communities and to move from the emergency response approach to integrated disaster risk management strategies (Amadhila *et al.* 2013). One of the objectives of the NDPS is to encourage farmers to adopt self-reliant approaches to drought risks, shifting the responsibility of handling drought effects from the government to the farmers with financial assistance and food interventions only to be considered in the event of an extreme or disaster drought being declared. The African Adaption Project (2010), Kuvare, Maharero and Kamupingene (2008) identified conservation and organic agriculture, crop diversification, early warning signals, crop irrigation, reduction of stock numbers, increase in extension services and rainwater harvesting to be some of the strategies that can be utilized by the Namibian farmers to mitigate drought effects. The government also called for the implementation of improved information gathering, analysis and dissemination techniques in order to convince farmers to prepare for up-coming droughts and other climate change disasters. However, after the development of such policy interventions, very few studies have been done to assess their utilization and impact.

Ex-ante and ex-post drought coping mechanisms

Coping strategies can be defined as short-term responses to an immediate and irregular decline in access to food (FAO, 1997), adopted to attempt to meet physiological, social, economic and political needs of everyday life during periods of drought and other natural disasters (Wisner, *et al.*, 2004). According to Pandey and Bhandari (2007), risk-coping strategies can be classified into *ex-ante* and *ex-post* depending on whether they help to reduce risk *a priori* or reduce the impact of risk *posterior* to the disaster. *Ex-ante* mechanisms include awareness and production responses prior to the occurrence of the drought. These include the awareness of the upcoming drought, diversification of crop varieties, planting of drought resistant crops and soil and water conservation techniques in preparation for the impending drought. Crop diversification spreads the risks of total crop failure because if one crop fails, the other might survive. Cultivation of short-, medium- and long-term varieties reduce the risk of complete crop failure because early and late maturing usually react differently to drought (Manzungu, 1999). Incorporation of ethno-science coping mechanisms, such as conservation agriculture, which is a sustainable agricultural production system aimed at minimising soil disturbances and preserving water and soil through zero to minimal tillage and permanent soil cover through intercropping and mulching and crop rotations as well as fallowing to improve water holding capacity can mitigate

consequences of drought. Although there are some legal and legitimacy issues, small-scale farmers sometimes fence their grazing land to not only provide protection from predators but also improve grazing land and herd management (Werner). Other ex-ante coping practices include diversification of income generation which include non-farming activities like having a small shop and growing fruit trees.

On the other hand, risk reduction after the drought has already occurred and entails consumption response, migration and asset response. When people's ability is stretched by drought and the available resources no longer sustain the people, households often adjust their consumption patterns and reduce the number of meals per day or the quantity consumed per meal. In addition, household members often move to other areas in search for food and other means of accessing food such as temporary and permanent employment, resulting in increased seasonal out-migration. In addition, households may resort to less preferred wild fruits and vegetables as alternative sources of food. According to Chenje (1994), rural households in Botswana utilized over 250 wild species and animals during drought. In extreme cases, when farms are deprived of food by drought, they are forced to sell and liquidate their livestock and other productive assets in order to buy food (Carr 1997); where small assets such as chicken are sold first and then bigger assets such as livestock; ploughs and land are sold as a last resort (UNEP, 2002, FAO, 1997). In addition, Namibian households often practice pastoral nomadism in response to drought, where younger members of the community move animals to specific dry-season grazing areas known as "cattle posts" where grazing resources last throughout the dry season (Kunene River Awareness Kit, 2020). Furthermore, households are often forced to borrow and take quick loans at exorbitantly high interest rates in order to buy food.

Several studies have been done on drought coping strategies in the region. Masendeke and Shoko (2013) studied the coping strategies employed by households in Mberengwa District of Zimbabwe while Ndlovu (2009) conducted a similar study to determine the coping mechanisms utilized by communal households in Bulilima and Mangwe Districts of Matebeleland Province in Zimbabwe both under semi-arid to arid climatic conditions. Uddin *et al.* (2014) rated the importance of the coping strategies employed by households in Bangladesh using the Likert Scale continuum and computed coping strategy indices according to farmer perceptions on the importance of the coping strategy to their enterprises. However, most of these studies were on collection of qualitative research methods. Few studies have utilised quantitative statistical models to estimate the magnitude of the effects of coping strategies on household resilience and vulnerability to drought effects on a continuous continuum. The Namibia Vulnerability Assessment Committee (NAMVAC) has been established to conduct vulnerability assessments for early warning purposes and to identify vulnerable groups based on laid down indicators and assessment tools. However, they do not estimate vulnerability at household level.

Crisis control measures usually have negative effects on the socio-economic status of households as they may resort to disposal of productive assets or dispersing of family members. Risk reduction mechanisms, (ex-ante), give a measure of drought resilience

while crisis control coping strategies, (ex-post), give a measure of vulnerability to consequences of drought after the drought has already occurred. In this study, resilience is defined as the ability to adapt to drought risks by employing risk reduction coping strategies while vulnerability refers to exposure or susceptibility to drought shocks. The current researchers saw it necessary to carry out a study to rank the intensities of household resilience and vulnerability to drought risks and identify the strategies that are easy or severe for the households to employ in mitigation of the devastating consequences of drought using the item response theory (IRT) models. The study addresses the recommendations from Angula and Kaundjua's (2015) study that recommends the needs for estimation of vulnerability indices at household level.

Materials and Methods

Study area

The research was conducted in Oshipya District of Etayi Constituency in northern parts of Namibia. The district has approximately 257 households. The mopane bush (*Colophospermum mopane*) grows throughout the district and is primarily limited to 1.0–2.5m in height because of felling, making the district suitable for small scale livestock production. The soil type is mostly sandy and therefore, considered unsuitable for crop cultivation. The dry season lasts from May to October, while the rainy season extends from November to April. The population is mainly reliant on mixed farming agriculture through growing of pearl millet (*pennisetum glaucum*), locally known as *mahangu* and livestock husbandry through cattle and goats husbandry.

Sampling design and data collection

The target population for this study was small scale farmers in Oshipya Distict operating on less than ten hectares of land. The region, constituency and district was purposively selected, based on the fact that the area is susceptible to drought and other natural hazards. There are approximately 257 households in the district consisting of nine villages. Five of the nine villages were randomly chosen to represent the whole district. A sample of 80 households was selected randomly from an approximate total of 180 households in the 5 villages selected for the study. Households were selected using the Systematic Random Sampling method where in each village, a household was randomly chosen at the beginning of the sector and thereafter, every second household was sampled. A questionnaire was used to collect socio-econo-demographic data and data on binary responses (*yes/no*) to drought risk reduction and impact reduction coping strategies employed by the sampled households.

Ex-ante coping strategies for drought preparedness considered include: the planting of drought resistance crops, diversification of livelihood activities, changing of cropping systems where some households are now practicing conservation agriculture and inter-cropping, fencing of grazing areas and water sources, irrigation farming, fish farming, use of forestry conservation strategies, employment of soil conservation techniques as well as movement of livestock to “cattle posts” during drier times. The ex-post mitigation strategies utilised by households and considered in the structured questionnaire include asset disposal to buy food, displacement of household members due to food shortages, seeking formal and non-formal employment and seeking and consuming wild food due to food shortages.

Data analysis

The data was cleaned and checked for consistency and completeness before being subjected to descriptive statistical analysis for respondents and item attributes in IBM SPSS version 23 (2015) and item response theory (IRT) analysis using the R version 3.4.0 **eRm** and **ltm** packages. The household drought resilience and vulnerability levels were estimated from responses to ex-post and ex-ante coping strategies respectively, using the 2 parameter logistic (2PL) model for binary/dichotomous responses. The IRT modeling technique was used for analysis as it enables the estimation of latent levels of resilience and vulnerability to consequences of drought by taking cognisance of the item difficulty and person ability (vulnerability and resilience) levels. Such a scale is superior to an index computed by counting the number of coping strategies employed by a household or scores that gives equal weight to all coping strategies (Hargety & Land 2007) as one’s ability cannot be judged by the number of correct items, but rather the item attributes/difficulty should be taken into account. In addition, the IRT techniques were selected ahead of methods like the multinomial logit or probit models because they provide estimates of a single scale for all coping strategies while the multinomial logit and probit models either handle coping mechanisms one at a time or restrict coping strategies to be category responses of a multiple responses item, thereby limiting the number of strategies a household can endorse.

The analytical framework

IRT models were developed for the purpose of measuring the unobservable ability (latent trait) of individuals based on their answers to a set of binary multinomial response questions. The models imply the existence of a “scale” on which the respondents can be placed based on their ability/proficiency levels. In the present study, the latent traits being measured are the levels of household adaptation/resilience and vulnerability to drought. The 2PL IRT model examines the fit of the questionnaire items measuring identical underlying constructs along a logit continuum, (Kilanowski & Lin 2012, Nord 2014), by combining information from multiple dichotomous (*yes/no*) items to rank the respondents on a

continuum of latent attribute being measured. The main objective is to estimate where the individuals fall on the scale. The model is based on the fact that the observed data consists of p manifest variables (X_1, X_2, \dots, X_p) that codes the responses as “1= affirm” and “0 = not affirm”. The 2PL model is determined by the probability of affirming the binary response question, given the household’s ability (θ_j) to give a correct response to item i , $P[X=1/\theta_j]$, and is given in equation 1:

$$P[X=1/\theta_j] = \frac{\exp\{a_i[\theta_j - b_i]\}}{1 + \exp\{a_i(\theta_j - b_i)\}} \quad (1)$$

where b_i is the item severity/difficulty/location parameter and a_i is the discrimination parameter for item i which is greater than 0, captures the ability of each item to categorise the respondents according to the trait being measured.

The theory is that the probability of endorsing an individual item is decided by the difference between item severity (difficulty), and a person’s location (ability) on the latent continuum. In this study, the item’s difficulty is the level of vulnerability/resilience they capture, and the scale on which households are measured is the severity of the household’s vulnerability to effects of drought or preparedness to deal with the effects of drought. The difficulty of an item is the severity level of households that are just at the point of affirming or denying that item. If an item severity is lower than the person’s ability, it has more chance of being endorsed. The odds ratio that a household affirms an item right at its severity level is 1, corresponding to a probability of 0.5. As b increases, the probability of affirming the question decreases for a household with a specific value of θ . The households’ resilience levels determine the probability of them affirming a given ex-ante coping strategy that defines their preparedness to deal with consequences of drought while the vulnerability level determines the chance of affirming an ex-post coping strategy denoting their exposure to drought shocks. The 2PL assumes that the questions are interpreted in the same way by all households in order to avoid bias in estimation of vulnerability and resilience. The model also assumes a monotonic increasing relationship between the latent variable and the probability of affirming the item and it assumes that items measure a single latent attribute (unidimensional).

Results

Items such as *use of forestry reservation strategies, use of community dam, fish farming and employment of soil conservation techniques* were removed from the analysis because their difficulty parameters could not be estimated as they were either affirmed or negated by all respondents.

Diagnostic checks for the assumptions of the Rasch model

Table 1a and Table 1b give the model diagnostic statistics for ex-ante and ex-post coping strategies respectively. The assumption of unidimensionality was assessed using the Cronbach’s alpha that gives a measure of interval consistency.

From the findings in Table 1a, the item infit and item outfit statistics for all the ex-ante coping strategies are within the range 0.8–1.2, a range considered to be “very good” by Linacre and Wright (1994). Nord (2014) also agrees as he argues that it is a great indication that there is no wide discrepancy between the observed deviations of responses and the deviations of expected responses, leading to a conclusion that the 2PL model fits the data well. However, the overall Cronbach’s alpha (0.4486) and all the other Cronbach’s alpha were less than 0.7; an indication that there might be other latent variables being measured by the items other than the level of adaptation/resilience to drought.

The results shown in Table 1b indicate that except for “Sell assets” and “Disperse family members”, outfit and infit mean squared statistics for the ex-ante coping strategies are

Table 1a: Diagnostic checks for Ex-ante coping strategies

Item No.	Item	Cronbach’s alpha for Item excluded	Outfit MSQ	Infit MSQ
		0.4486		
1	Fence water source	0.4130	0.858	0.934
2	Fence grazing area	0.4165	0.931	0.974
3	Moved livestock to cattle post	0.3845	0.478	0.625
4	Changing cropping system	0.4453	1.017	1.047
5	Plant drought resistant crops	0.4040	0.957	0.949
6	Irrigate crops	0.3795	0.529	0.819
7	Prepared for drought	0.4378	0.930	1.004

Table 1b: Diagnostic checks for the Ex-post coping strategies

Item No.	Item	Cronbach’s alpha for Item excluded	Outfit MSQ	Infit MSQ
	None	0.4763		
1	Sell Assets	0.5237	1.931	0.938
2	Seek Wild Food	0.3561	0.769	0.856
3	Disperse Family Members	0.3237	0.723	0.685
4	Work for food	0.3272	0.854	0.794
5	Seek Employment	0.5106	1.108	1.168

0.7–1.3 deemed to be usable by Linacre and Wright (1994) and Nord (2014). This implies that these items fit the Rasch model well. The outfit mean square statistics for the “Sell assets” item is greater than 1.5, which indicates that the item is less strongly or consistently related with vulnerability and hence, does not fit the data very well. On the other hand, the infit statistic for “Disperse family members” is less than 0.7, which implies that the item is strongly associated with household vulnerability and the information it provides might be undervalued. Contrary to the other goodness of fit statistics, all the Cronbach’s alpha statistics are less than 0.7. This implies that the items might not be unidimensional, thereby measuring more than one latent attribute. This means that the ex-ante and ex-post items are usable in measuring the drought resilience and vulnerability respectively for households in Oshipya constituency, using IRT modelling.

Item characteristic curves for ex-ante and ex-post coping strategies

The item characteristic curves (ICC) in Figure 1a show that the easiest (most implemented) coping strategies for the communal farmers in Oshipya were the changing of the farming system and planting of drought resistant crops as farmers with low resilience. This shows that the farmers employed these coping strategies as signified by the ICC on the extreme left. Furthermore, respondents with a 0.5 probability of using the strategies have a resilience level less than 0. However, fencing water sources, fencing of grazing areas, irrigation of crops and movement of livestock to cattle post were employed by more resilient households. Most of the households in Oshipya District have to some extent or another prepare for the drought as the ICC of item 7, inquiring about preparedness, is to the left of all the other items.

The ICCs for ex-post strategies (Figure 1b) show that the most difficult (less employed) risk mitigation coping strategy is the selling of assets to buy food as it requires a household

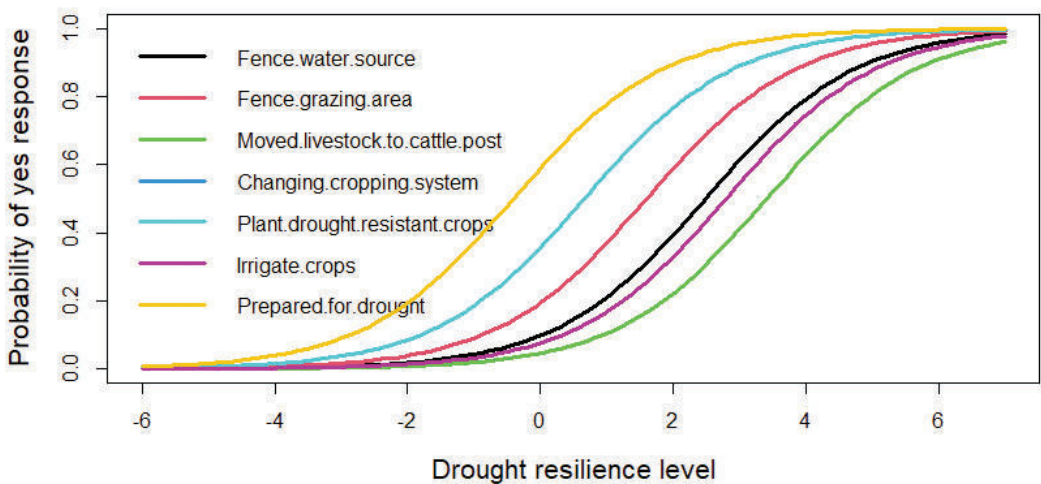


Figure 1a: Comparison of item difficulties for ex-post copying strategies.

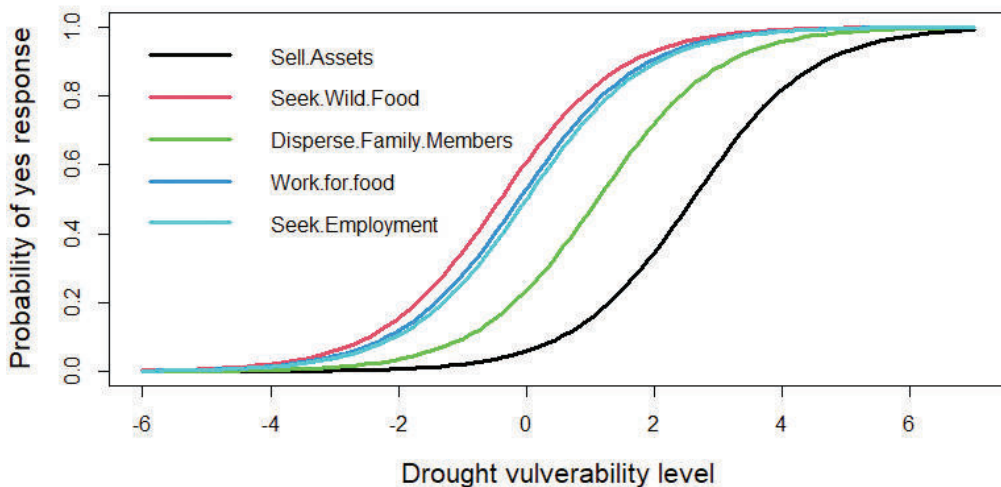


Figure 1b: Comparison of item difficulties for ex-post coping strategies

of vulnerability status of about 2.0 to give an affirmative answer with a probability of 0.5. This shows that it required households with very high levels of vulnerability to dispose assets due to food insecurity. Disposal of household members was fairly difficult and required households of vulnerability status more than 0 to have a 0.5 probability of implementing it. The easiest coping strategy employed by households in the event of drought was searching for wild fruits as it has the flattest ICC to the extreme left of all the other ICCs, followed by working for food. In addition, some households seek employment in the event of drought, although few work for food.

Item parameters for ex-ante and ex-post coping strategies

Table 2a gives the item attributes for the ex-ante strategies while Table 2b gives the item attributes for ex-post coping mechanisms. From the results in Table 2a, the most poorly utilized risk reduction coping strategy was the movement of livestock to cattle post with an item difficulty parameter of 1.656 and only affirmed by 6.25% of the sampled respondents, followed by the irrigation of crops which was endorsed by 10% with a difficulty parameter of 1.084. The easiest coping strategies were the changing of cropping system and planting of drought resistant crops with a difficulty parameter of -0.862, utilized by 37.5% of the households. The item that was most influential in disaggregating respondents, according to their levels of resilience, is the “irrigation of crops” with a discriminant parameter of 2.079 followed by “fencing of water sources” with a discriminant parameter of 1.19. The least discriminating item was the “changing of cropping systems with a discrimination parameter of 0.438. Only households high on the resilience scale fenced water sources (12.5%), fenced grazing areas (22.5%) irrigate crops. Only 6.25% of the sample households moved their cattle to cattle posts in times of drought.

Assesment of the Drought Coping Strategies Practiced by the Households in the Oshipya District of Etayi Constituency in Nothern Namibia

According to the item parameter findings in Table 2b, the most difficult (poorly utilised) coping strategies were the selling of household productive assets to buy food (difficulty parameter = 2.117) only affirmed by 8.75% of the respondents, followed by the dispersal of family members due to high levels of food insecurity, affirmed by 27.5% of the respondents and an IRT difficulty parameter = 0.490. However, the most commonly employed coping strategies were the seeking of wild food, practiced by 58.75% of the households (difficulty parameter = -1.119), followed by working for food and seeking of employment (difficulty parameter = -0.682), endorsed by 50% of the sampled households.

Person parameters (household resilience and vulnerability levels)

The person parameters (resilience and vulnerability) were estimated on a continuous scale ranging from -4 (poor) to 4 (high) with an expected average of 0. The sample estimates of the household levels of vulnerability to effects of drought ranged from -2.93 (the least vulnerable) to 3.21 (the most vulnerable), relative to other members in the sample with -0.64 being the average with a standard error of 0.169. The household resilience level ranged from 3.32 (least resilient) to 2.22 (most resilient) relative to other group members. The

Table 2a: Item information for ex-ante coping strategies (Resilience)

Item No	Item	Proportion <i>no</i>	Proportion <i>yes</i>	Difficulty parameter	Discriminant Parameter
1	Fence water source	0.8750	0.1250	0.792	1.190
2	Fence grazing area	0.7750	0.2250	-0.034	0.575
3	Moved livestock to cattle post	0.9375	0.0625	1.656	2.217
4	Changing cropping system	0.6250	0.3750	-0.862	0.438
5	Plant drought resistant crops	0.6250	0.3750	-0.862	1.126
6	Irrigate crops	0.9000	0.1000	1.084	2.079
7	Prepared for drought	0.4250	0.5750	-1.773	0.566

Table 2b: Item information for ex-post coping strategies

Item No	Item	Proportion <i>no</i>	Proportion <i>yes</i>	Difficulty parameter	Discriminant Parameter
1	Sell Assets	0.9125	0.0875	2.117	0.170
2	Seek Wild Food	0.4125	0.5875	-1.119	-1.782
3	Disperse Family Members	0.7250	0.2750	0.490	-1.368
4	Work for food	0.4750	0.5250	-0.805	-2.954
5	Seek Employment	0.5000	0.5000	-0.682	-0.358

mean of household level of resilience/preparedness to deal with consequences of drought is -1.46 (which is below the expected average of 0) with a standard error of 0.142. About 90% of the respondents have been ranked below 0 on the resilience/preparedness continuum, an indication that they are not very prepared according to the resilience items in the survey. On the other hand, about 35% of the households have been ranked to be above 0 on the vulnerability scale, that is, some of them have affirmed the most difficult/rare coping strategies like disposal of assets to buy food for the household at some point.

Diversification of livelihood activities

One of the ways of dealing with drought suggested in literature is diversification of sources of livelihood so that maybe some of the livelihood sources may subsist drought consequences. Figure 2 gives some of the livelihood strategies used by the Oshipya households to mitigate the effects of drought on food security and livestock husbandry. The planting of fruits and storage of pearl millet stalks were the most common strategies utilized for food security and animal feeds respectively. However, a sizeable fraction of the households did not use any of the extra coping measures highlighted.

One-way analysis of variance (ANOVA) was performed to check if there is a difference between the coping strategies and resilience levels for households that implement the livelihood activities in Table 3. There was a significant difference in the resilience levels for different livelihoods activities ($p < 0.05$) although the difference between the vulnerability levels was not statistically significant ($p > 0.05$). Table 4 gives the mean comparisons for the resilience and vulnerability levels. The results show that it is the least resilient households (mean = -3.32) and less vulnerable households (mean = -1.77) that resort to borrowing in the occurrence of drought. Preparation strategies like shop ownership, preservation of pearl millet stalks and planting of trees improves household level of drought adaptation. There is no significant difference in the resilience levels for households with no diversification

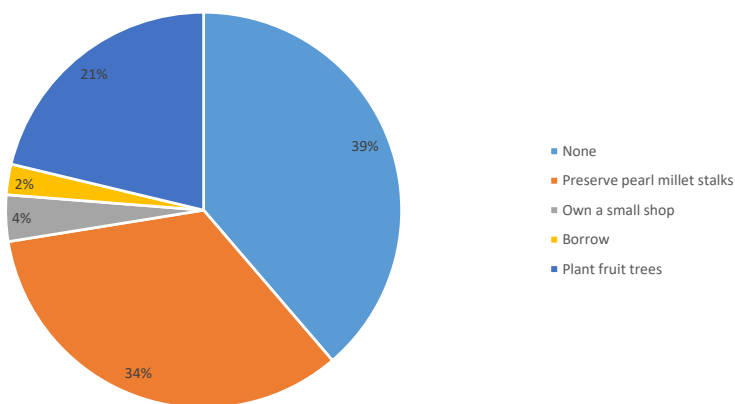


Figure 2: Other ways of preparing for drought

Assesment of the Drought Coping Strategies Practiced by the Households
in the Oshipya District of Etayi Constituency in Nothern Namibia

*Table 3a: Person parameters
for resilience levels*

Resilience level	Frequency	Percent
$-4 \leq x < -3$	12	15.0
$-3 \leq x < -2$	24	30.0
$-2 \leq x < -1$	23	28.8
$-1 \leq x < 0$	13	16.3
$0 \leq x < 1$	4	5.0
$1 \leq x < 2$	2	2.5
$2 \leq x < 3$	2	2.5
Total	80	100.0

*Table 3b: Person parameters
for vulnerability levels*

Resilience level	Frequency	Percent
$-3 \leq x < -2$	12	15.0
$-2 \leq x < -1$	17	21.3
$-1 \leq x < 0$	24	30.0
$0 \leq x < 1$	17	21.3
$1 \leq x < 2$	8	10.0
$2 \leq x < 3$	0	0
$3 \leq x < 4$	2	2.5
Total	80	100.0

Table 4: Mean comparison for types of coping strategies

Copying strategy	Resilience		Vulnerability	
	Mean	s.e.	Mean	s.e.
Borrow	-3.32a	0.18	-1.77a	0.26
None	-2.13a	0.20	-0.99a	0.31
Own a small shop to earn money	-1.26ab	0.54	-0.69a	0.38
Preserve pearl millet stalks for animals	-0.93b	0.00	-0.61a	1.16
Plant fruit trees to eat	-0.90b	0.36	-0.52a	0.41

mechanism in place and those that borrow and no significant difference between the resilience levels for households that preserve pearl millet stalk and households that planted fruit trees.

Discussion

The results have depicted low levels of drought resilience and high levels of vulnerability to drought. Only households high on the resilience scale fenced water sources and grazing areas, irrigate crops and moved their cattle to cattle posts in times of drought. This is probably because some of the copying strategies, such as fencing of water sources and grazing areas, are difficult to implement due to legal and legitimacy issues as highlighted by Werner (2012). Similar results were observed by Angula and Kaundjua (2015), who reported low adaption capacity for households in Ohangwena, Oshana and Omusati regions due to climate risk, social, political and cultural factors. The most common risk reduction coping strategies utilized by the Oshipya households are changing of cropping systems and planting of drought resistant crops varieties.

The current findings concur with other findings in literature. Iliffe (1980), in a study in Zimbabwe, reported the chief defence against food scarcity due to drought to be the production of drought resistant crops such as rapoko and pearl millet. Mdungela *et al.* (2017) discovered the planting of drought resistant crops to be relatively utilized by 44% of the sampled households in the drought prone Eastern Province of South Africa. Ndlovu (2009) advocated for the planting of drought resilient small grains which should be accompanied by promotional policies. Swearingen *et al.* (2000) and Mortimore and Adams (2001) observed the use of heat and drought resistant varieties to be beneficial strategies in Morocco and the Sahel region respectively. Furthermore, planting of drought resistant crop varieties like mahangu Okashana 1 and 2 varieties which are early maturing and resistant to drought has also been advocated for by the African Adaptation Project (2010) and Angula and Kaundjua (2015) as a way to combat the effects of drought and climate change in Namibia.

No one affirmed the item on soil conservation and conservation agriculture (CA), making it a very difficult coping strategy; hence, it was removed from the analysis. This is probably because soil and water conservation techniques are practiced in selected communities with the help of non-governmental organisations that are in partnership with the agricultural ministry. Henceforth, CA might not be implemented in the study community yet. However, soil and water conservation techniques were identified by Asfaw and Lipper (2011) to be important ways of climate change adaptation. CA calls for soil and moisture conservation through zero to minimum tillage, crop rotation and soil cover using crop residues. The African Adaptation Project (2010) and Kuvare *et al.* (2008) identified it to be one of the potential adaptation measures the Namibia households should employ to mitigate the effects of climate change and drought. However, the sustainability of such a farming principle is at stake as it may be incompatible with the strategy of saving crop residues for use as animal feeds in the event of drought.

Water management strategies are poorly utilized by households in the survey as very few households fenced water sources. However, water management strategies have been observed as a major factor influencing the household vulnerability to drought risks (Muhammad & Jayan 2013; Mdungela *et al.* 2017; Asfaw & Lipper 2011). Rainwater harvesting and water resource management are among the mitigation strategies encouraged for Namibia (African Adaptation Project 2010, Kuvare *et al.* 2008). In addition, irrigation agriculture was only employed by households higher on the resilience continuum. These findings are in agreement with Mdungela *et al.* (2017) who discovered irrigation to be a coping strategy employed by only 29% of the households in Eastern Province of South Africa. However, Uddin *et al.* (2014) observed an increased use of irrigation to be a common drought coping strategy in Bangladesh, highly rated by 75% of the households in their study. This is probably because water for irrigation is scarce in northern Namibia. Howden *et al.* (2007), and Eakin (2005), also identified the use of irrigation to be an effective way of mitigating the effects of climate change and environmental degradation. A study by Kuvare *et al.* (2008) concluded that irrigation agriculture is a possible means for agricultural populations to adopt to drought.

Households that diversified income sources were more resilient than households that rely on agriculture alone. However, the strategies were collected as categories of a single item on the questionnaire, without giving allowance for multiple responses and hence, information on households using more than activity might have been missed. Crop diversification and non-farm income generation activities were observed to be adaptation strategies that are practiced at household level in response to climate change (Ajao & Ogunniyi 2011, Martimore & Adams 2001; Tazeze *et al.* 2012) and significantly improved households' ability to cope with climate change effects. The government is encouraging the cultivation of high valued crops such as paprika, mushrooms and oriental tobacco as a way to mitigate the effects of climate change (Kuvare *et al.* 2008).

The study findings depict that movement of cattle to a cattle post was a rare coping strategy employed by very few highly resilient households. These findings are in agreement with the findings of Ndlovu (2009) who discovered that the households in Bulilima and Mangwe did not significantly employ this coping measure. However, the movement of livestock is not uncommon among pastoral nomads as they move their livestock in search of pastures. Campbell (1999) observed the Kenyan households to move their livestock to places where there is water and pastures. Livestock mobility and herd accumulation are the most important livestock management strategies (Kuvare *et al.* 2008) with movement to cattle posts as fall-back grazing areas as they are usually unused in normal times because of distance, land tenure constraints and water availability problems.

Crisis management coping strategies

The most commonly employed crisis management coping strategies in the event of drought are the seeking of wild fruits, working for food, migrating to seek employment. Dispersal of family members and disposal of assets were not very common but practiced by most vulnerable households according to the estimated vulnerability scale. The collection of wild foods and fruits was also noted in Zimbabwe in the 1982–84 drought where many rural households resorted to shelling marula (*sclerocarya birrea*) nuts for consumption and for sale (Chenje 1994). Ndlovu (2009) also noted that households resorted to consumption of unfavourable food stuff such as the drinking of wild okra and consumption of wild fruits.

Dispersal of family was deemed a rare coping strategy in this study. However, most households have members seeking employment or working for food within the locality, although a few had to migrate to other areas. These findings are in agreement with the argument of FAO (1997) who argued that labour migration and the selling of big assets such as livestock and fields are the last resort coping strategies. Masendeke and Shoko (2013), in their study in Ward 12, Mberengwa, Zimbabwe reported that male members of the households are sent out of the home to seek temporary and permanent employment and in acute situations, even females. Similar crisis management techniques were noted by Neeftjes (2000) in a study in southern Niassa, Mozambique where many individual farmers

depended on piece work and some households dispersed young men to work in occupations such as the construction industry so as to fend for their families.

Productive assets such as cattle and ploughs play a significant economic role in rural households. However, the study showed that in extreme cases of vulnerability, households had to dispose their productive assets in order to buy food for the households. Most studies in literature agree that asset disposal is an extreme coping strategy employed only when there are no other alternatives and smaller assets are that sold first, then bigger assets like livestock, ploughs and fields are sold for food when conditions continue to worsen, (Carr1997, FAO 1997, Iliffe 1990, UNEP 2002). However, it is also vital to note that such extreme coping strategies were rarely employed, probably because households were receiving relief aid from the government and its stakeholders as the drought was declared disastrous. Contrary to these views, Ndlovu (2009) found the selling of livestock to be a very easy coping strategy as most of the households in the study disposed of their livestock to buy food. This is probably because the Bulilima and Mangwe districts in which her study was conducted are heavily reliant on livestock production as a source of livelihood. However, reduction of livestock numbers has been called for by the African Adaptation Project (2010), Ndlovu (2009), Sledger (2008) and Campbell (1999) as a way to handle the effects of drought by reducing the herd to manageable size as well as decreasing the loss of livestock dying because of drought. The farmers can likewise access funds to buy supplementary feeds for the other livestock during drought periods. The qualitative study by Angula and Kandjua (2015) noted that households in the northern parts of Namibia reduce the impact of drought by destocking and selling livestock to buy food. However, the selling of assets, if relied upon too much, can in the long run increase drought risk, as communities will depreciate productive assets to prepare for future droughts unless otherwise if the proceeds from such sales are saved and reinvested for rebuilding lost assets.

Conclusion

The objective of the study was to apply the IRT modelling technique to estimate the levels of household adaptation and vulnerability to drought using their responses to risk and impact management coping mechanisms. The results show low adaptation level is low and high vulnerability, implying that household resort on disaster risk response strategies than preparedness strategies. This is in agreement with Angula and Kaundjua's (2015) study that concluded that there were no long-term adaption options identified in their study areas and farmers opined that the existed strategies are not adequate to cope with more frequent and extreme incidents of drought with no local adaptation institutions in the villages they studied. Amadhila *et al.* (2013) and Kuvare *et al.* (2008) opined that subsistence agriculture remains vulnerable to extreme climate change effects as farmers resort to short term adaptation strategies. This might mean that the farmers are not capacitated enough to deal with extreme drought cases.

It is encouraged that the government and other stakeholders conduct a thorough assessment of the effects of drought on the community as well as the coping mechanisms that are utilised so as to identify gaps and the need for assistance. The government and its stakeholders should encourage effective drought management through risk identification, risk mitigation and emergency preparedness at both community and national level. It is recommended that households be encouraged to utilize farming techniques that reduce effects of drought and other climate change related hazards, such as planting drought resistant and short season varieties. Households should store crop residues and other supplementary feeds for their livestock in the drier seasons, diversify livelihood activities to include non-farming activities and move their livestock to cattle posts where they will get enough feeds. It is suggested that such viable strategies be incorporated into policies and mechanisms to encourage farmers to adopt and cope with drought at household level so as to reduce dependency from relief food supplements which have been noted to cause dependency syndrome among the beneficiary households if over utilized (Ndlovu 2009, National Drought Task Force 1997).

Conservation agriculture is not yet employed in Oshipya District, although it has been identified to be one of the potential adaptation measures for drought prone Namibia. However, the farming technique calls for permanent soil cover using crop residues in order to conserve soil moisture. Research should be done to assess the sustainability of the farming mechanism since it appears incongruent to the concept of keeping crop residues for feeding livestock in the event of drought. In summary, adaptation practices require extensive research and high-quality information on the effects of climate change on agriculture, environment and social systems so that the strategies to be implemented can aim to address all these issues. The need for drought adaptation may not be over emphasized as lives may be lost while social networks and capital investments may be disrupted and government funds rechannelled to emergencies.

References

- AFRICAN ADAPTATION PROJECT, 2010. Namibia CCA Ambassadors Theme 6: Potential Adaptation Measures for Namibia. http://www.iecn-namibia.com/-content/Theme6_potential_adaptation_measures.pdf/.
- AGAZZI I. 2013. Drought hits policies. Retrieved from <http://www.ipsnews.net/2013/03/drought-hits-policies/> (Accessed 21 July 2019).
- AJAO A.O. & OGUNNIYI L.T. 2011. Farmers' strategies for adapting to climate change in Ogbomoso agricultural zone of Oyo state. *Agris On-line Papers in Economics and Informatics*, 3(3): 3–13.
- AMADHILA E. SHAAMHULA L. VAN ROOY. G. & SIYAMBANGO N. 2013, 'Disaster risk reduction in the Omusati and Oshana regions of Namibia', *Jãmbá: Journal of Disaster Risk Studies* 5(1):1–9.

- ANGULA M.N. & KAUNDJUA M.B. 2015. The changing climate and human vulnerability in north-central Namibia. *Jamba: Journal of Disaster Risk Studies*, 8(2).
- ASFAW S. & LIPPER L. 2011 Economics of PGRFA Management for Adaptation to Climate Change: A Review of Selected Literature; Background Study Paper No. 60; Agricultural Economic Division: Rome, Italy.
- CAMPBELL D.J. 1999. Response to drought among farmers and herders in Southern Kajiado district, Kenya: a comparison of 1972–1976 and 1994-96. *Human Ecol.* 27(3):377–416.
- CARR M. 1997. *New patterns: Process and change in human geography*. Thomas Nelson and Sons Ltd, UK.
- FAO 2017. Islands of Success: Conservation Agriculture in Namibia <http://www.fao.org/namibia/news/detail-events/en/c/1028094/>.
- FAO, 1997. *Agriculture, food and nutrition for Africa*. FAO Publishing Management Group, Rome.
- HAGERTY M.R. & LAND K.C. 2007. Constructing Summary Indices of Quality of Life: A Model for the Effect of Heterogeneous Importance Weights, *Sociological Methods Research* 35, 455–496.
- HOWDEN S.M. SOUSSANA J. TUBIELLO F.N. CHHETRIN. DUNLOP M. & MEINKE H. 2007. Adapting Agriculture to climate change effects. *Proc. Natl. Acad. Sci. USA*, 104, 19691–19696.
- ILIFFE J. 1990. *Famine in Zimbabwe 1890-1960*. Mambo Press, Gweru, Zimbabwe.
- JORDAAN A.J., 2012. *Drought Risk Reduction in the Northern Cape Province, South Africa*. Ph.D. Thesis, University of the Free State, Bloemfontein, South Africa.
- KAUNDJUA M.B. ANGULA M.N. & ANGOMBE S.T. 2012. ‘Community perceptions of climate change and variability impacts in Oshana and Ohangwena regions’, *Journal for Studies in Humanities and Social Sciences* 1(1), 21–32.
- KUNENE RIVER AWARENESS KIT (2020). http://www.kunene.riverawareness-kit.com/KUNENERAK_COM/EN/PEOPLE/PEOPLE_AND_ENVIRONMENT/LIVELIHOODS/LIVELIHOODS_AGRICULTURE/LIVESTOCK_FARMING.HTM.
- KILANOWSKI J.F. & LI L. 2012. Rasch analysis of US Household Food Security Survey Module in Latino migrant farmworkers, *Journal of Hunger & Environmental Nutrition*.7 (2-3), 178–191.
- KUVARE U., MAHARERO T. & KAMUPINGENE G. 2008. *Research on farming systems change to enable adaptation to climate change*, University of Namibia, Namibia. http://www.met.gov.na/Documents/Farming_Systems_Climate_Change_FINAL_REPORT.pdf.
- LINACRE J.M. & WRIGHT B.D. 1994. “Reasonable Mean-Square Fit Values.” *Rasch Measurement Transactions* 8(3):370. Available: www.rasch.org/rmt/rmt83.htm.
- MASENDEKE S. & SHOKO K. 2013. *Drought Coping Strategies and Their Effectiveness: The case of Ward 12 Mberengwa District Zimbabwe*. *International Journal of Social Sciences Studies*.
- MAWF, 2006. *Agricultural Statistics Bulletin (1992–2004)*. Directorate of Planning, Ministry of Agriculture, Water and Forestry, Windhoek, Namibia.

- MDUNGELA N.M. BAHTA Y.T. & JORDAAN A.J. 2017. Farmers' choice of drought coping strategies to sustain productivity in the Eastern Cape Province of South Africa. Book Series Frontiers in Sustainability. 1(1):73–89.
- MORTIMORE M.J. & ADAMS W.M. 2001. Farmer adaptation, change and “crisis” in the Sahel. *Global Environmental Change* 11(1), 49–57.
- MUHAMMAD A. & JAYAN K. 2013. Perception and understanding of drought and coping strategies of farm household in north-west Balochistan. Elsevier limited 5. 49–60.
- NAMIBIA CROP PROSPECTS, FOOD SECURITY AND DROUGHT SITUATION REPORT (2015. Namibia Early Warning and Food Information Unit, Ministry of Agriculture, Water and Forestry, Namibia.
- NAMIBIA STATISTICS AGENCY (NSA), 2011. Namibia 2011 population and housing census main report, Namibia Statistics Agency, Windhoek.
- NATIONAL DROUGHT TASK FORCE, 1997. National Drought Policy & Strategy Republic of Namibia. <http://www.mawf.gov.na/Documents/app.htm>.
- NDLOVU S. 2009. Coping with Drought. Research Findings from Bulilima and Mangwe Districts, Matabeleland South, Zimbabwe. Practical Action Publication.
- NEEFJES K. 2000. Environments and livelihoods, strategies for sustainability. Oxfam Publication.
- NORD M, 2014. Introduction to Item Response Theory applied to Food Security Measurement: Basic Concepts, Parameters, and Statistics. Technical Paper, FAO, Rome. (<http://www.fao.org/economic/ess/ess-fs/voices/en>).
- SEYMOUR C. & DESMET P. 2009. Coping with drought: do science and policy agree?. *South African Journal of Science*, 105(1-2), pp.18–19.
- SWEARINGEN W. & BENCHERIFA A. 2000. An Assessment of the drought hazard in Morocco. In *Drought: A Global Assessment*; Wilhite, D.A., Ed.; Routledge: London, UK, Volume 1:279–286.
- TAZEZE A. HAJI J. & KETEMA M. 2012. Climate change adaptation strategies of small-holder farmers: The case of Babilie District, East Harerghe Zone of Oromia Regional State of Ethiopia. *Journal of Economics and Sustainable Development*, 3(14):1–12.
- UDDIN M.N. BOKELMANN W. & ENTSMINGER J.S. 2014. Factors affecting farmers' adaptation strategies to environmental degradation and climate change effects: A farm level study in Bangladesh. *Climate*, 2(4):223–241.
- UNEP, 2002. Africa environment outlook, past present and future Perspectives, Earthprint Ltd, UK.
- WERNER W. 2012. Unlocking the Economic Potential of Communal Land. Regional/ Africa Experience. Discussion Paper. Bank of Namibia 14th Annual Symposium 2012.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft
Windhoek, Namibia 2021

ISSN: 1018-7677 ISBN: 978-99945-76-74-6

About the Authors

Vonai Charamba is a Biostatistics lecturer with the University of Namibia. She studied for her PhD in Science (Statistics) with the University of Namibia and BSc in Science and MSc in Science (Statistics) with the University of Zimbabwe. She is currently teaching Biostatistics, Biometry and Research Methods modules to undergraduate and postgraduate students in the School of Agriculture and Fisheries Science and the School of Health Sciences and Veterinary Medicine, at the University of Namibia.



Her Research Interests are as follows:

- Item Response Theory Modelling
- Application of Generalized Linear Models to Agricultural Research (Food security and sustainable agriculture)
- Bayesian Inference
- Climate change and Social research

Vonai is a strong advocate of student centred teaching and learning where students learn through hands on application. She believes learning is a cycle where we continually learn from students and colleagues through information dissemination. She has published some work on Agriculture and Food Security in peer reviewed journals and had several conference presentations.

Haruna Mohammed Bello

Research and Academic Experience: Bello started his academic and research career in August 1983 at the Usmanu Danfodiyo University Sokoto – Nigeria as a Graduate Assistant. He navigated through the ladder of the academic career attaining the rank of Professor in October 2009.



Research Area: Consumption/Production analysis, natural resources/environmental/climate change, social issues such as gender, poverty and child labour.

Number of Published papers: He has published over 40 peer-reviewed academic articles in accredited academic journals and or book chapters. Research interest in consumption studies, climate change, social issues, natural resources and the environment.

Special Award: In 1985, He was successfully nominated for the Fulbright Fellowship to study at Texas A&M University in College Station, Texas. While at Texas A&M University, as a Fulbright Fellow, he was selected in Who's Who Among International Students in the American Universities and Colleges in 1988. In 2003, the Association of African Universities (AAU) and the German Academic Exchange Services (DAAD) selected him to serve as AAU – DAAD Visiting Fellow in the Department of Agricultural Economics and Extension at the National University of Lesotho.

Remarkable points: HM Bello worked in a number of institutions during his research and academic career. He worked at the Usmanu Danfodiyo University as a lecturer and some administrative positions such as the Faculty Examinations Officer, Deputy Director Academic Planning; Chairperson of some Faculty and University Committees and member of the editorial board of the Nigerian Journal of Basic & Applied Sciences (NJBAS). At the National University of Lesotho, he was also on the editorial board of the Lesotho Journal of Social Sciences. At the Walter Sisulu University Haruna, he was the Coordinator of Curriculum Development in the Centre for Rural Development, while at the University of Namibia, he served as Coordinator/HOD for Postgraduate Studies and member of the UNAM Postgraduate Board and briefly served as Acting Dean School of Agriculture, Food Processing and Biotechnology at the NITED Polytechnic, Windhoek, Namibia before re-joining Department of Economics at the National University of Lesotho in June 2021 where he currently serves as lecturer and Postgraduate Coordinator in the Department of Economics, NUL.

Dorthea Kashinasha Shiimi is an Agriculture Technician Officer under the Ministry of Agriculture Water and Land Reform, Namibia. She has been working there for almost two years. Before that, she was working as an intern at Namibia Biomass Industry Group for half a year.

Dorthea Kashinasha Shiimi was born thirty years ago in a small village found in the northern part of Namibia. She grew up with her grandmother as her mom was away at school. They survived on land, growing pearl millet from a two hectare field. It was not easy as their area was affected by drought thus, farming was challenging. Her grandmother had to resort to other means to ensure that her cousins and Dorthea Kashinasha Shiimi were fed. When Dorthea Kashinasha Shiimi was ten, she moved from the village and went to school in a small town called Tsumeb. It was there where she completed her high school at Etosha Secondary School in 2009. While in the high school, life was not easy because her mom was a single parent supporting four kids, but, by the Grace of God they overcame.

In 2010, with the advice of her aunt, Dorthea Kashinasha Shiimi enrolled in a three years Diploma in Agriculture program at the University of Namibia. After completing, she strived to continue with her honours degree. For the love and interest she has for Agriculture and economics, she decided to pursue an honours degree in Agricultural Economics. This was when she decided to go back to her home village to undertake a study that captures different coping mechanisms that subsistence farmers put in place to deal or overcome the effects of drought. This is because she felt like subsistence farmers do a lot to cope with drought but it is not properly captured and mostly overlooked hence decision makers may make uninformed decisions to try and assist the farmers when it comes to drought. Upon completing her honours in 2016, she continued with her MSc degree in Agricultural



Vonai Charamba, Haruna Mohammed Bello, Dorteia Shiimi

Economics still with the University of Namibia. The focus for her masters' research was more on determining the viability of turning encroaching bush species into animal feeds and the paper has already been published.

Addresses

Vonai Charamba, P.O. 8981, Windhoek, Namibia, E-mail: vcharamba@unam.na.na.

Haruna Mohammed Bello, Department of Economics, Faculty of Social Sciences, National University of Lesotho, 0180 Roma - Maseru, Lesotho, email: hm.bello@nul.ls.

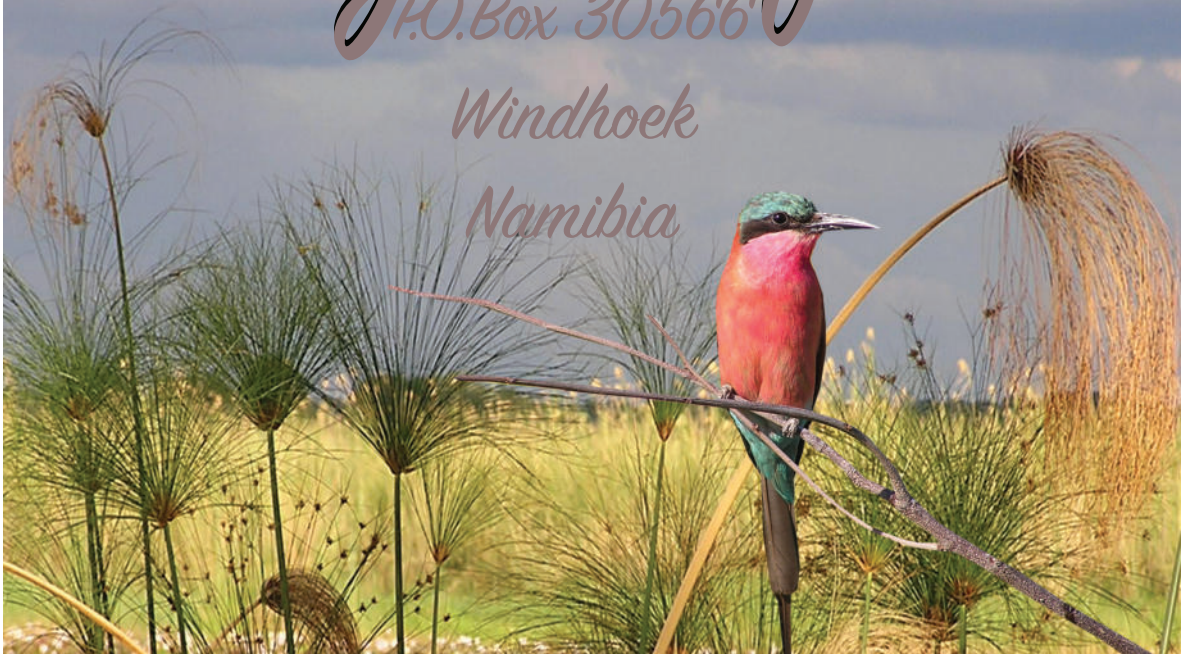
Dorteia Kashinasha Shiimi, Department of Agricultural Economics and Extension, University of Namibia, Private Bag 13188, Windhoek, email: dkdorthy@gmail.com.

Kidogo Safaris

P.O.Box 30566

Windhoek

Namibia



Tel.: +264 61 243827

Email: kidogo@iway.na

www.kidogo-safaris.com/de

**individuell*

**anspruchsvoll*

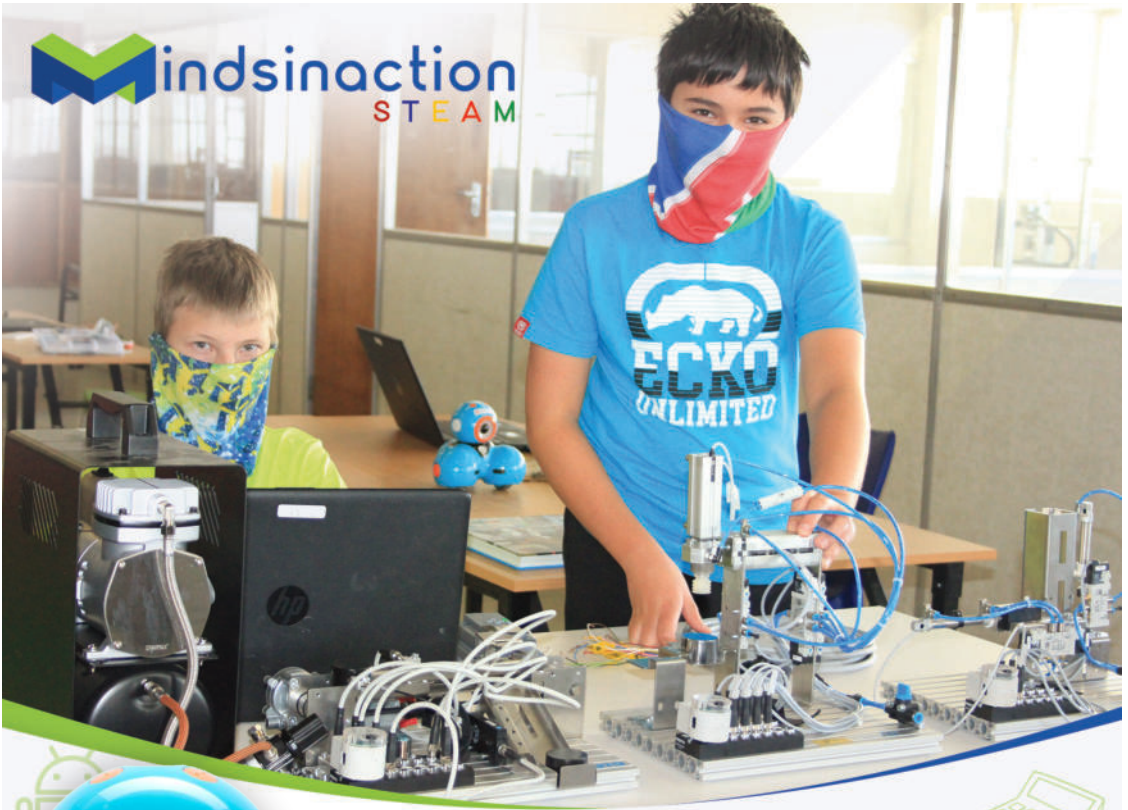
**naturnah*

**erfahren*

**bewährt*

**Reptiliensafaris*





REGISTER NOW!

STEM

**SCIENCE TECHNOLOGY ENGINEERING
ARTS MATHEMATICS**

Mindsinaction STEM Center, has a new offer for students and children in Windhoek. In a playful way, using hands-on training kits, students learn industry 4.0 skills to become innovators. Courses on offer range in clusters including Robotics, Electronics, Coding, Renewable Energy and Water Technology.

REGISTER HERE

www.mindsinaction.com.na

FEES

N\$ 1,500/per Module

Duration: 8 Weeks

PHYSICAL ADDRESS

Toivo Ya Toivo Street, N0.6
Suiderhof, Windhoek
Namibia

ENQUIRIES

Cell: +264 81 363 0529

+264 81 380 4069

Email: admin@mindsinaction.com.na

The Importance of Being Earnest – the Relation between Hendrik Witbooi and the Gamsberg

Sanne de Jong

Keywords: Hendrik Witbooi, Gamsberg, colonialism, African Millimeter Telescope (AMT).

Abstract

Hendrik Witbooi (c. 1830–1905) was captain of the Witbooi people living in southern Namibia. For a long time, Witbooi defied the German occupation by fighting against the German colonial troops, until he died of wounds sustained in battle. His leadership in resisting the colonist armies make many consider him as a national hero in Namibia today. The African Millimeter Telescope (AMT) project aims to bring the first sub-mm radio telescope (an essential link to the network of telescopes known as the Event Horizon Telescope (EHT)) to the African continent, specifically the Gamsberg mountain in Namibia. This recommendation will explore Hendrik Witbooi's life and his geographical locations in relation to the Gamsberg mountain.

Introduction¹

‘I have heard that the British and the German Governments held a large meeting to decide who should make Protection treaties with the chiefs of which country in Africa; and that you the British let the Germans have this land. But you stipulated at the meeting that no chief shall be forced. If a leader is

¹ This research is mostly based on German and British colonial military sources, missionary sources from German missionaries and European newspaper articles. The sources are biased and therefore supplementary information is needed. More on this in the conclusion.

willing to, and does not understand why he should need Protection, he cannot be coerced. That was the agreement reached at your meeting, which was endorsed by all those present²

Abovementioned was written by Hendrik Witbooi, nowadays, seen by some as one of the African leaders who resisted German colonization in what is now Namibia, in November 1892 to the British Magistrate in Walvis Bay, as a complaint about the German colonization of the area.³ By this year, the Germans were already some years active in the region. The German colony, 'Deutsch-Südwestafrika', had been established in 1884. Hendrik Witbooi, together with his people and other groups in the region, resisted the presence of the German colonial troops in his region. He did this among others from his established settlement at Hoornkrans, roughly 20 kilometers from the Gamsberg mountain, where he settled in 1887.

The purpose of this research is to search for a possible connection between Hendrik Witbooi and the Gamsberg. The land on top of the Gamsberg is owned by the Max Planck Society. Before this land will be used for the telescope, it is important to first research the history of the area. During conversations about the idea of the Gamsberg as site for the AMT-telescope, some people mentioned the connection between the Gamsberg and Hendrik Witbooi. The land that will be used for the telescope will be in an area where Hendrik Witbooi was active. For example, his settlement, Hoornkrans, was roughly 20 kilometers from the Gamsberg, a distance that was doable with a horse in that day. It is important to keep in mind that the local people may have a connection with the location, or at least the area, due to the relation with Hendrik Witbooi. In the case of the Mauna Kea protests, the interests of the telescope constructors were put above those of the local population.⁴ There was little respect for the fact that they saw the mountain as a spiritually important place. This must of course not become the case in Namibia.

Sources and methods

I conducted this internship by studying secondary sources (modern academic works and literature about the topic) and primary sources (first-hand accounts). I mostly used German colonial reports and letters as primary sources, but also missionary reports. Of course, both

² Hendrik Witbooi, *The Hendrik Witbooi Papers*, Brigitte Lau ed. (Windhoek 1995) 111-112.

³ I would like to thank the anonymous reviewers and the Namibian Scientific Society. I gratefully thank the AMT-team and especially Dr Klein Wolt and Ms Schut at Radboud University. I am also thankful to Mr Matthaai, Dr Elsemi Olwage, Prof. de Rooy and Prof. Akawa and Dr Bernard Moore at UNAM. Furthermore, I would like to thank Mr De Hoog at University of Leiden, and Dr Hannah Dalgleish from Oxford University, Dr Kramer from Radboud University and Dr Goosmann from Utrecht University.

⁴ In 2014 the construction of a Thirty Meter Telescope caused disturbance among the Hawaiian population. According to Native Hawaiian religion and culture, the Mauna Kea was the home of Wakea, the sky god.

these sources are biased. Missionaries, while they not only actively tried to destroy the local population such as the German forces tried to, still contributed to the destabilization of ethnic groups such as the Herero, Nama and the Orlam Afrikaners under Jan Jonker Afrikaner. Jan Jonker Afrikaner was *Kaptein* of the Orlam Afrikaners in present-day Namibia.⁵ He came to power in 1863 and for a long time, he controlled the trade routes in Southwest Africa. Some think that his control of the area delayed the German penetration of the area that would later become their colony. It is relevant to mention that Jan Jonker Afrikaner, an important person in delaying formal colonial influence in Southwest Africa, has a connection with the Gamsberg as well.⁶ Heinrich Vedder mentions that Jan Jonker Afrikaner ‘went into the Gamsberg’ in December 1880.⁷ After Afrikaners’ power was broken, missionaries were still actively involved in weakening the powers of resistance by various groups, such as the Witboois.⁸

An important source providing information about the geographical location of Hendrik Witbooi was J.H. Esterhuyse. Esterhuyse was an archivist in South Africa and Namibia in the 1960s and has written a book about the German colonization in South West Africa. He mentions the Gamsberg several times in his book *South West Africa 1880–1894: The Establishment of German Authority in South West Africa*.⁹ To conduct his research, he used various archival sources from the colonial period. His work is the only secondary source I could find that explicitly mentions the Gamsberg in relation to Hendrik Witbooi. I was not able to trace all the primary sources the author used regarding the Gamsberg and Witbooi, due to travel restrictions and the outdated archive numbers. However, the ones I was able to trace did indeed confirm this connection. Esterhuyse also based some of his work on the *Quellen* from the missionary Heinrich Vedder, in which Vedder has written a history of Namibia from the 15th century until 1890.¹⁰ This missionary is a valuable source, since

⁵ In Khoekhoegowab Gaob, the term used to describe the leader of a community is translated as King. Captain or Chief is a diminutive term, see: Memory Biwa, ‘Toa Tama! Khams Ge’: Remembering the war in Namakhoeland, 1903–1908’, Master Thesis, University of Cape Town (2006) 9, note 4. Because of the more common use of *Kaptein*, also by people like Hendrik Witbooi himself, I have chosen to use the Dutch/Afrikaans name in this recommendation.

⁶ Jan Jonker Afrikaner is commonly known for his more cruel ways of dealing with his enemy, but he was nevertheless important in keeping the German colonial troops at a distance.

⁷ Heinrich Vedder, *South West Africa In Early Times: Being the story of South West Africa up to date of Maharero’s death in 1890*, Cyril G. Hall transl. and ed. (London 1966) 463.; N.A. 289, Whindus – U.S.N.A., 14.10.1882.

⁸ Brigitte Lau, ‘Pre-Colonial’ Namibian historiography: what is to be done?’ in Brian Wood (ed.), *Namibia 1884-1984: Readings on Namibia’s history and society*. (London 1988) 90–101, esp. 95. See for critical works on the role of missionaries in Southwest Africa: Heinrich Loth, *Die Christliche Mission in Südwest-Afrika. Zur destruktiven Rolle der Rheinischen Mission beim Prozess der Staatsbildung in SWA* (Berlin 1963).

⁹ J.H. Esterhuyse, *South West Africa 1880-1894: The Establishment of German Authority in South West Africa* (Cape Town 1968).

¹⁰ I used both the original German and the translated English version, for the German version see: Heinrich Vedder, *Das alte Südwestafrika – Südwestafrikas Geschichte bis zum Tode Mahareros 1890: Nach den besten schriftlichen und mündlichen Quellen erzählt* (Berlin 1934).

he tells a lot about the history of the Namaland before the colonization, but he is also a problematic source because of the racist undertone in his works and his support of German colonialization.¹¹ He also was not contemporary to the history he described, he based his work on documents from the Rhenish Missionary Society and oral history reports.

The problem with the German colonial sources is that they are biased. In some cases, they themselves also didn't know where Hendrik Witbooi was settling or hiding. Since the war between the Germans and the Witboois was a guerilla-war, it is likely that Hendrik Witbooi only settled in some places for quite a short time, making the significance of the locations where he was settling/hiding small. Since the war between the Germans and the Witboois was a guerilla style war, there have been several occasions where the Germans were unaware of the location of Hendrik Witbooi. Whenever colonel Leutwein lost touch with the Witbooi in the Naukluft mountains, he would send a messenger to Witbooi to ask if he was willing to make peace. The real reason of this mission, however, was to track his location.¹²

During my research, it could be established that the Gamsberg throughout history has been known by different names. Before 1884, the most seen name on European maps is the name 'Tansberg'.¹³ In 1836-37, the British Captain James Edward Alexander encountered what he called 'Hill or Berg Damara' at the Tans Mountain, the present Gamsberg Mountain.¹⁴ Nonetheless, other names for the Gamsberg were used as well. During the period of German colonization, the name for the Gamsberg, both on maps and in colonial sources, seems to have been 'Gansberg' (Gans means 'flat rock' in Nama).¹⁵ I also found the mountain was named 'Kansberg' and 'Gr. Schanz Berg'. In 1973, two sources gave the meaning of the name *Gamsberg* as 'lion mountain' from the Nama *Xam(s)*, which means 'lion' and the Afrikaanse word for 'mountain', *berg*.¹⁶ Other sources, however, support the explanation of Gamsberg as 'Enclosing Mountain'.¹⁷ On historical maps, the ambiguity about the spelling of the name is evident. Various maps from overlapping years show a wide variation of spellings. It is also possible that the name Gamsberg was used more broadly than just the mountain itself. This would mean that the area surrounding the Gamsberg, and also the region of Hoornkrans, would be named Gamsberg as well. This theory can, however, be dismissed using the colonial sources. J.H. Esterhuysen mentions that Hendrik

¹¹ Brigitte Lau, 'Pre-Colonial' Namibian historiography: what is to be done?' in Brian Wood (ed.), *Namibia 1884-1984: Readings on Namibia's history and society*. (London 1988) 90-101, esp. 93-94.

¹² *Die Dagboek van Hendrik Witbooi*, 24. Note from editor.

¹³ See for example: 'Missionskarte von Süd-Afrika nach der Karte in Stieler's Hand Atlas' (1857). <https://www.bmarchives.org/items/show/100203739> (consulted on 30-05-2021).

¹⁴ James E. Alexander, *An Expedition of Discovery V Into the Interior of Africa* (Cape Town 1967) 135-136. Originally published in the *Africana Collectanea* Vol. 22/33.

¹⁵ Nicole Grünert, *Namibia Fascination of Geology A Travel Handbook* (Göttingen/Windhoek 2017) 135-136.

¹⁶ P.E. Raper, 'Notes on Khoekhoen Place Names' *South African Journal of Science* 75 (1979), 451.

¹⁷ Lucie Alida Moller, 'N TOPONIMIES-LINGUISTIESE ONDERSOEK NA DUITSE PLEKNAME IN SUIDWES-AFRIKA', 499.



'TANS-MOUNTAIN, DAMARALAND.'

Figure 1: A picture of the Gamsberg, named 'Tans-mountain' by the explorer James Alexander in the 1830s. James Edward Alexander, *An Expedition of Discovery into the Interior of Africa: Through the hitherto undescribed Countries of the Great Namaquas, Boschmans, and Hill Damaras* (London 1838).

Witbooi had a new settlement in the Gamsberg after the battle at Hoornkrans.¹⁸ For some sources, it might certainly be true that they are talking about Gamsberg (or in some cases: Gansberg) in reference to Hoornkrans. Since Hoornkrans was very close to the Gamsberg, and the Gamsberg is a famous landmark, those names might have been used to describe the same geographical area.

Historical context Namibia and German colonization

Prior to 1880, European nations controlled only ten percent of Africa. Apart from a French controlled area in the north and South Africa, which was conquered by the British in the south, European trading posts and forts dotted the coast of Western Africa. The inlands of the African continent were largely undiscovered by the Europeans. After 1880, this

¹⁸ J.H. Esterhuyse, 202.

changed. A goldrush mentality by European nations led to a determined race for territory. To lay down some rules for this global competition, Jules Ferry of France and Otto von Bismarck of Germany arranged an international conference on Africa in 1884 and 1885. The Berlin Conference established that European claims on African territory had to be based on a strong presence on the occupied area that was recognized by other European states. Germany was at this moment rising as an imperial power. Prior to 1880, Bismarck had seen little value in colonies. Germany already had some ties in southwest Africa since the 1840s, when missionaries from the Rheinische Mission went to the area.¹⁹ In 1883, the German trader Adolf Lüderitz bought a piece of Namibian ground from a Nama kaptein.²⁰ The trading post of Walvis Bay was a British establishment, and Lüderitz alerted Bismarck that the British had interest in the area, because of its rich natural resources. In 1884, the German protectorate of Deutsch-Südwestafrika (German Southwest Africa) was established, in the area which is nowadays known as Namibia.²¹

Historical context: Hendrik Witbooi

The relation between the Witbooi and modern-day Namibia begins with Hendrik Witbooi's grandfather Kido Witbooi. In the mid-1850s, the Witbooi Nama (!Khowesin) under the leadership of Kido Witbooi (or #Alëib), moved from Pella in present-day South Africa to Gibeon (Khaxa-tsùs), where they settled in 1863. In the 1820s, Kido and his following set out to the north from Pella, in modern-day South Africa. For two decades, they circled the south of Namaland, in the Orange river region.²² In this time, contact was made with the Rhenish missionaries in this region, and in the year 1863, the Witboois established themselves in Kachatus, which they renamed 'Gibeon' (figure 2).²³ The Witbooi then numbered 3000 people living in 30 villages, as counted by the missionary Olpp.²⁴ A Peace Agreement for Hoachanas was initiated by missionary Vollmer that was ratified by 13 Nama Chiefs, including Kido Witbooi. The 'Oorlam Peace' was concluded on 19 December 1867.

¹⁹ Jürgen Zimmerer et al., *Völkermord in Deutsch-Südwestafrika der Kolonialkrieg (1904-1908) in Namibia und seine Folgen* (Berlin 2016) 16-29, esp. 25.

²⁰ In Khoekhoegowab Gaob, the term used to describe the leader of a community is translated as King. Captain or Chief is a diminutive term, see: Memory Biwa, 'Toa Tama! Khams Ge': Remembering the war in Namakhoeland, 1903-1908', Master Thesis, University of Cape Town (2006) 9, note 4.

²¹ McKay, 807.; Jürgen Zimmerer et al., *Völkermord in Deutsch-Südwestafrika der Kolonialkrieg (1904-1908) in Namibia und seine Folgen* (Berlin 2016) 16-29, esp. 18-19.; Werner Hillebrecht, *The Witbooi* (1992) 17.

²² Brigitte Lau, 19.; 'Hendrik Witbooi: Ikone und Inspiration des antikolonialen Widerstands und des unabhängigen Namibia' in L. Förster: *Namibia-Deutschland: eine geteilte Geschichte* (Köln 2004); Bosman, Hendrik, 'A Nama 'Exodus'? A postcolonial reading of the diaries of Hendrik Witbooi: exodus as narrative concerning origin and migration negotiating identity in Africa', *Scriptura* 108 (2012) 329-341, esp. 334.

²³ Brigitte Lau, 19.; The Rhenish Mission Station was founded in Gibeon, with missionary Jacob Knauer as its first missionary until November 1867, followed by Johannes Olpp (1867-1879).

²⁴ Quellen 16, May 1871.

Hendrik Witbooi was born around 1834 in Pella, the former Witbooi settlement. His Nama name was !Nanseb/Gâbemab, his Herero name was Korota (probably a variation from the Dutch/Afrikaans ‘korte’). Hendrik was the son of Moses Witbooi (!Gâbeb !A-!lîmab) and the grandson of Kido Witbooi (!A-!lîb !Gâmebab). Due to the influence of European missionaries, he was raised in the Christian faith (he was baptized together with his wife) and throughout his life, he believed that a divine mission guided his actions. He moved with his family to Gibeon (in modern-day Namibia) where his grandfather had decided they should settle and where Hendrik became a church elder. He resigned from this function in 1883, probably to serve his political obligations as heir and ruler.²⁵

In 1884, Hendrik Witbooi became *Kaptein* of the Witbooi people. At that time, political and military conflicts between the Herero and Nama groups were underway. In June 1884, Witbooi made peace with Maharero after an indecisive battle, but in the following year, the Witboois were defeated by Maharero in the battle of Osana. The Witboois were one of the largest groups in Namaland, but they were not the only group with political and military power. Under Hendrik Witbooi, the number of Witbooi doubled when compared with their number in 1875, as counted by Olpp. By this time, the Witbooi had established themselves in a region stretching as far north as Gobabis (northeast of Windhoek). This increase in numbers, however, involved very large-scale changes. In the 1880s, Hendrik Witbooi’s following was extended by his leadership of the ‘Witkamskap’, a movement transcending all tribal allegiances and drawing members from all over Namaland, who all wore a white scarf around their hats as a distinguishing mark.²⁶ Hendrik Witbooi constantly refused to sign a ‘Protection Treaty’ with the German colonizer. In 1890, governor Göring urged Hendrik Witbooi in a letter to move from Hoornkrans to Gibeon. In his reply, Hendrik Witbooi informed the governor that the Witbooi Nama would maintain their independence.²⁷ Witbooi wrote to Maharero in 1890, stating: ‘You will eternally regret that you have given your land and your right to rule into the hands of the whites’.²⁸ In 1892, Hendrik Witbooi concluded peace with Samuel Maharero, the leader of the Herero and son of Maharero.²⁹

In 1884, the German *Kaiserreich* declared the region as ‘Deutsch Südwest-Afrika’ (German South West Africa), a part of its colonial empire, which it would be until 1915.³⁰ The colonial power was eager to sign treaties with the different people of Namibia, and

²⁵ Brigitte Lau, ‘Concerning the Hendrik Witbooi Papers’ in Annemarie Heywood ed., *History and Historiography: 4 Essays in reprint* (Windhoek 1995) 17–37, esp. 18.

²⁶ *Ibid.*, 20.

²⁷ *Die Dagboek van Hendrik Witbooi*, no. 25., 29.05.1890, Hendrik Witbooi to Göring.

²⁸ *Die Dagboek van Hendrik Witbooi*, no. 26., 30.05.1890, Hendrik Witbooi to Maharero. Hendrik Witbooi wrote this to Maharero, after he received a letter from Göring on 20.05.1890 that informed him that the Ovaherero were again under German protection.

²⁹ Werner Hillebrecht, *The Witbooi* (1992) 29. The Herero and the Nama were first at war in August of the year 1880, when a war broke out between the Nama and the Ovaherero, after the battle of Gurumanas (!Gurumâ!nâs).

³⁰ Brigitte Lau, ‘Concerning the Hendrik Witbooi Papers’ in Annemarie Heywood ed., *History and Historiography: 4 Essays in reprint* (Windhoek 1995) 17–37, esp. 18.

would give them a ‘protection status, but Hendrik refused to sign these treaties and tension between the Germans and the Witbooi rose. In 1893, the Witboois were attacked at their stronghold at Hoornkrans, where they had settled in the year 1887.³¹ Witbooi and his warriors were able to escape, but many died in the ambush, including two of Witbooi’s sons. In 1894, the former governor was replaced with Governor Theodor Leutwein, after which the colonization of the country entered a new stage. Little else counted but to subdue Witbooi, because by now the Germans understood that otherwise no protectorate could be maintained. The battles between Witbooi and the German troops continued in the Naukluft mountains.³² On the 15th of September in 1894, Witbooi surrendered to Governor Leutwein in the Naukluft Mountains. With the treaty, Witbooi surrendered a territory of 20.000 km² and jurisdiction over his people and land.³³ He promised to live peacefully and abandon warlike and marauding ways. Between 1894 and 1904, Witbooi lived at Gibeon, where he assisted occasionally the German troops against other ethnic groups. The Witboois were allowed to possess arms and had a limited autonomy. In January 1895, governor Leutwein led a ‘punitive expedition’ against the Khauas and Fransman Nama and later against the Bondelswarts in the south, which led to the military defeat of these groups. In this expeditions, he was assisted by Hendrik Witbooi and his men.³⁴

A shocking event was the battle at Waterberg in August 1904, where on orders of General Lothar von Trotha, many of the Herero people were attacked, killed or forced to flee into the desert. Witbooi was disgusted with the way Von Trotha led a cruel and bloody war against the Herero, and decided to raise arms against the German colonial army again. He joined Samuel Maharero in the war of resistance and led the Nama soldiers in an insurrection against the colonial power. Hendrik Witbooi was killed in action, and died on 29 October 1905, from wounds sustained in battle (near Vaalgras, see figure 2).³⁵ Hendrik Witbooi was succeeded by his son, Samuel Isaak Witbooi, who moved to Rietmont, present-day Leonardville. On 19/20 november 1905, this successor was forced to surrender to the Germans at Berseba. Other Namas soon followed. The resistance of the Nama and the Herero troops was broken. Survivors were forced into concentration camps, where many of them died.

³¹ BAP, RKA 10.01.2128, von Goldammer an Göring, 08.05.1887, S. 68.

³² Hendrik Witbooi had bought ammunition and weapons from the British trader Robert Duncan in December 1888, in exchange for thousands of heads of cattle.

³³ Bühler, Andreas Heinrich, ‘Der Namaaufstand gegen die deutsche Kolonialherrschaft in Namibia von 1904-1913’ 4.

³⁴ It is important to understand that the conflicts and wars between the various ethnic groups and the German colonial government were very complex and that to understand them fully more information is needed. There were various actors in play that played a role in the conflicts. For more information see: The Hendrik Witbooi Papers, Brigitte Lau ed. (Windhoek 1989), Dag Hendrichsen, *Herrschaft und Alltag im vorkolonialen Zentralnamibia: Das Herero und Damaraland im 19. Jahrhundert* (2011).

³⁵ Brigitte Lau, ‘Concerning the Hendrik Witbooi Papers’ in Annemarie Heywood ed., *History and Historiography: 4 Essays in reprint* (Windhoek 1995) 17-37, esp. 30-37.; Werner Hillebrecht, *The Witbooi* (1992) 47.

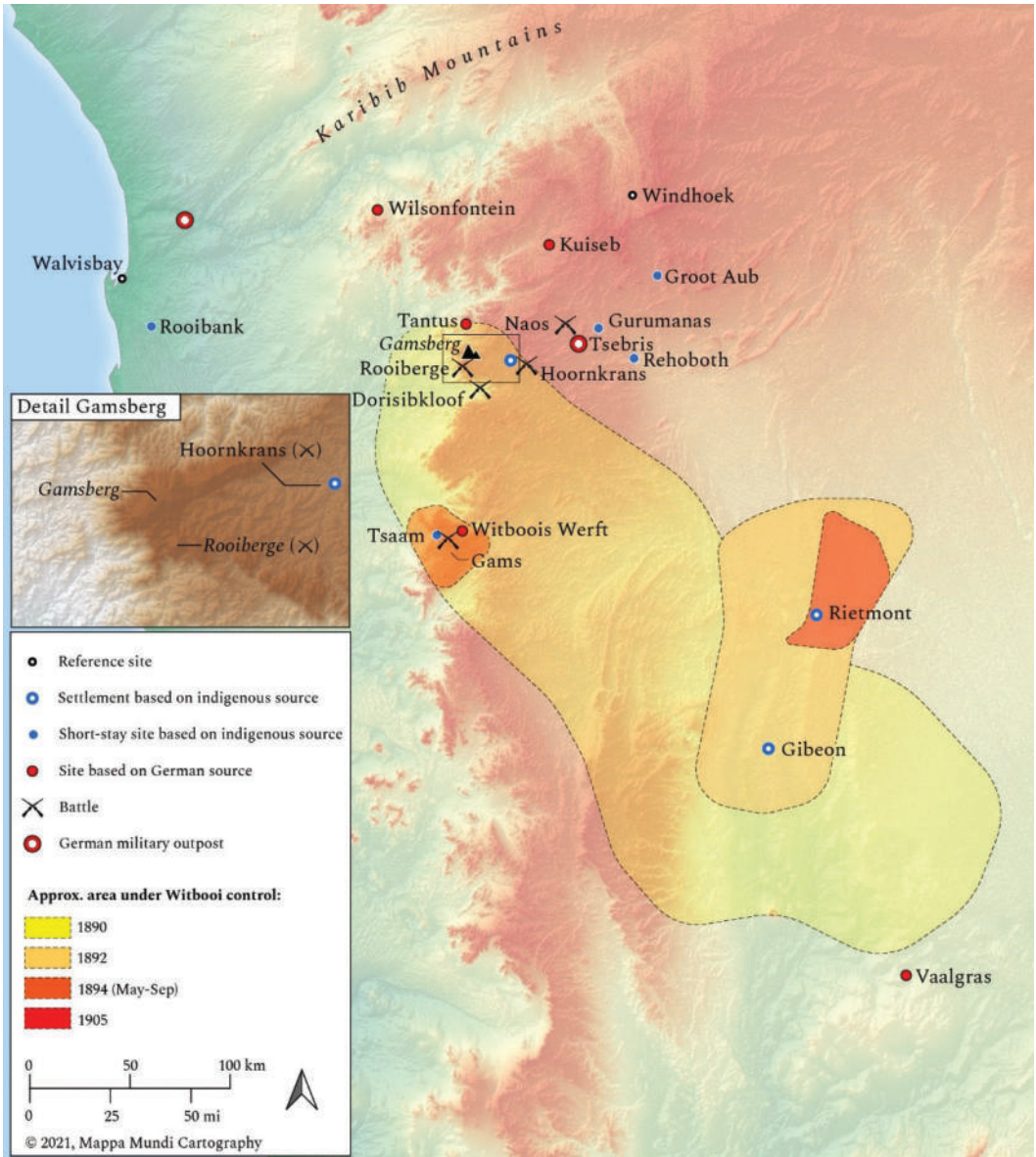


Figure 2: The areas under Witbooi control according to German maps and estimations. The sites portray the settlements or short-stay locations where Hendrik Witbooi was active.³⁶

³⁶ I would like to thank Erik Goosmann for making this map for this research. The locations on the map are based on German colonial maps and descriptions in the diary of Hendrik Witbooi. The locations, certainly those on the German colonial maps, may therefore be located incorrectly. It is important to keep in mind that these locations are in some cases rough estimates of where the actual location may have been.

Was Hendrik Witbooi on the Gamsberg?

The first mention of Hendrik Witbooi in relation to the Gamsberg can be traced to 1882. Jan Jonker Afrikaner was reportedly in conflict with the Herero at this time and left for the Gamsberg, because he ‘could hide himself and his loot in its impenetrable kloofs.’³⁷ A mention of Jan Jonker at the Gamsberg was made by a captain in the German infantry:

‘Dieser [Hendrik Witbooi] und Jan Jonker, der in den unwirtlichen Schluchten des Gansberges hauste, fielen mordend und brennend, sengend und plünderend über Feinde und Bundesgenossen her. Jahrelang sollten Sie ganz Südwestafrika in Aufregung und Unruhe erhalten.’³⁸

He writes in 1882 that the missionary J.G. Krönlein had received instructions to go to Namaland and make peace between the Herero and the Nama, who were in conflict at that time. Krönlein visited his mountain stronghold on the Gamsberg then.³⁹ A British source mentions that the Rooinasie of Hoachanas, together with the Herero and the Basters made a joint attempt in September of the year 1882 to drive the Afrikaners from the Gamsberg.⁴⁰ Another source mentions that Jan Jonker Afrikaner had the habit of coming down from the ‘Gamsberg’ to steal cattle from the Basters.⁴¹ In correspondence between the governor Göring and German official Louis Nels, it is mentioned that Nels left for the Gamsberg in January of the year 1886, where Jan Jonker Afrikaner was living at that time with about sixty families.⁴²

In 1889, the German biologist/geologist Ed. Fleck tried to reach the top of the Gamsberg via the southern side to study birds, but the expedition was made impossible because of a

³⁷ Heinrich Vedder, 464.

³⁸ Kurd Schwabe, *Mit Schwert und Pflug in Deutsch-Südwestafrika: Vier Kriegs- und Wanderjahre* (Berlin 1904) 56. Schwabe mentions the following: ‘Dieser [Hendrik Witbooi] und Jan Jonker, der in den unwirtlichen Schluchten des Gansberges hauste, fielen mordend und brennend, sengend und plünderend über Feinde und Bundesgenossen her. Jahrelang sollten Sie ganz Südwestafrika in Aufregung und Unruhe erhalten.’

³⁹ Heinrich Vedder, *South West Africa In Early Times: Being the story of South West Africa up to date of Maharo's death in 1890*, Cyril G. Hall transl. and ed. (London 1966) 467. In Krönlein's word the mountain stronghold was ‘a natural fortress, which most up-to-date booter could not have selected and devised better for the protection of himself and his loot.’

⁴⁰ Cape Archives Depot Archives Native Affairs (N.A.) 290. Simpson-U.S.N.A., 11.10.1883.; J.H. Esterhuyse 36.

⁴¹ Heinrich Vedder, 470.

⁴² Archives Depot of South West Africa: *Das Zentral-Bureau* (B.Z.): 1. A1a1: Inbesitznahme des Schutzgebiets, 1882-1896. Nels-Göring, 13.02.1886, 118.; J.H. Esterhuyse 109.; Dr. Heinrich Ernst Göring (1839-1913) was the father of the Nazi War Minister. He was a Deutsche Reichskommissar that was active in German Southwest Africa since 1885.

war between Hendrik Witbooi and Jan Jonker Afrikaner.⁴³ Fleck even mentions that Jan Jonker was shot there by Hendrik Witbooi.⁴⁴ At the end of 1892, Fleck was able to reach the southern side of the mountain. He mentions that he passed the ‘robber’s cave’ from Hendrik Witbooi on the way to the southern side of the mountain.⁴⁵ There is another mention in a German colonial handbook of Jan Afrikaner in the area of Gamsberg:

‘Ich wollte in 1889 den [Gans/Gams] Berg umgehen, um von der südliche Seite anzukommen, diese Absicht wurde aber durch die Kriege zwischen dem Hottentottenhäuptling Hendrik Witboy von Gibeon einerseits und durch die verbündeten Häuptlinge Jan Jonker Afrikander, Manasse von !Hoaxanas und Fripp andererseits vereitelt. Damals war ich gezwungen, mein Lager mehrere Nächte hindurch durch Vorsichtsmaßregeln gegen allfällige Angriffe von Seite der verbündeten kriegführenden Hottentottenstämme zu schützen und schließlich wegen völligen Wassermangels aufzugeben.’⁴⁶

Hendrik Witbooi was also in a struggle with the Herero in the second half of the 1880s. He would often steal their cattle and vice versa. One attack from the Herero led to the death of two of his sons, which caused the tension between the two groups to escalate for some time. After they were defeated by the Herero somewhere in the area around Rehoboth, Hendrik Witbooi decided that they should not settle back in Gibeon. Instead, they settled in the Gamsberg.⁴⁷ The claim that Hendrik left for the Gamsberg is supported by German and British colonial sources. In September 1886, correspondence between a German official and the German Auswärtiges Amt (Ministry of Foreign Affairs) claims that Hendrik Witbooi had permanently hidden himself in the Gamsberg, where he received large quantities of arms through Namaland from the south.⁴⁸ A year later, it is reported that the leader of the Herero, Maherero, sent 250 of his men to look for Hendrik Witbooi. When they

⁴³ Ed. Fleck., ‘Das Vogelleben Deutsch-Südwestafrikas und dessen Schauplatz’, mentions the following: ‘Ich wollte in 1889 den [Gans/Gams] Berg umgehen, um von der südliche Seite anzukommen, diese Absicht wurde aber durch die Kriege zwischen dem Hottentottenhäuptling Hendrik Witboy von Gibeon einerseits und durch die verbündeten Häuptlinge Jan Jonker Afrikander, Manasse von !Hoaxanas und Fripp andererseits vereitelt. Damals war ich gezwungen, mein Lager mehrere Nächte hindurch durch Vorsichtsmaßregeln gegen allfällige Angriffe von Seite der verbündeten kriegführenden Hottentottenstämme zu schützen und schließlich wegen völligen Wassermangels aufzugeben.’

⁴⁴ Ed. Fleck., ‘Das Vogelleben Deutsch-Südwestafrikas und dessen Schauplatz’ 301-302.: ‘Waren wir schon in den letzten Nächten von Spionen Jan Jonkers umgeben, so folgte er auch bald selbst, seinen Weg über das Gebirge nehmend und von Hendrik verfolgt nach, der ihn endlich einholte, einschloss, seine Scharen aufrieb und ihn selbst erschoss.’; While Ed. Fleck mentions that Hendrik Witbooi shot Jan Jonker Afrikaner, other sources mention that Jan Jonker Afrikaner was.

⁴⁵ Ed. Fleck., ‘Ende 1892 erst hatte ich Gelegenheit, unserem Bergkoloss von der südlichen Seite her auf den Leib zu rücken, indem ich die Räuberhöhle Hendriks über Gubitsaas her passierte’.

⁴⁶ Ed. Fleck., ‘Das Vogelleben Deutsch-Südwestafrikas und dessen Schauplatz’ 301.

⁴⁷ Quellen 27, Bericht, Diehl, 30.12.1886, 112.

⁴⁸ Z.B. 1, Nels-Ausw. Amt., 6.9.1886., 142.; J.H. Esterhuysen 115.

reached the Gamsberg, they saw his camp fire burning between two mountain ranges. This was, however, a trap, and they were surrounded. The Herero fled and thousands of Herero cattle were driven into Hendrik's 'mountain fastness'.⁴⁹ After the death of his father, Moses Witbooi, Hendrik got into conflict with Jan Jonker Afrikaner. He decided to leave Gibeon, but did not consider Gamsberg a safe place anymore.⁵⁰ He decided to settle in Hoornkrans instead, which is around 30 kilometers from the Gamsberg (figure 2).⁵¹

In 1888, Hendrik Witbooi and the Witbooi were in conflict with the Rooinasie. At Kowas Manasse, the leader of the Rooinasie, received an invitation from Jan Jonker Afrikaner to move to the Gamsberg, where the Afrikaners were settled then. Witbooi got wind of the move of the Rooinasie and attacked the tribe near Rehoboth, while they were on their way.⁵² Jan Jonker Afrikaner was murdered in 1889, hereby ending the polity of the Oorlam Afrikaners. After this, it is possible that Witbooi filled the power vacuum left in the Gamsberg area, since Jonker Afrikaner was not there anymore to control this area.

After the battle at Hoornkrans, we know that eventually battles between the German colonial troops and the Witboois continued in the Naukluft mountains. Nevertheless, between Hoornkrans and the Naukluft, the Witbooi fought against the German troops in the Gamsberg area for some time as well. Several newspapers mentioned that Hendrik went to the Gamsberg after the attack on Hoornkrans.⁵³ At some point, it was said that Hendrik and his men had fled on the Gamsberg, where the governor of the colony, Curt von François, tried to take them down with mountain cannons.⁵⁴ Curt von François seemed convinced for a while that Witbooi was on the Gamsberg, but it is unclear whether this was the case. In German sources, there is no mention again of Hendrik being on the Gamsberg after this, only of him being on the 'Rote Berge' near Hoornkrans, but it is quite difficult to determine which mountain/mountains are meant by this.⁵⁵ It is probable that these were the

⁴⁹ Heinrich Vedder, 492-493.

⁵⁰ Heinrich Vedder, 498.

⁵¹ J.H. Esterhuyse, 127.

⁵² J.H. Esterhuyse, 147.; U.G. 41-'26, p. 39, par. 109.; V.R.S. 9, pp. 22-23, no.9.; V.R.S. pp. 45-46, no. 18.; Z.B. 2029, WIId21bd1, Manesse-Göring, 25.3.1889, p. 135-136.

⁵³ The Times, 11-11-1893: Cape Town, nov. 8. 'About October 5. Captain von François, with his whole available force and with some native allies, left Windhök with the object of capturing Witbooi dead or alive. In an engagement with Witbooi's force several Germans were killed and wounded. Witbooi made a further stand and then fled to a mountain near Hornkrantz. Captain von François shelled the mountain, but Witbooi escaped. Captain von François has abandoned the expedition for the present – Our correspondent.'; *Algemeen Handelsblad*, 25-01-1894. Transl. by me.: 'Major von François has reported that he defeated Hendrik Witbooi and caused his troops many losses, on the first of January at Gamsberg.'

⁵⁴ J.H. Esterhuyse 198.; *Deutsches Kolonialblatt*, 11.05.1893.

⁵⁵ *Deutsches Kolonialblatt* 24. 15-12-1893, 564: 'Auf die Runde, daß Witbooi auf dem Rothen Berge unweit von Hornkrantz Stellung bezogen habe, war die verstärkte Schußtruppe mit zwei Beschüßen am 24. September von Windhoek aufgebrochen und nach fünfägigem Marsche in Hornkrantz eingetroffen. Am 2. Oktober wurde die Stellung der Witboois angegriffen. Dieselben wichen einem offenen Kampfe aus und flüchteten von Fels zu Fels nach der etwa 400 Meter tiefer liegenden Thalhohle und suchten schießlich in schwer züglichen Schluchten Schuß.'

mountains directly south of the Gamsberg, since these are nowadays known as the ‘hintere Rote Berge’ (directly south of the Gamsberg) and the ‘vordere Rote Berge’ (roughly south of Hoornkrans, see figure 2). It therefore cannot be said with certainty if Hendrik Witbooi was *on* the Gamsberg himself, since the sources mentioning this are vague and uncertain themselves. What can be concluded is that Hendrik Witbooi was *at* Gamsberg, meaning around and nearby the mountain, and he might have used the gorges of the mountain itself to hide himself and his men from the German troops.

Recommendation

This research on the relation between Hendrik Witbooi and the Gamsberg has found that there is certainly a relationship between Hendrik Witbooi and the Gamsberg area. While a connection between Hendrik Witbooi and the Gamsberg can be made, two things remain uncertain. It cannot be said for sure if Hendrik Witbooi himself was physically on top of the mountain itself, or if he was just merely in its gorges and around the mountain. Secondly, Hendrik Witbooi seemed to be the most active on the Gamsberg when he was in battle with Jan Jonker Afrikaner and the Herero in the 1880s. He may have used the mountain to hide himself from German troops in the 1890’s and fight against them after the battle at Hoornkrans, but not so extensively as before, since this battle eventually moved to the Naukluft mountains south of the Gamsberg. A relation between the Gamsberg and the Witbooi in the time of the struggle against the Germans in 1904 and 1905 cannot be made. Hendrik Witbooi and the Witbooi people had by this time settled in Rietmont and Gibeon. So, in short: yes, Hendrik Witbooi can be connected to the Gamsberg mountain, he was in the area and roamed the area around and near the Gamsberg in his battles against Jan Jonker, the Herero and the German colonial army. But, it cannot be established that he himself was on the mountain for certain.

Since I was unable to study all the sources, I wanted to, due to travel-restrictions, I believe there are still valuable sources that possibly contain useful information on this matter. These sources, not only in Namibia, but also in South Africa and probably Germany, Switzerland and Great Britain as well, may contain information that is valuable for the history of the area. There might also be more maps that contain more detailed information regarding land ownership by the Germans and the usage of land by the Witbooi. Other than Jan Jonker Afrikaner’s presence on/near the Gamsberg, there were probably other groups that roamed the area as well, years before the Afrikaners and Witboois were in the area such as the Damara. But also, the history of the area in the years after, when the Witbooi settled in Gibeon again and the land was most likely sold to farmers, is relevant for the

project.⁵⁶ To my knowledge, little research has been done on the occupation of this area on a micro-level. It might be beneficial for the project - and for Namibia as well – that more research on a more local scale is done. It might be beneficial to look at long-term archeological projects in the area, but also short-term projects such as historical research on Jan Jonker Afrikaners presence in the area.⁵⁷ What is the role of Jan Jonker Afrikaner and the Afrikaners in the area? But also, what is the role of other groups such as the Damara and the Herero in this research? It may be beneficial to establish if people feel that the Gamsberg is an important location for them or are other sites in the area important for them, as Hoornkrans is for example. More research needs to be done on the relevance of the Gamsberg for the Witbooi people, Nama and Namibians themselves in present-day Namibia.⁵⁸

This research is sensitive, given the negotiations between Namibia and Germany at the moment. Since the land on top of the Gamsberg is still in foreign hands, Hendrik Witbooi, or any other figure that had a close relation with the Gamsberg and is of historical or mythical importance for the Namibians today, may be used to negotiate a ‘significant’ status of the Gamsberg. Since the Gamsberg is connectable to the Nama, victims of the genocide, this strengthens the sensitivity of the subject. I suggest more research must be done on the area and on the connection between the Gamsberg and important figures, but also on other ethnic groups that roamed the area in its history, to ensure that the project is aware of, and shows respect for the historical significance of the local area.

⁵⁶ Cited from Wilfrid Haacke, ‘The hunt for the Damara IHaibab in 1903: Contemporary oral testimony’ *Journal of Namibian Studies* 8 (2010) 7-25, esp. 23.: ‘According to unconfirmed information IHaibab’s father, Abraham IGuruseb, had been chief (*gao-aob*) in the vicinity of the Gamsberg further south, but some unknown reason had had to leave that area for the area IÂgommes (Okombahe) where his son later established himself with a following of marauders.’

⁵⁷ Some archeological research has been done in the area, also on the rock art that can be found in the region. See for example: Ernst-Rudolf Scherz, *Felsbilder in Südwest Afrika, Teil III (Vienna/Cologne 1986)*.; *John Kinahan, Pastoral Nomads of the Central Namib Desert: the people history forgotten (Windhoek 1991)*.; *Beatrice Sandelowsky, Prehistory of the Central Namib Desert (Windhoek 2013)* and *Beatrice Sandelowsky, Archaeologically Yours – a personal journey into the prehistory of Southern Africa, in particular Namibia (Windhoek 2004)*.; M. Shackley, ‘Palaeolithic archeology of the Central Namibia Desert’, *Cimbebasia Memoire* 6 (1984).

⁵⁸ ‘In 1988 a commemoration was held at farm Hornkrans near the Gamsberg pass. In the case of Hornkrans, this choice of festival site was linked to an explicit, though unsuccessful effort to re-appropriate the farm, which lies some 200 km northwest of Gibeon.’, cited from Reinhart Kössler, ‘Constructing and Claiming Identities and Spaces: Commemorations in Southern and Central Namibia’ in R. Kössler, *Namibia and Germany: Negotiating the Past* (Windhoek 2015) 205.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft

Windhoek, Namibia 2021

ISSN: 1018-7677

ISBN: 978-99945-76-74-6

About the Author

Sanne de Jong (1998) is a Master student in Human Geography at the Radboud University in Nijmegen and has a Master of Arts in history, where she graduated on the relation between volcanic eruptions, climate change, and social and political unrest in Mediterranean Europe. For her master's in history, Sanne completed an internship, doing historical research for the AMT project on the relationship between Hendrik Witbooi and the Gamsberg.



Address

Email address: j.m.dejong@student.ru.nl



Acacia Namibia

Our Passion. Your Journey.

Acacia Namibia bietet Ihnen ein 'Rundum-Sorglos-Paket' für Ihre Reisewünsche in Namibia und seinen Nachbarländern.

Acacia Namibia offers you an 'all in one' booking agent for your travel requirements in Namibia and its neighbouring countries.

Wenden Sie sich vertrauensvoll an unser Büro.

Dietlind Basson

P O Box 6833, Windhoek

Tel +264-61-229142 Cell +264-81-1242070

E-mail: info@acacianamibia.com

www.acacianamibia.com



I am a member and Fellow of the Insurance Institute of South Africa (IIISA) by examination and election.

Amanda Miller Insurance Brokers was born from a passion for the Mining and Construction Industries and the opportunity to specifically specialize in insurance protection for these industries. I have had the privilege of negotiating and instituting insurance cover from the design/project phase of a new mine, to practical completion and handover thereof. (From the cradle to the grave.) I am grateful for the 12 years of experience gained within these industries which allowed me to broker large assets programmes into the Local Market as well as International Re-Insurance Markets. With great risk exposures in this arena, it brings about its own challenges in resolving and settling of large and complex claims. It requires an understanding of the nature of the business, the protection provided for in terms of the insurance contract/policy wording and liaising with Insurers and Loss Adjusters.

Except for the protection of the assets, which generally forms the largest part of the insurance portfolio, there is also the responsibility to third parties i.e. various liabilities that may arise in the course of conducting your business, Personal Accident protection for your employees, Directors and Officers Liability in respect of claims which may arise from the decisions and actions taken, whilst carrying out your daily activities, protection against employee dishonesty, theft and third party fraud, Marine Imports and Exports and Cyber Liability which is still evolving. These are just a few classes to mention.

Due to the nature of mining, there is also a requirement to make provision for Mine Closure, which can be provided for over the "life of mine" in terms of Alternative Risk Financing options. Pollution Liability cover is available, however it has to be proven that the liability arising was from a sudden and specific event that occurred.

The future of commodity pricing is difficult to predict. My wish for the Namibian Mining Industry is an upswing in the commodity price cycle, which will attract the much-needed funding and investment required to make it prosper.

I look forward to being of service to you.

AMANDA
MILLER



INSURANCE
BROKERS

AMIB

Specialising in Mining, Metals and Minerals





Windhoecker Buchhandlung cc

Est. 1958



BÜCHER UND MEHR...

Tel : +264 61 225216

www.whk-buch.com

info@whk-buch.com



Frequenzen

Zentral 99.5 FM

Küste 97.5 FM

Otjiwarongo 90.0 FM

Tsumeb / Grootfontein 90.4 FM

HITRADIO namibia

 083 2020 123

 0853 444 333

 hitradio.com.na

 facebook.com/hitradionamibia

Werben mit Hitradio Namibia?

Schreibt uns gerne via sales@hitradio.com.na an.

DHPS Windhoek

Local roots, global minds



- Exzellente Deutsche Auslandsschule
- Vom Kindergarten bis Klasse 12
- Deutsches Internationales Abitur & Cambridge Certificate
- Internat & Nachmittagsbetreuung
- Bilingualität von Anfang an

Deutsche Höhere Privatschule Windhoek (DHPS)

11-15 Church Street • Windhoek • www.dhps-windhoek.com
registration@dhps-windhoek.com • Tel: 061 - 373 100 / 145



Exzellente
Deutsche
Auslandsschule



Cambridge Assessment
International Education
Cambridge International School



KULTUSMINISTER
KONFERENZ

GOBABEB



NAMIB RESEARCH INSTITUTE

Situated in the heart of the Namib Desert, for 60 years, Gobabeb has been the hub for innovative arid lands research.

If you are a Namibian curious about our desert, a scientist or student wanting to do research, an intern eager for a unique on-the-job learning opportunity, or a visitor wanting to experience the extraordinary, Gobabeb welcomes you!

Visit us at www.gobabeb.org



An Eye for the Cycle of Life: Exploring Rock Art in the Khomas Region

André du Pisani

Keywords: Rock art; Khomas Region; Harmonie; panels/panoramas; shamans/shamanistic; Holocene; Nauzerus; Naukluft; Noab.

Abstract

Rock art sites in the Khomas Region can best be understood if located within a landscape-based approach as Kinahan (2020) compellingly argues. Such an approach has the advantage of connecting primary resource sites with evidence of scattered occupation of secondary resource sites, mediated by social relations that determine access to these resources.

Many rock art sites are in mountainous terrain, for the Region is named after the Nama *lomas* (mountain) (Grünert, 2000:30) which, with an average height of almost 2,000m, acted as natural retreats for hunter-gatherers competing with herders and farmers for resources. Most rock art sites are located in relative proximity to water. Even so, some sites are far from river courses and water – several kilometres in fact. Despite an overall similarity of paintings across the region, no two sites have quite the same set of images. For this reason, it is important to explore the relationships between the art, social life, landscape and its resources, hence the title of this article.

The legibility¹ of the paintings is a matter of disagreement among researchers. For some analysts, much of the imagery is literal: humans and animals have recognizable represented morphologies: bags, bows, breasts, buttocks, penises and young. Their assumption is that the image-maker wanted the viewer to recognize his or her subject matter. This is what the Zimbabwean archaeologist Peter Garlake (1995) calls '*the principle of legibility*'.

¹ The term 'legibility' refers to the clarity of visibility, overall legibility and outline of an image and derives from the work of Peter Garlake (1995) *The Hunter's Vision - The Prehistoric Art of Zimbabwe*. University of Washington Press, Seattle, p. 21.

This legibility may, however, not be enough in itself. A second level has to be to attempt an understanding of how the image-makers think. Rock art affords insights into hunter-gatherer spiritual life. While not every archaeologist agrees, there is a sizeable body of historical ethnography that argues that some of the art is shamanic (Dawson, 1988; Lewis-Williams, 1981, 2002, 2019). Kinahan (2020:14), however, usefully warns against the ‘ahistorical reliance on the authority of ethnographic sources’. A further problem is that ethnography tends to present hunter-gatherers in a rather essentialist way as if they are static and unchanging.

Introduction

Paintings of human figures are relatively easy to recognize. Normally, these figures can be sexed – male and female. Based primarily on our ability to recognize either breasts or a penis in such figures, moreover, the association, equipment and physical proportions of human figures is a useful dimension of the art. At many sites in the Khomas Region, human figures are shown in processions and particular settings forming a panel such as dances, other social occasions such as rituals and significant social events. Often images of humans carry a set of equipment which may be repeated from figure to figure. Equipment can range widely: bows, arrows, quivers sticks, and bags for collecting food, decorative items including headdresses, knee straps and dancing rattles. The images of humans reflect features present in the rock art in the rest of the country.

As is the case in many rock art panels elsewhere in the country, figures are sometimes juxtaposed or superimposed. This makes the interpretation of such panels more complex, for it is difficult to decide if it was an intentional composition or not. The viewer can look at the orientation of specific images, their placement in a panel, their compositions and if there are clear juxtapositions.

Some paintings are neither clearly humans nor animals, but *therianthropes* – human-animal transformations or conflated fantasy animals (Forssman & Gutteridge, 2012: 50). In Khomas, historical images that can be related to specific historical events are rare, although these may exist.

The bulk of the images are rendered at centimetre scale, most falling between 10 and 30-40 centimetres in maximum dimension. As in the rock paintings in other parts of the country, the paintings are predominantly rendered in ochreous colours: reds, oranges, and yellows derived from the weathered oxides or hydroxide of iron. All oxides, hydroxides and dioxides used in paintings are inorganic materials not suitable for radiocarbon C-14 dating, whereas charcoal is potentially datable (Lenssen-Erz & Erz, 2000: 90-91).

Based on my fieldwork of many different rock art sites in the Region, most individual images are rendered in monochrome, painted in a single colour, usually red or shades of red. There are a number of bio-chromes, paintings with two colours and significantly fewer polychromes, images rendered in more than two colours.

While there is undoubtedly a relationship between rock art and water, such a relationship is far from being uniform, as springs are often far-and-wide between and run-off water from occasional rainfall gathers in open rocky pools, or disappears beneath the sand of ephemeral rivers such as the !Khuseb and Gaub rivers (Kinahan, 2005: 120). Kinahan (2005 and 2020) shows that Holocene archaeological sites, especially those dating to within the last 5 000 years, during which human responses to the aridity of the Namib developed distinctive features (Kinahan, 2005: 120).

Later Stone Age (LSA) culture is characterized by specialized microlithic assemblages that persisted until the colonial era of the late 19th and 20th centuries among the last surviving hunter-gatherer communities. Microlithic assemblages for various rock shelter excavations in the Namib are mostly related to light-weight hunting equipment such as the bow and composite arrow (Richter, 1984 and Wendt, 1972).

Extensive field research over four decades in the Namib and adjacent Khomas Highlands, shows that hunter-gatherer subsistence was centripetal to reliable water sources, and this in turn, determined the pattern of land use of the nomadic pastoral economy that dominated the desert and its fringes during the last two millennia (Kinahan, 2005: 120-121; Kinahan, 2020:111) Rock art sites are broadly found along the escarpment watershed, with a higher concentration west of the escarpment zone.

In the case of the Daurês/Brandberg Mountain in the Erongo Region, intensive and repeated occupation of the higher elevations only began approximately 5,000 years B.P. (Kinahan, 1984; 2001). Through groundbreaking research, Kinahan has shown that although rock-shelter sites near reliable water sources were used in the early Holocene, later Holocene settlement took place near “highly localized water sources” (Kinahan, 2005:121).

In the Hungorob drainage in the Daures/Brandberg, Kinahan (2005:121-123) argues that the proceeds of hunting “very closely reflect the relative abundance of the most common species, rock dassie (*Procavia capensis*), klipspringer (*Oreotragus oreotragus*) and Jameson’s red rock rabbit (*Pronolagus randensis*). The rock art is mainly devoted to human figures, but it includes different animals, with medium and large antelope of the desert plains and dry river valleys predominant among these”.

In the case of more than the 200 rock art sites that I have visited in the Khomas Region, a broadly similar pattern of rock art images occur, with images of many different animals, among these: Springbok (*Antidorcas marsupialis*), greater Kudu (*Tragelaphus strepsiceros*), giraffe (*Giraffa camelopardalis*), Gemsbok (*Oryx gazelle*), Zebra (*Equus hartmannae*), elephant (*Loxodonta africana*) and Black rhinoceros (*Diceros bicornis*). Birds, felines, reptiles and baboons are numerically less important, even if there are a few sites with brilliant paintings of birds (*Neu-Heusis*) and feline (*Krumneck*) (du Pisani, 2020:13-43). Clearly, the rock art is not a comprehensive reflection of local fauna.

Comprehensive and innovative research by Kinahan (2005:123, 2020) shows that ritual healing was greatly intensified when resources were strained before the summer rains, or in times of extended drought. In this finding, Kinahan also draws on the important ethnographic research of Barnard (1992) and Lee (1979) to further substantiate his finding.

Before discussing specific rock art panels at two farms in the Khomas Region, it is worth repeating that the Region had/has specific areas of seasonal occupation – what Kinahan (2005,2020) calls ‘a density-dependent system’ – based on the availability of water and food resources. The rock art needs to be understood within such a social system and political-economy.

Harmonie

The farm *Harmonie* No. 376 of 3,790ha is some 95km to the west of Windhoek, off the C-28 gravel road and has been in the ownership of the Jacobs family for decades. *Harmonie* nestles in the heart of the Khomas Highlands with its undulating hills that form the escarpment between the coastal plain and central, inland plateau. The surface-water area on the farm is dry for most of the year. The network of ephemeral rivers carry water only for short periods after a heavy rainfall – there is little groundwater on the farm and the water table is deep. Considered within a landscape-perspective, the site is located close to a secondary and not a primary resource area. On the surface, there is little archaeological evidence of extended habitation.

On average, the geological record dates back some 750 million years, while the so-called *Damara Mountain Building* age, occurred approximately 650 million years ago. The peneplain of the Khomas Hochland comprises mostly of mica-schist and quartz (Grunert, 2000:31).

The actual rock art site is not spectacular and comprises of an overhang of mica-schist that measures 5m 30cm in length. Approximately 800m upstream from the site, there is evidence of an earlier spring in an ephemeral rivulet that provides some seepage during good rains. There are also a few rock pools that provide water for a short period, mostly to Baboon (*Papio ursinus*), Zebra, Greater Kudu, Rock hyrax (*Procavia capensis*), Porcupine (*Hystrix africaeaustralis*) and Steenbok (*Raphicerus campestris*). This may well provide one of the keys in the landscape that explains the images and panel that depict rain and possibly a rain-making ceremony.

Based on historical ethnography of the nineteenth century, the trance experience involved rain-making and the control of antelope. Those skilled in these practices were known respectively as *!khwa-ka !gi:ten* and *Opwaiten-ka !gi:ten* (Lewis-Williams, 1981:77). In addition to dances, rain-making and antelope control constituted symbolic action intended to sustain the material basis for human life – the environment and hence economic viability of the hunter-gatherers. The San shamans’ symbolic and social work was thus believed to have a triple impact:

First, on human relationships, secondly, on sustaining people’s relationships with the environment and finally, on people’s relationship with the spirit realm (Lewis-Williams, 2020:35).



Figure 1: Photo: André du Pisani

Figure 1 shows an image of rain at the site. The painting of rain drops that resembles digits in parts stretches for all but 2m50cm and is located across a fairly smooth surface with a few cracks transecting it. These cracks may suggest a dividing line between the physical and the spiritual world.

Of particular interest is the placing of two human figures that may represent shamans. The biggest of these is 19cm high and the other, 17cm. These two prominent figures are surrounded by smaller figures of between 8 and 10cm in height. At least one of these figures is painted in a sitting position within a circle of other figures.

Figure 2 on the next page, shows what may be a shaman surrounded by several other smaller human figures.

The monochrome figures are rendered in considerable detail, with an emphasis on their arm and leg muscles and ornamentation such as what appears to be straps, skins and cloak-like garments, items suggestive of ritual attire (du Pisani, 21/05/2020, unpublished field notes, see also: Lewis-Williams & Dowson, 1989). Most of the human figures have been painted without heads or with small heads covered by headdresses.

Paintings of rain are also found at several other farms in the Region, such as *Koireb 1* in the Rehoboth district, *Hornkranz*, *Hornkranz South*, and *Omandumba West* near the Erongo Mountains in the Erongo region. Piet van Rooyen wrote an admirable article on



Figure 2: Photo: André du Pisani

rain, rain-making and rain animals based on a site at his farm *Hornkranz South* (Van Rooyen, 2015: 135-150).

Kinahan's argument (2020:124) that the rock art "formed a fundamental and necessary part of the ritual activity" is most useful, since "the rock art of rain-making was executed as part of the process of rain-making, not afterwards as a record of the event" seems to ring true in this case as well. Moreover, rain-making as we know from the ethnographic and historical record, and as argued by Kinahan (2020), formed a significant component of the relationship between hunter-gatherers and other communities of pastoralists and farmers who engaged shamans for the explicit purpose of making rain.

Having briefly considered some of the rock art at the farm *Harmonie*, the focus now shifts to an extraordinary rich site that is located at farm *Noab* at *Remhoogte* in the *Naukluft* Mountains.

The fountains of Noab

Farm *Noab* 10 nestles along the impressive *Remhoogte* pass amidst complex geological formations of about 600 million years old sediments of *Schwartzkalk* belonging to the Nama Group. Similar formations are found at the *Zaris* Mountains further to the SW, while the upper sections of the mountain are composed of dolomites of the *Naukluft* Nappe

Complex, part of the Damara Sequence. The lower sections of the pass have prominent folding structures – the result of geological processes over millennia. The pass traverses a deep valley incision landscape, caused by tectonic activity. This fault line runs along the *Noab* River with its many springs, from which the farm takes its name. The *Noab* River is a tributary of the *Tsondab* River.

The rock overhang where the paintings are, overlooks the valley of the *Noab* River and comprises of dolerite; an igneous rock that consists of calcium-rich plagioclase feldspar-mostly augite – with quartz, magnetite and olivine. The roof and back wall of the overhang show streaks of calcite (CaCO₃); a carbonate rock that is almost transparent with a vitreous lustre. Calcite forms in sedimentary rocks, in caves in limestone areas, in mineral veins and around hot springs. Some of the paintings are partly covered by such calcite veins.

Noab is adjacent to the farm *Nauzerus* 11, famous for a magnificent hunting scene of a Black rhinoceros (*Diceros bicornis*). The panel at *Noab* contains an equally impressive monochrome painting of a Black rhinoceros. This painting is 19cm long and shows a number of similarities with that at *Nauzerus*. Both paintings are distinguishable by their two horns, large bodies and short tails. In both paintings, the head is held horizontally, slightly upwards. Both heads are depicted as being shorter than their necks.

In San rock art, rhinos are implicated in the transformation of shamans and rain-making tasks. Not only are rhinos great meat animals, but are also considered as one of the rain animals (Forssman & Gutteridge, 2012: 183-184). The painting of a rhino is located 1m 32cm from the floor of the overhang and occupies a central position within the panorama, making it easily evident within the panel of paintings.

Not denying the beauty and importance of the rhino painting, arguably, the most significant painting appears to the left of the rhino. It is of a line drawing of a human figure; 16cm in height that appears to wear an animal cap that resembles the head of a baboon. The image has been rendered in bi-chrome and shows the figure carrying a stick, a bag, displaying an ornamented penis and wearing other decorative items such as knee-straps. The figure may represent a shaman engaging in rain-making (du Pisani, 30/12/20: 12-14).

The panel also includes two clearly-recognizable images of clouds with rain falling from them. The smaller of the two paintings is 16cm across and the biggest 22cm. Painted in red ochre, these two paintings provide the part of the context of the panel and have been painted above the other images that include smaller animals and humans.

Paintings of baboons (*Papio ursinus*) are rare in Namibian rock art. Based on research by Challis, cited in Estes (1992:510), baboons have been highly regarded by hunter-gatherers for their ability to raid crops and escape unharmed. Among the raiders, the San were renowned for their ability to harness the potency of certain animals, including baboons, during ritual dances. In the Maloti-Drakensberg in South Africa, there are paintings that show dancing groups changing into baboons and horses. The creolized raiders seemingly believed they could appropriate, in ritual, the protective powers of the baboons and thus remain unharmed on mounted raids into adjacent settler farms (Estes, 1992: 510).



Figure 3 shows the image of a Shaman. Photo: André du Pisani



Figure 4 shows the image of the Black rhino. Photo: André du Pisani

Baboons, it has been argued, retained their human-like qualities like elephants and ant bears. San refer to baboons as “the people who sit upon their heel”. The Nharo San do not consider the baboon a meat animal or predator – the two categories into which animals fall according to their beliefs – because they are closely related to humans (Mitchell & Smith, 2009).

Conclusion

The rock art discussed in this article falls within the *Later Stone Age* (LSA). The LSA began around 20,000 years ago and was still in existence in recent history when Namibia was colonized by Europeans in the late nineteenth century and after. The San tools during this time were characteristically small and comprised of scrapers, segments, adze, awls and earthenware pottery. Hunting and gathering constituted the mode of political-economy, with people primarily subsisting off mammals, reptiles, fish, birds and a wide variety of vegetation.

The distribution of the rock art sites underlines the importance of primary and secondary resource site. In the case of Harmonie, water was mostly available during the rainy season when the local spring and rock pools supplied water to the hunter-gatherers and animals alike. There is little evidence of longer periods of settlement and one may conclude that the site was used for fairly short periods in time, determined by the availability of water and food.

The site at Noab overlooks the Noab River incision that supports a wide range of mammal fauna, with hyrax, rock hare, kudu and Hartmann Zebra as its principal herbivores. The ravine has several springs that attract zebra and plains antelope, snakes, flocks of Namaqua sandgrouse (*Pterocles namaqua*), Rock pigeons (*Columba guinea*), Swainson's spurfowl (*Pteristes swainsonii*), Helmeted guineafowl (*Numida meleagris*) and raptors to drink. The intensity of occupation in the Noab mountains is apparent from a clear view over the base of the River and the surrounding landscape and provides protection against the elements.

A few of the well-preserved paintings may date to less than 300 years B.P., while others may be older. All fall within the *Later Stone Age* (LSA) and may be between 300 to 2500 years old. This is based on the tool industry evident in the site and various reports by travelers and missionaries, among them, James Edward Alexander (1838, 1997 facsimile reprint), Francis Galton (1889) and the missionary Schmelen who visited the Rooibank along the Khuseb River in 1825 (cited by Moritz, 2020:58) that mention the presence of hunter-gatherers in the nineteenth century in the Naukluft and its environs.

Acknowledgments

I wish to acknowledge the support given to me and the interest in my work by Mr Mike Jacobs of Harmonie, Mrs Caroline Buhrman of Nauzerus, Mr Jan Buhrman of Noab, Emeritus Professor Piet van Rooyen of Gamsberg 23/3, Mr Robin Hurt of Great Gamsberg and Mount Barry, Dr Beatrice H. Sandelowski, Dr John Kinahan, Dr Alma Nankela, Prof. Dr Peter Breunig of the University of Frankfurt, Prof. Dr Tilman Lenssen-Erz of the University of Köln and Prof. Emeritus David Lewis-Williams in the University of the Witwatersrand.

References

- ALEXANDER, JAMES EDWARD. 1838/1967. *Expedition of Discovery into the Interior of Africa*. Henry Colburn Publisher, London and C. Struik (Pty.) Ltd., Cape Town (Facsimile reprint).
- BARNARD, A. 1992. *Hunters and Herders of Southern Africa: A Comparative Ethnography of the Khoisan Peoples*. Cambridge University Press, Cambridge.
- BLEEK, W.H.I. & LLOYD, L.C. 1911. *Specimens of Bushmen folklore*. George Allen, London.
- BREUNIG, Peter. 2014. *Archaeologischer Reiseführer Namibia*. Africa Magna Verlag, Frankfurt a.M.
- BREUNIG, Peter. 2019. Lebensraum Wüste. Archaeologie eines Trockengebietes in Nordwest-Namibia, in Eichhorn, Barbara & Alexa Hihn (eds.) *Trees, Grasses and*

- Crops People and Plants in Sub-Saharan Africa and Beyond*. Verlag Dr. Rudolf Habelt GmbH, Bonn: 39-62.
- DOWSON, T.A. 1988. Revelations of religious reality: the individual in San rock art. *World Archaeology* 20: 116-128.
- DU PISANI, ANDRE. 21/05/2020. *Unpublished Field Notes*.
- DU PISANI, ANDRE. 30/12/2020. *Unpublished Field Notes*.
- DU PISANI, ANDRE. 2020. Seeing and Remembering: Rock Art Sites at the Farm *Krumneck* in the Khomas Region. *Journal of the Namibia Wissenschaftliche Gesellschaft-Namibia Scientific Society*, Band/Volume 67:13-28.
- DU PISANI, ANDRE. 2020. The Way we were: Rock Art in the Khomas Region of Namibia. *Journal of the Namibia Wissenschaftliche Gesellschaft-Namibia Scientific Society*, Band/Volume 67: 29-44.
- ESTES, R.D. 1992. *The Behavior Guide to African Mammals*. University of California Press, Berkeley.
- FORSSMAN, T. & Gutteridge, L. 2012. *Bushman rock art – an interpretative guide*. South Publishers, Pinetown.
- GARLAKE, PETER. 1995. *The Hunter's Vision – The Prehistoric Art of Zimbabwe*. University of Washington Press, Seattle.
- GALTON, F. 1889. *Narrative of an Explorer in Tropical South Africa, Being an Account of a Visit to Damaraland in 1851*. Ward, Lock & Co., London.
- GRUNERT, NICOLE. 2000. *Namibia Fascination of Geology – A Travel Notebook*. Klaus Hess Publishers, Windhoek/Göttingen.
- KINAHAN, JOHN. 2020. *Namib The archaeology of an African desert*. UNAM Press, Windhoek.
- LEE, R.B. 1979. *The !Kung San: Men, women and work in a foraging society*. Cambridge University Press, Cambridge.
- LENSSEN-ERZ, T. & Erz, M. 2000. *Brandberg – Der Bilderberg Namibia, Kunst und Geschichte einer Urlandschaft*. J. Thorbecke Verlag, Stuttgart.
- LEWIS-WILLIAMS, J.D. 1981. *Believing and seeing: symbolic meanings in southern San rock paintings*. Academic Press, London.
- LEWIS-WILLIAMS, J.D. and Dowson, T. (eds.) 1989. *Images of power – understanding San rock art*. Southern Book Publishers, Halfway House.
- LEWIS-WILLIAMS, J.D. 2002. *The mind in the cave: consciousness and the origins of art*. Thames and Hudson, London.
- LEWIS-WILLIAMS, J.D. 2011. *San Rock Art*. Jacana Media, Auckland Park, Johannesburg.
- LEWIS-WILLIAMS, DAVID. 2019. *Image-Makers The Social Context of a Hunter-Gatherer Ritual*. Cambridge University Press, Cambridge.
- MITCHELL, PETER and Benjamin Smith (eds.) 2019. *The Eland's People – New Perspectives in the Rock Art of the Maloti-Drakensberg Bushmen Essays in Memory of Patricia Vinnicombe*. WITS University Press, Johannesburg.

- MORITZ, WALTER. 2020. *Die Topnaar und die !Nara – Geschichte und Leben eines indigenen Namastammes in der Namibwüste*. Walter Moritz Verlag, Werther.
- RICHTER, J. 1984. Messum I: A Later Stone Age pattern of mobility in the Namib Desert. *Cimbebasia* (B) 4 (1): 1-12.
- SANDELOWSKY, BEATRICE. 2004. *Archaeologically yours – A personal journey into the prehistory of Southern Africa, in particular Namibia*. Namibia Scientific Society, Windhoek.
- SANDELOWSKY, BEATRICE H. 2013. *Prehistory in the Central Namib Desert*. Benguela Publishers, Windhoek.
- SCHERZ, ERNST-R. 1986. *Felsbilder in Südwest-Afrika, Teil III*. Bohlau Verlag, Köln/Wien.
- SCHNEIDER, GABI. 2008. *The Roadside Geology of Namibia*. Gebrüder Borntrager, Berlin/Stuttgart.
- VAN ROOYEN, PIET. 2015. Rain and prehistoric pregnancy in a hunter-gatherer rock painting from Namibia. *Journal of the NWG/NSS*, Band/Vol. 63: 135-150.
- VOGELSANG, R. 1998. Middle Stone Age Fundstellen in Südwest-Namibia. *Africa Praehistorica* 11. Heinrich-Bart-Institut, Köln.
- WENDT, W.E. 1972. Preliminary report on an archaeological research programme in South West Africa. *Cimbebasia* (B) 2: 1-61.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft
Windhoek, Namibia 2021

ISSN: 1018-7677 ISBN: 978-99945-76-74-6



Enjoy up to
25% discount
**WITH FLEX
BUNDLES.**

Starting
from
N\$ 999
Per month
excl. VAT

Upgrade or sign up for our
**NEW ultra fast Fiber & Mobile-LTE
Bundle offering.**

Services are only available where Paratus has Network Coverage.
T's & C's Apply.

Visit na.paratus.africa for more information or call any of our offices:
Head Office: +264 83 300 1000 | **Grove Mall:** +264 83 300 1002
Swakopmund: +264 83 300 1960 | **Walvis Bay:** +264 83 300 1850



PARATUS
Always Prepared

NOTICE OF STRATEGIC ENVIRONMENTAL ASSESSMENT

FOR WINDHOEK MUNICIPALITY AND TOWNLANDS

INTRODUCTION

The Windhoek Municipality has commissioned a Strategic Environmental Assessment (SEA) in compliance with the Ministry of Environment, Forestry and Tourism requirements and accordance with Part X of the General Provision, Section 56 of the Environmental Management Act No. 7 of 2007. The objective of the SEA is to review existing plans, policies, and programmes (PPPs) to inform and support future spatial and other development opportunities and promote sustainability within the Municipality areas of jurisdiction.

For this purpose, the Windhoek Municipality appointed Excel Dynamic Solutions Pty Ltd to undertake the SEA. Excel Dynamic Solutions Pty Ltd will perform the Task in partnership with Stubenrauch Planning Consultants CC and Tony Barbour Environmental Consulting (together referred to as 'Consultant').

PUBLIC CONSULTATION

The Consultant on behalf of the Municipality is inviting and encouraging interested and affected parties (IAPs) to register and provide input in the identification of important environmental, social, and economic issues regarding the Municipality into the SEA process. The IAPs' inputs are vital to ensure that the final SEA products reflect their concerns and aspirations.

REGISTRATION AND SUBMISSION

Request for Background Information, registration as an IAP, and submission of input, concerns, and comments can be made electronically via email to:

public@edsnamibia.com

Alternatively, registration as an IAP can be through the Consultant's website:

<http://edsnamibia.com/>

or by hardcopy addressed to:

The Project Lead, Mr. Nerson Tjelos, Excel Dynamic Solutions Pty Ltd Office: 122 Robert Mugabe Avenue, Windhoek Central, opposite the National Theatre of Namibia, P O Box 997154, Maerua Mall, Windhoek, Tel: +264 61 259 530/+264 81 152 4420



On the Body in Rock Art of the Khomas Region

André du Pisani

Keywords: Rock art, body, entoptic phenomena, genitals, symbolism, rituals, psychological well-being, trance/medicine dance, shaman.

Abstract

In many cultures, the body is regarded as a representation and reflection of their society or community. The body appears in the visual archive of rock art and takes on highly symbolic meanings. Individual organs are associated with certain emotions: the heart, the head, the nose, the womb, the penis, the stomach, hands, blood, bodily emissions and so forth. Aspects of culture were imagined to reside in the body.

This type of symbolism also holds true for San culture and spirituality, where the heart, the liver, the hands, the nose, the womb, the penis, the blood, the stomach and other body fluids are important metaphors of emotional and material conditions of shared social experiences and beliefs of culturally related people – whether these refer to witchcraft, or to special capacities and agency, charismatic or healing qualities, contagious infections, love, rain-making, anger or symbolic communion or specific rituals such as initiation ceremonies. Of all body parts, the genital organs are invested with the greatest symbolic meaning. Representations of the vulva and the phallus are to be found in many variations all over the world and have been submitted to various interpretations.

The widely-held idea that the rock art ‘illustrates’ the folklore and myths is not viable. Research over the past four decades, shows that the practice of making images was essentially concerned with different types of engagement with the supernatural realm and its beings. San image-making, as Lewis-Williams (2017:150) reminds us, “... was a ritual practice in its own right, not a secondary, merely illustrative appendage to San mythology or anything else”.

While it is undoubtedly meaningful to view rock art within a landscape framework to identify primary and secondary resource nodes as Lenssen-Erz (2004), Breunig (2019) and Kinahan (2020), among other archaeologists suggest, rock art could also be seen as a modification of the landscape and a construction of living social and cultural spaces, through altered states of consciousness, dreaming, folklore, rituals and visions.

The field of cognitive archaeology is widely associated with altered states and entoptic phenomena – altered states of consciousness induced by hallucinogenic substances – (Lewis-Williams, 1991 & 2002) and Whitley (1994), but other aspects of the mind are also important. One of these concerns the body and bodily experience.

In initiation practices, girls and boys are prepared for their gender-specific roles in society. Particular attention is paid to sexual education. Because of the perceived relationship between the body and the social order, the coherence of its parts and the harmonious communication of its members is the basis of the well-being of the community. There are numerous rock art sites in the Khomas Region and elsewhere in the country, that have images of bodies in the trance or medicine and rain dance; the most important ritual for all San groups (Lewis-Williams & Pearce, 2012). The dance promotes psychological well-being and social cohesion and is about the use of *n!um* to achieve, *!ia* (also spelled *!khia*). *N!um* has variously been translated as ‘medicine’, ‘energy’, ‘potency’ or ‘power’. The term has many meanings and refers to herbal medicines, healing, menstrual blood, pregnancy and ejaculation, among others (Lee, 1984:109).

Introduction

The trance or medicine dance is a community activity made possible by the egalitarian principles of social organization. All pertinent rituals and taboos must be observed, even if not all people would participate in them. Various ethnographic studies of different San groups suggest that the dance promotes psychological well-being and reinforces social cohesion (Biesele, 1993), (Lee, 1968), Marshall (1969), Katz (1976, 1982), Lewis-Williams (1981a & 2002) and Loubser (2010). In the trance or medicine dance, *n!um* is activated within the stomach of a shaman and made to ‘boil’. ‘Boiling’, in turn, causes *!ia*, or ‘trance’, and through trance, one can use his/her power (most often it is men who do so) to cure the sick. Learning to achieve trance requires years of training and practice.

Lee (1968:39-41) identifies five phases of the trance performance. The first is the ‘working up’ phase. This phase is characterized by extended periods of singing and clapping on the part of women of the group, and dancing on the part of men. The second phase involves entering trance. Trance is usually achieved, either suddenly or gradually, after some 30 to 60 minutes. Lee called the third phase ‘half death’ – arguably, a rather unfortunate term. In this phase, the trance performer collapses in a state of physical and mental strain. “He, or she, may hallucinate. He/she will tremble with tension, shriek and moan, and have to be assisted by other dancers, who will rub his body to keep it warm” (Barnard, 1992:58), however, not all trance performers are capable of attaining this heightened phase of trance.

The fourth phase is what Lee calls ‘active healing’. This may last perhaps an hour, and several such curing performances, by one or more medicine men, can occur throughout the night. In this phase, the healer places his/her hands on each and every person present,



Image 1: A Shamanic figure at Rostock in the Oase Cave. Photo: André du Pisani

though sick persons are singled out for special treatment. This practice serves the purpose of binding the group as a whole and makes participants of everyone. The final phase is the return to normal. Sometimes this takes long to happen. The most memorable dances may last for one or more days. A change in personnel is possible, but the action may continue as each achieves trance, cures, and collapses in exhaustion (Barnard, 1992:58).

In the bichrome image above, the shaman is rendered in considerable detail that shows the clothes and adornments that he wore and is painted in close proximity to an image of an antelope, possibly a kudu, emphasizing the spiritual link between humans and animals in another world.

Above the image of the shaman, various Springbok (*Antidorcas marsupialis*) appear showing them as prodigious athletes.

The image 2 on the next page is shown above represents a link to mythology and cosmology. The painting of the Kudu cow (*Tragelaphus strepsiceros*) is particularly significant. Forssman and Gutteridge (2012:128) comment: “According to San folklore, with the creation of the world, the original *Jul’hoansi* decided to create supernatural power, which they used to give animals different designs. The kudu’s stripes were made using this supernatural power, which is also known as *nlom*. Kudus are one of the animals associated with the weather. When a woman’s fluids spill on the floor during childbirth, her and the child connect and are believed to cause the weather to change.” Similarly, when a dead animal’s



Image 2: *Jumping Springbok*. Photo: André du Pisani

blood reaches the floor, the animal's *n!ao* connects with the hunter, causing a change in the weather. The kudu is also linked to *n!om*. It is used to access the spirit world where various tasks are performed such as healing, warding off evil spirits, changing the weather, rain-making and fending off attacks by lions.

In the upper left part of the image, a therianthrope (human-animal transformations) depicts a shaman in the spirit world in a state of levitation. This skeletal-like depiction shows the shaman 'floating' in a different realm. The late Ernst-Rudolf Scherz; in his comprehensive and impressive survey of rock art in the country, called such images "*Tier-Mensch-Wesen or Geister*" [*Ghosts*] (Scherz, 1986: 44). Peter Breunig (2014:96) refers to "*Tier-Mensch-Mischwesen (Theriantrophen)*" to designate such paintings.

***N!om* (Supernatural potency)**

One of the interesting aspects of *!Kung* beliefs is *n!om* (Marshall, 1957). This is not to be confused with the Nama idea of *!nau*, which refers to a state of ritual danger at times of individual crisis. Rather, *n!om* is essentially a force which influences the weather. It is present in each human person and in certain large meat animals – sometimes painted as 'rain animals'.

Individuals require their *n!om* before birth. It is formed or implanted in the womb. There are two variants: ‘good’ or rain-bringing *n!om* and ‘bad’ or cold-bringing *n!om*. When a child is born with ‘good’ *n!om*, it rains. When a child is born with ‘bad’ *n!om* the weather becomes cold. Seemingly, the significance of human *n!om* is largely confined to the time of birth. According to Barnard, (1992:59), the only exception is that a child born with ‘good’ *n!om* may later be asked to urinate in the fire or burn some of his or her hair, in order to make it rain.

Rain itself is a matter of superstitious belief and the *!Kung* San speak of ‘male (heavy) rain’ or *!ga !go*, and of ‘female’ or gentle rain, *!ga di* (Marshall, 1957:232-233; Van Rooyen, 2015:135-150) and Kinahan (2020: 190-191). Rain is associated with hair, in the sense that in the *!Aulei* as well as in the *Zul’hoā* dialect, rain clouds are said to be ‘the rain’s hair’. Based on research conducted by Lorna Marshall (1976:70), when a torrential outpouring from the clouds is seen from a distance, the *!Kung* calls it the “rain’s hair”.

Animals which possess *n!om* are the giraffe, eland, gemsbok, kudu, hartebeest and wildebeest. When a *Zul’hoa* hunter kills one of these animals, its *n!om* is released. In a complex interaction with the *n!om* of the hunter, it creates a rainy or cold condition in the weather.

Image 3 below shows a cloud releasing ‘male’ or heavy rain.

The above image appears in an overhang at the farm *Noab* in the Naukluft Mountains in the Khomas Region and is one of the finest renditions of ‘male rain’ in the Region.



Image 3: Photo: André du Pisani



Image 4: Photo: André du Pisani

At the farm *Harmonie* in the Khomas Region a sensitive rendition of ‘female’ rain appears, amongst other significant paintings. Image 4 above shows the image of rain at the farm *Harmonie*.

Initiation ceremonies

According to older ethnographic studies, the *!Kung* practiced both male and female initiation (Fourie, 1928:92 and Schapera, 1930:124-125). On the first day, the boys were given no food or water but subjected instead to the ‘smoke of the devil’s fire’ and the ‘devils urine’. On the second day, their skin was blackened, and danced for many hours, with little food or water. The third day was much the same. On the fourth day, they walked through a water-filled pan, gathered veld food, and, in the evening, were ‘introduced’ to *Glaau*. Then they consume honey which he had brought. On the fifth day, they were cleaned up and permitted to move about the camp, as long as they did not speak to unmarried women. Thereafter, each day was spent in tests of hunting skills. Those boys who passed the tests were tattooed with meat from their own kill.

Lee (1979:238-9) describes the tattooing in detail. A mixture of charred herbs and fat was rubbed into ten small cuts made in the skin, on the initiate’s breast bone. Then further

cuts were made on the left side of the chest, the left side of the belly, under the left scapula, at five different locations on the left arm, and finally, between the eyes. According to Silberbauer (1965: 89, 99), among the *G!wi*, ritual tattooing of the chest, shoulders, and thighs, follows not only a young hunter's first kill, but also a young man's first trance performance, thereby marking a different aspect of 'manhood'. Tattooing continues among the San living in present-day Namibia (Polzer & Huber, 2012:163).

Female initiation is said to have been dominated by the 'Eland Bull Dance', performed at the time of a girl's first menstruation period. The ceremony is wide-spread throughout the Kalahari. The initiate is placed in a hut and attended by women of the band, while the men had to leave the area. The person (usually a man) who represented the eland bull wore horns and danced in a step which mimicked the movement of an eland, chasing the women around the fire and hut. The initiate took no active part in the ceremony, but the other women, lifting their skirts behind them as they danced, represented female sexuality, in opposition to the powerful 'medicine' of the eland bull (Barnard, 1980: 117-118) and Lewis-Williams, 1981b:43-67). For a recent photographic record of various dances by present-day San in this country, see (Polzer & Huber, 2012:128-133).

The *!Kung* San makes different fires, some are built for the ritual curing dance and for the performance of other rites. The dance takes place around a fire built in the center of the dance circle. In addition, people who are resting, or are for some other reason not dancing, sit at fires near the dance circle. The rites that require special fires include the Rite of the



Image 5: An initiation dance for girls at Hornkranz? Photo: André du Pisani

First Kill (performed when a boy kills his first large animal), another hunting rite, a rite for a novice medicine man, *nlum k" xau* ("owner of medicine"), initiation rites for boys and girls, and the rite for a child's first haircut (Marshall, 1976:91).

Barnard (1979 & 1980) opines that the ritual tattooing of boys might best be regarded as 'hunting magic', rather than 'initiation' (Barnard, 1979:70; 1980: 117-118). In a social context, hunting is something to be 'initiating' into, in the sense that it marks the primary identity of an adult male. Just as the female ceremony signifies a woman's roles as a potential wife and mother, the male rites acknowledge a man's hunting prowess.

The image 5 shows a number of human figures in a dancing scene. Some of the dancers wear headgear, animal skin bags and carry dancing sticks. The elongated figure may be that of a shaman. Elongated figures appear in different parts of the country, such as at *Ekuta* in the Erongo Mountains, *AiAiba*, and at *Omandumba-West*, all in the same mountains, and at *Hornkranz-South*. Such figures are classified as type 5 figures in the typology of Lenssen-Erz (2001:78, 114) It is not clear if it is a trance or medicine dance or an initiation dance being shown.

In some paintings, mostly of *therianthrope*, fluid emissions from different body parts such as the mouth, head, eyes, nose and penis appear. One such image is to be found at the farm *Gamsberg 23/3* in a shelter overlooking a small ravine that carries a fair amount of water when it rains, and retains water in the near-by water holes for several months. Sadly, the erotic elongated image is rather badly faded and difficult to see, but it may nonetheless signify a link between trance, possession and sex, particularly when considered with other images of human figures and animals that form part of the panel. It is not entirely clear if the human figure urinates or ejaculates or if sexual stimulation is involved. Whatever the case, it tells the story of a bodily experience.

The monochrome figure right is 16cm in height, carries a bow, and is painted in close proximity to other human figures, two paintings of kudu – a bull and a cow – and a delightful Klipspringer (*Oreotragus oreotragus*). The site may well have served as a place of performance. The granite outcrop provides a natural home to Klipspringer and raptors, as I can attest on many visits to the site.

Apart from other paintings on the panel, those of human figures have been executed with great skill. These human figures form a grouping and appear about 1m 50cm from the painting discussed above. Image 7 shows the series of paintings of four humans.

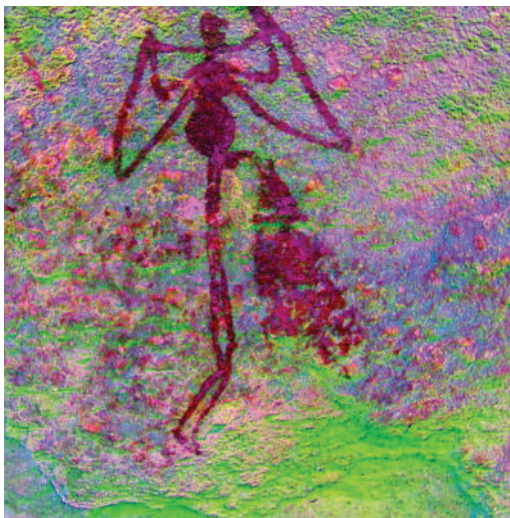


Image 6: On the body, possession and sex. Picture has been enhanced with DStretch software. Photo: Prof. Piet van Rooyen



Image 7: Picture has been enhanced with DStretch software. Photo: Prof. Piet van Rooyen

The four human figures have been painted as if they participated in a ritualistic procession. The detail is remarkable with special emphasis on their feet, legs and torsos.

Conclusion

Since archaeologists are primarily interested in material remains, they can benefit by attempting to link such artefacts to human body movements and thought patterns. Loubser (July 2010:184) usefully remarks: “Realizing that psychological characteristics help create and constrain our interaction with the world, it is necessary to interpret material creation and interactions, such as paintings, living areas, and lived landscapes, in terms of general structural principles of the mind and body that shape the experiences shared by people globally”.

The important work of Laughlin (1997) on ‘neurognostic structures’, or what he calls “neural knowing” structures that are present in humans since birth offers a useful path for looking at some rock art. However, it seems important that specific cultural contexts make

for idiosyncratic ways in which people experience and view their bodies. Thus, it may well be more important, to study trends within cultures instead of relying solely on general principles. Rock art offers one entry point into studying bodily experiences and metaphors. The paintings may well provide a skeletal framework around which more meaningful metaphorical understandings of the body could be constructed.

The richly argued synthesis and illustrated book by David Lewis-Williams *The Mind in the Cave* (2002), offers a compelling set of arguments with reference to Southern African San Rock Art (among others) in support of combining neurological and archaeological evidence, pointing to the ubiquity among hunter-gatherer communities of what he calls ‘shamanism’ (Lewis-Williams, 2002:205).

Lewis-Williams not only argues for the widespread occurrence of shamanism, but notes “the ancient, universal, human neurological inheritance that includes the capacity of the nervous system to enter altered states and the need to make sense of the resultant dreams and hallucinations within a foraging way of life” (Lewis-Williams, 2002:206). Animals are metaphors for rituals, while the caves or overhangs within which the rock art occurs provide spaces for community and conflict.

The San mythology and folklore find powerful expression in rock art which is largely a ritual activity in its own right. The paintings as Lewis-Williams (2017) and Loubser (2010), among many other rock art researchers argue, are imbedded in the language, thought world and social circumstances of the San.

Acknowledgements

I acknowledge and recognize the invaluable support and encouragement from Mr Mike Jacobs of *Harmonie*, Mrs Caroline Buhrmann of *Nauzerus*, Mr Jan Buhrmann of *Noab*, Kücki of *Rostock Ritz Desert Lodge*, Emeritus Professor Piet van Rooyen of *Gamsberg 23/3*, Mr Robin Hurt of *Great Gamsberg* and *Mt. Barry Wilderness*, Professor Dr Peter Breunig of the University of Frankfurt a.M., Professor Dr Tilman Lenssen-Erz of the University of Köln, Professor Emeritus David Lewis-Williams of the University of the Witwatersrand.

References

- BARNARD, ALAN. 1992. *Hunters and Herders of Southern Africa A Comparative Ethnography of the Khoisan Peoples*. Cambridge University Press, Cambridge.
- BIESELE, M. 1993. *Women Like Meat: The Folklore and Foraging Ideology on the Kalahari Jul’hoan*. University of the Witwatersrand Press, Johannesburg.
- BREUNIG, PETER. 2014. *Archäologische Reiseführer Namibia*. Africa Magna Verlag, Frankfurt a.M.

- BREUNIG, PETER. 2019. Lebensraum Wüste. Archäologie eines Trockengebietes in Nordwest-Namibia. In EICHORN, BARBARA & Alexa Hohn (eds.) *Trees, Grasses and Crops People and Plants in Sub-Saharan Africa and Beyond*. Verlag Dr. Rudolf Habelt GmbH, Bonn: 39-62.
- DU PISANI, ANDRE. 2017. *Field Notes, Hornkranz and Hornkranz South*. Unpublished.
- DU PISANI, ANDRE. 2020. The Way We Were: Rock Art in the Khomas Region of Namibia. *Journal NWG/Journal NSS Band/Volume 67*: 29-44.
- FORSSMAN, TIM & LEE Gutteridge. 2012. *Bushman Rock Art An Interpretative Guide*. Southbound, Pinetown.
- FOURIE, LOUIS. 1928. The Bushmen of South West Africa. In C.H.L. Hahn, H. Vedder, and L. Fourie, *The native tribes of South West Africa*. Cape Times, Cape Times.
- KATZ, RICHARD. 1976. Education for transcendence: !Kia healing with the Kalahari !Kung. In Richard B. Lee and Irven DeVore (eds.). *Kalahari-hunter gatherers: studies of the !Kung San and their neighbors*. Harvard University Press, Cambridge, MA,: 281-301, 400-1.
- KATZ, RICHARD. 1982. *Boiling energy: community healing among the Kalahari Kung*. Harvard University Press, Cambridge, MA.
- KINAHAN, JOHN. 2020. *Namib The archaeology of an African desert*. UNAM Press, Windhoek.
- LAUGHLIN, C.D. 1997. Body, Brain, and Behavior: the Neuroanthropology of the Body Image. *Anthropology of Consciousness* 8 (2-3): 49-68.
- LEE, RICHARD B. 1968. The sociology of the !Kung Bushman trance performances. In Raymond Prince (ed.). *Trance and possession states*. R.M. Bucke Memorial Society, Montreal, pp. 35-54.
- LEE, RICHARD B. 1979. *The !Kung San: men, women, and work in a foraging society*. Cambridge University Press, Cambridge.
- LEE, RICHARD B. 1984. *The Dobe !Kung*. Holt, Rinehart and Winston, New York.
- LENSEN-ERZ, T. 2001. *Gemeinschaft-Gleichheit-Mobilität: Felsbilder im Brandberg, Namibia, und ihre Bedeutung. Grundlagen einer textuellen Felsbildarchäologie*. Heinrich-Barth Institut, Köln.
- LENSEN-ERZ, T. 2004. The landscape setting of rock-painting sites in the Brandberg (Namibia): Infrastructure, Gestaltung, use and meaning. In Chippendale, C. and Nash, G. (eds.) *Pictures in place: The figured landscapes of rock-art*. Cambridge University Press, Cambridge: 131-150.
- LEWIS-WILLIAMS, J.D. 1981a. The thin red line: southern San notions and rock paintings of supernatural potency. *South African Archaeological Bulletin* 36: 5-13
- LEWIS-WILLIAMS, J.D. 1981b. *Believing and seeing: symbolic meanings in southern San rock paintings*. Academic Press, London.
- LEWIS-WILLIAMS, J.D. 1991. Wrestling with Analogy: a Methodological Dilemma in Upper Paleolithic Art Research. *Proceedings of the Prehistoric Society* 57 (1): 149-162.
- LEWIS-WILLIAMS, J.D. 2002. *The Mind in the Cave*. Thames & Hudson, London.

- LEWIS-WILLIAMS, J.D. & Pearce, D. 2012. The southern San and the trance dance: A pivotal debate in the interpretation of San rock paintings. *Antiquity* 86: 696-706.
- LEWIS-WILLIAMS, J.D. 2017. *Myth and Meaning San-Bushman Folklore in Global Context*. UCT Press, Cape Town.
- LOUBSER, JOHANNES H.N. July 2020. Prefigured in the Human Mind and Body: Toward and Ethnographically Informed Cognitive Archaeology of Metaphor and Religion. *Time and Mind: The Journal of Archaeology, Consciousness and Culture*, Volume 3-Issue 2: 183-214.
- MARSHALL, LORNA. 1957. N!ow. *Africa* 27: 232-240.
- MARSHALL, LORNA. 1969. The medicine dance of the !Kung Bushmen. *Africa* 39: 347-381.
- MARSHALL, LORNA. 1976. *The !Kung of Nyae Nyae*. Harvard University Press, Cambridge, Massachusetts and London.
- POLZER, GOTTLIEB & ARNOLD H. HUBER. 2012. *Die letzten Steinjäger – Bildband über die letzten freien Kung-Buschleute Namibias*. Nordwest Media Verlagsgesellschaft mbH, Grevesmühlen.
- SCHAPER, I. 1930. *The Khoisan peoples of South Africa: Bushmen and Hottentots*. George Routledge and Sons, London.
- SCHERZ, ERNST-RUDOLPH. 1986. *Felsbilder in Südwest-Afrika*, Teil III. Böhlau Verlag, Köln/Wien.
- SILBERBAUER, GEORGE B. 1965. *Report to the Government of Bechuanaland on the Bushman Survey*. Bechuanaland Government, Gaborone.
- VAN ROOYEN, PIET. 2015. Rain and prehistoric pregnancy in a hunter-gatherer rock painting from Namibia. *Journal NWG/Journal NSS*, Vol 63-2015: 135-150.
- WHITLEY, D.S. 1994. Shamanism, Natural Modeling, and the Rock Art of the Far Western North America. In S. Turpin (ed.) *Shamanism and Rock Art in North America*. Texas Rock Art Foundation Special Publication I: 1-43.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft

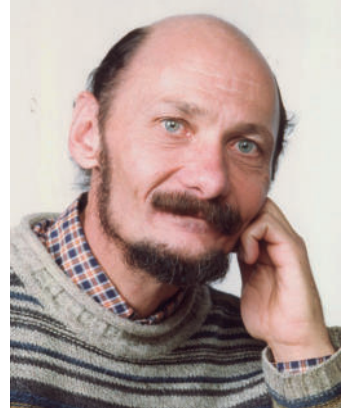
Windhoek, Namibia 2021

ISSN: 1018-7677

ISBN: 978-99945-76-74-6

About the Author

Emeritus Professor André du Pisani (1949) is a Namibian political scientist, photographer, art collector, writer and poet. Born in Windhoek, he completed a bachelor's degree (1971) and an honours degree (1972) in political science and history at the University of Stellenbosch in South Africa and in 1975 a master's degree in politics. He continued his education at the London School of Economics (LSE) from 1975 to 1976, where he read philosophy. In 1987, he received his PhD from the University of Cape Town in South Africa and did postdoctoral research on conflict and philosophy at the University of Cambridge in the United Kingdom from 1995 to 1996. He joined the lecturing staff of the University of Namibia in April 1993.



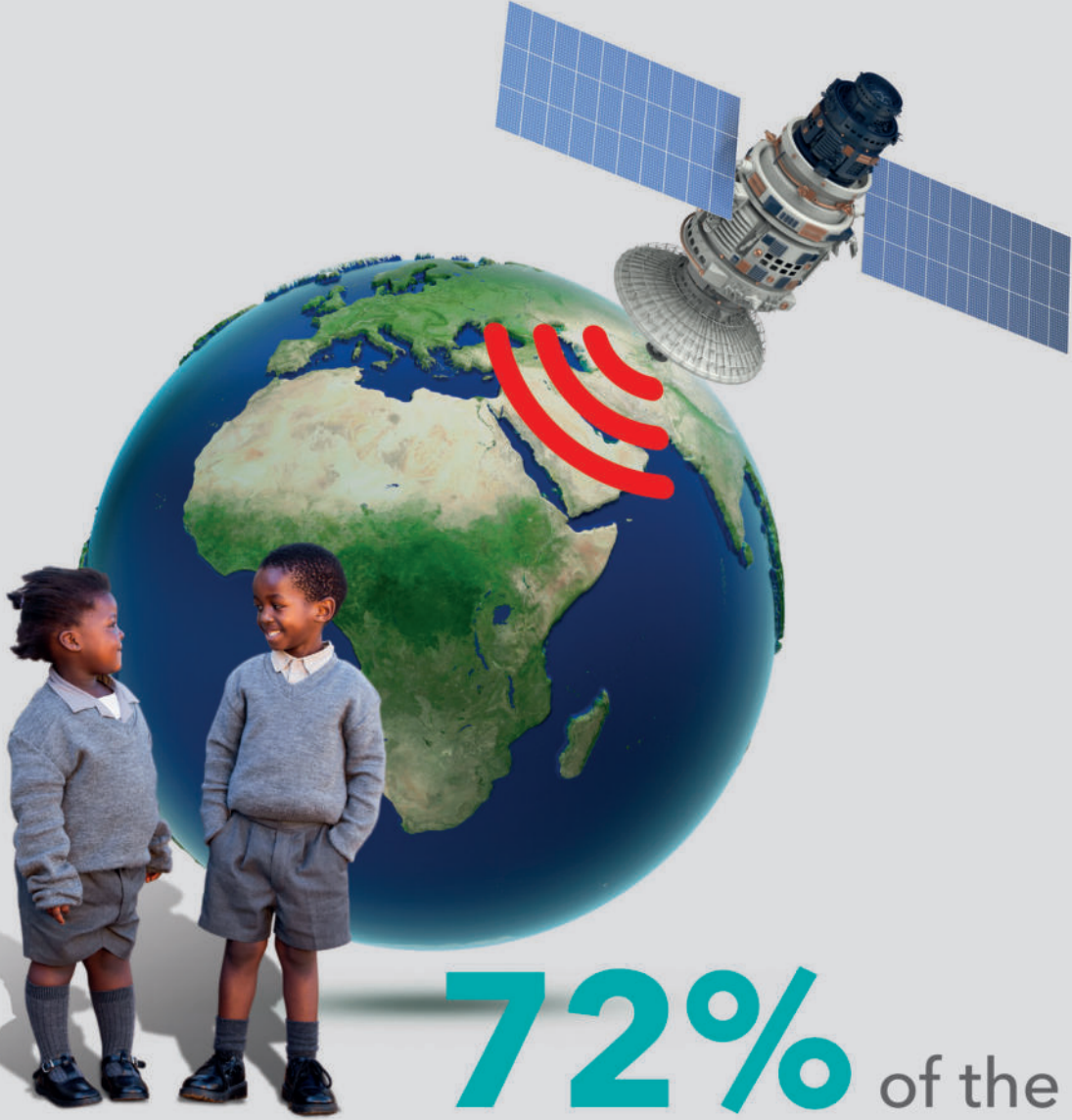
Since 1998, du Pisani has been professor and dean in the Department of Political and Administrative Studies at the University of Namibia (UNAM) and has published prolifically. He has been actively involved in southern African regional security and economic cooperation since the 1980s. In this capacity, he served as the focal person for the Southern African Defence and Security Management Network from 2001-2014 and was Namibian coordinator of the Volkswagen-funded project on Reconciliation, Post-Conflict Reconstruction and Peace in southern Africa. He serves on the editorial boards of the *Journal of Namibian Studies* and the *Strategic Review of Southern Africa*. He also reviews contributions for the *Journal* of the Namibian Scientific Society.

In 2006, he was awarded the *Palme Academique* by the French ministry of education for his contribution to public discourse. From 2012-April 2014, he was the Chairperson of the National Commission on Research, Science and Technology (NCRST) and retired from full-time lecturing at UNAM at the end of January 2014. From March 2014 to June 2016, he served as a member on a Global Reflection Group on the Monopoly on the Use of Force funded by the Freidrich-Ebert Stiftung (FES) based in Berlin, Germany. His research on rock art in the Khomas region commenced a decade ago and is ongoing.

Since his retirement in January 2014, André has been designing policy for various government ministries and agencies. He is a regular contributor to public conversations in local and international print media.

Author's address

P.O. Box 31589, Windhoek, Namibia, E-mail: andredupisani@gmail.com



72% of the
Pupkewitz Foundation
Funding is focused on the
*development of the
Namibian Child.*



**PUPKEWITZ
FOUNDATION**

FROM **BIG** TO SMALL WE HAVE IT ALL



WINDHOEK

c/o Sam Nuyoma Drive. &
Nelson Mandela Ave.

061 - 370 300

WALVISBAY

Shop 36A, 12th Road.

064 - 212 300

OSHAKATI

Advance Centre
(Opposite Kamwa Trading)

065 - 229 300

WE ARE A CERTIFIED **CANON**
PLATINUM PARTNER AND
WARRANTY CENTRE



Now you can also create
your own *Business Cards,*
Christmas Cards,
DL Flyers and
Calendars

4 Easy Steps



Step 1

DOWNLOAD AND INSTALL

Download and install the free JMP Photobook software from our site www.johnmeinert.com

Step 2

SELECT PRODUCTS

Select which product you wish to create

Step 3

CREATE YOUR DESIGN WITH YOUR IMAGES

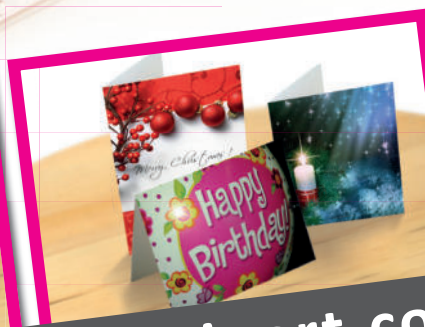
Choose from over 50 different page layout options, create your design by dragging and dropping your images onto each page and add extra text or backgrounds as you wish

Step 4

ORDER ONLINE

When finished click the shopping card button in the software menu, follow the prompts to order your product and then upload your design via your internet

The uploaded file size is optimised for easy uploading. Your beautiful product is then delivered in ±5 days.



www.johnmeinert.com

Snyman Circle, 17 David Hosea Meroro Road
P.O.Box 56, Windhoek, Namibia
Phone +264 61 225411 Fax: +264 61 224843
email: jmp@mweb.com.na



PHOTOBOOK

JOHN MEINERT PRINTING (PTY) LTD.

memories for a lifetime!

Using Signature Whistles to Investigate Population Dynamics of Locally Threatened Bottlenose Dolphins (*Tursiops truncatus*) in Namibia

Jack Fearey^{1,2}, Simon Elwen^{1,3}, Sasha Dines^{1,3}, Bridget James^{1,3}, Tess Gridley^{1,2,3}

1 – Namibian Dolphin Project / Sea Search Research and
Conservation – Walvis Bay, Erongo, Namibia

2 – Centre for Statistics in Ecology, Environment and Conservation,
Department of Statistical Sciences, University of Cape Town, South Africa;
Sea Search Research and Conservation, Cape Town, South Africa

3 – Department of Botany and Zoology, Stellenbosch University, Natural Sciences
Building, Private Bag 1, Matieland, Stellenbosch 7602, South Africa

Keywords: Mark-recapture, spatial capture-recapture, social networks, conservation, passive acoustic monitoring, PAMGuard, marine mammal, individual identification.

Project Background

Namibia is known for its rolling dunes and desert landscapes. These dunes often roll right into the sea, and into a coastline that hosts an incredibly diverse assemblage of species. Some of the more easily observed wildlife can be seen at the Walvis Bay lagoon, an internationally recognized conservation site for wading birds, or at Cape Cross and Pelican Point, which host immense colonies of Cape fur seals (*Arctocephalus pusillus pusillus*). The Namibian Dolphin Project (NDP) studies a more cryptic order of animals, cetaceans (whales and dolphins), which are resident to, or migrate through, the coastal waters of

Namibia. Founded in 2008, NDP's research investigates a range of questions including the sound production and behaviour of common bottlenose dolphins (*Tursiops truncatus*), Heaviside's dolphins (*Cephalorhynchus heavisidii*), and humpback whales (*Megaptera novaeangliae*). The focus of one of our more recent projects is to develop a method to estimate abundance, density, and movement patterns of dolphin populations, using a specific type of whistle produced by some delphinids, the signature whistle (Janik et al., 2013; Kriesell et al., 2014). We have termed this method, SWORD: Signature Whistles for Occurrence, Recapture and Density (Gridley et al., in prep).

Focal Species

Common bottlenose dolphins, (*T. truncatus*; hereafter 'bottlenose dolphins') are an abundant species with a global distribution. A small, isolated population of bottlenose dolphins is resident to Namibian waters (Fig. 1). These animals have a very coastal distribution, rarely seen in water more than 15 metres deep and as shallow as a half a metre. Globally, bottlenose dolphins are considered 'least concern' on the International Union for Conservation of Nature (IUCN) Red List, however, they often form small, isolated



Figure 1: A group of bottlenose dolphins (*Tursiops truncatus*) travelling along the arid Namibian coastline. This coastal population, numbering less than 100 individuals, is rarely seen in depths of more than 15 metres and ranges between Lüderitz and Möwe Bay.

populations which can be of much higher conservation concern (Currey et al., 2009). The Namibian population of bottlenose dolphins is regionally unique and is under pressure from harbour activity and construction, tourism, and possibly recreational fishing. The most recent population estimate suggested fewer than 100 individuals (Elwen et al., 2019), which makes them one of the smallest populations of mammals in southern Africa and among the most vulnerable, underscoring the need for strict conservation measures to support population management. They could be considered in a similar light to the Namibian desert lions (Stander, 2019), in that this is a locally unique population of a more abundant species.

Project Development

Current research methods for studying dolphins rely heavily on boat-based surveys using photographic identification (photo-ID) of individual's unique features such as scarring and marks on dorsal fins. By building up a sightings history of individuals, we can apply mark-recapture statistical methods to investigate ranging patterns, survivorship, and population abundance. However, these boat-based methods are inefficient for small, widely spread populations such as the Namibian coastal bottlenose dolphins which range over at least 400 km between Lüderitz and Walvis Bay. Therefore, we aim to develop a framework using biological sounds and a spatial capture-recapture approach (Borchers, 2012) to assess population density and abundance of Namibian bottlenose dolphins, contributing to long-term monitoring of this population.

Cetaceans use acoustic communication to mediate their social interactions (Popper, 1980; Herzing, 1996). Acoustic monitoring of general vocalisations is a widely used method to provide information on species presence and, to some extent, behaviour. However, some dolphin species have been known to also use individually distinctive 'signature whistles' (Janik, 2013), which have similarities to names in human society. Signature whistles, first described in 1968 (Caldwell et al., 1968), are used as contact calls and to facilitate reunions within the group (Janik, 2013). These individually unique signals are developed within the first year after birth (Sayigh et al., 1990) and are stable for up to 18 years, and most likely for life (dos Santos et al., 2005). By using unique signature whistles to monitor individual dolphins in their natural environment, our approach offers a substantial improvement on current monitoring methods. The deployment of hydrophones (underwater microphones) along the coast for extended periods of time will acoustically "capture" individual dolphins if they are producing their signature whistle as they swim by. Capture histories of signature whistles will enable cost-effective and robust monitoring of threatened populations at an individual level, improving abundance estimates. We also aim to generate information on individual movement, identify ecologically significant high-use areas and gain an understanding of social relationships, in locations and time frames previously inaccessible.

Our team aims to develop this novel methodology for its use on other threatened coastal delphinid species. The proof of concept for this method has been completed, demonstrating that capture-recapture estimates of signature whistles produce similar results to estimates generated through standard photo-identification methods (Longden et al., 2020). The Namibian Dolphin Project (NDP) has conducted 12 years of photo-ID (Elwen et al., 2019) and has a developed catalogue of known signature whistles (Kriesell, 2014). The acoustic repertoire is well understood (Gridley et al., 2015; Heiler et al., 2016), as well as their vocal behaviour and the spatial variation in signature whistle production and detection (Longden et al., 2020).

Methods

Acoustic data for the study was collected in Namibian coastal waters between Sandwich Harbour and Cape Cross from June to August of 2021, an area which represents the known core range of the species. The NDP's existing photo-ID and signature whistle catalogue will be used to generate signature whistle capture histories and statistical analyses. It should be noted that spatial capture-recapture models are able to cope with home ranges that extend beyond the survey limit (Borchers, 2012).



Figure 2: A SoundTrap 300HF (Ocean Instruments Inc., NZ) hydrophone used to make underwater recordings of the bottlenose dolphins (*T. truncatus*).

Acoustic data was collected using an array of six SoundTrap hydrophones (Ocean Instruments, Inc., NZ) and 10 AudioMoth hydrophones (Open Conservation Technology Ltd., UK) on a static mooring system (Fig. 2). They recorded at a sample rate of 96 kHz, above the maximum frequency of whistles for this population (maximum 23.24 kHz; T. Gridley, 2015), and can record for between five and 64 days depending on the device used and duty cycle chosen. Simultaneous deployments were made each month (June, July, August) at five locations: Sandwich Harbour, Walvis Bay (four sites), Swakopmund, Henties Bay, and Cape Cross.

Recordings were processed using PAMGuard (Gillespie et al., 2009) to identify periods of acoustic activity and extract individual whistles. These whistles were

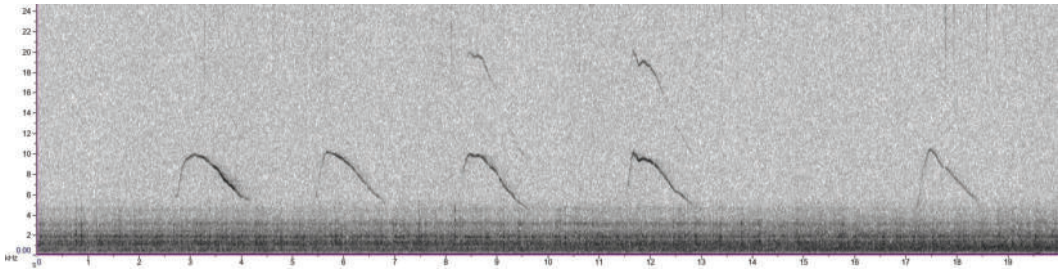


Figure 3: In this spectrogram, five bottlenose dolphin (*T. truncatus*) whistles are shown. Following the SIGID method (Janik et al. 2015), these whistles would constitute a signature whistle type. There are four or more stereotyped whistles, and three of the four occur within 10 seconds of the previous whistle.

manually investigated in Raven Pro v1.6 (Bioacoustics, 2019) and matched to a signature whistle type (SWT) in our existing catalogue or assigned a novel SWT using a well described method for identifying signature whistles in free-ranging populations; SIGID (Janik, 2013). This uses call classification and a sequence analysis approach applied to whistles produced in bouts (Fig. 3). We use the individually unique SWTs as the identifying marker to generate capture histories. These capture histories of SWTs (assumed individuals) are used in three types of statistical analyses: spatial capture-recapture modelling, using the R-package oSCR (Sutherland et al., 2019); mark-recapture modelling, using Program: Mark (White et al., 1999); and social network analysis, using SOCPROG (Whitehead, 2009). From these, we were able to estimate density, abundance, high-use areas, movement patterns, and social affiliations (Fig. 4).

Conservation Outputs

The small numbers in this population allow us the opportunity to monitor the population status at the individual level as well as develop a research tool that might be used on other at-risk populations or species. This approach is vital for Namibian bottlenose dolphins as bottlenose dolphins are generally classified under ‘Least Concern’, however, locally restricted populations such as this can also be critically endangered. Through our statistical analyses, we aim to identify high-use areas and provide a method to effectively monitor population trends. Our research will contribute to understanding dolphins in Namibian waters and help to create protective measures for this at-risk population, contributing to local and international management. Knowledge of an individual animal’s movements and activity centres, such as areas of high use by mother-calf pairs, is critical data for developing effective conservation practices. Development of passive acoustic monitoring (PAM) systems used to collect data on naturally occurring acoustic labels will allow us to develop direct, fine-scale protective measures. This method

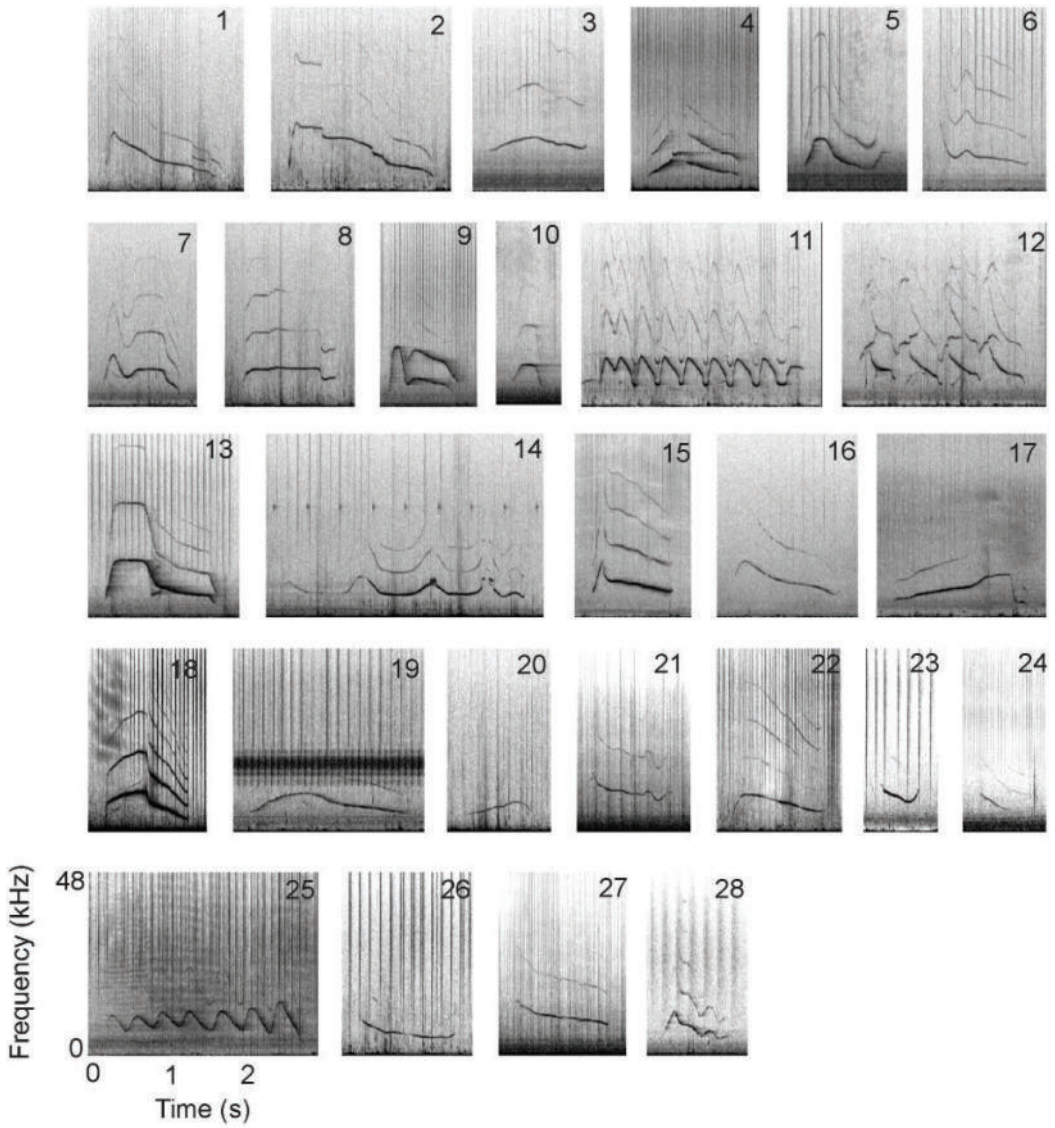


Figure 4: A portion of the Signature Whistle Catalogue held by the Namibian Dolphin Project. These whistle types were identified in 2014 (Kriesell et al., 2014), and the catalogue now holds over 80 SWTs.

can then be transferred to other species, marine or terrestrial, that have unique vocal signatures.

Bottlenose dolphins are one of the top predators within the Namibian marine coastal ecosystem and the population potentially plays an important role in trophic regulation and ecosystem management (Bejder et al., 2006; Heithaus et al., 2008). It has been widely shown that top predators are the key species in maintaining balance in food webs and for ecosystem health. Additionally, genetic stochasticity is a severe risk for small populations like the Namibian bottlenose dolphin population. A current assessment is being undertaken by B. James (in prep) to investigate the genetic health and heterogeneity of the population. When the numbers of a population drop to a certain point, recovery becomes exceedingly difficult. The loss of one calf or breeding individual to a ship strike or natural causes has a relatively larger impact than it would in a large healthy population. This population is known to forage in a tidal lagoon at the southern side of Walvis Bay, and numerous live strandings have been reported, mostly resulting in successful refloatations of the individuals (McGovern et al., 2020). Harbour activities and construction have continued, and an increase in industrial harbour activities could potentially cause the dolphins to use the risky lagoon to forage more often, increasing the likelihood of stranding events. Due to their ecological importance and at-risk status, it is necessary that we take every effort to promote conservation.

Promotion of conservation of our marine ecosystem can in turn support a growing marine tourism industry. The global whale-watching industry, according to a 2009 estimate, generated 2 billion dollars (USD) and was set to grow at 10% each year (O'Connor et al., 2009). Second only to the mining industry, tourism is the fastest-growing sector of Namibia's economy. As of the last review of the industry in Walvis Bay, eight tour companies operated 27 boats and over 60,000 passengers every year, generating almost N\$30,000,000 (Data from 2010) (Leeney, 2014). Restaurants, hotels and shops also rely on marine tourism to attract customers. Our continued involvement in the conservation of our marine fauna is welcomed and encouraged. The tourism industry has been significantly reduced, due to COVID-19, with only between two and four boats operating on any one day in early 2021, but there have been strong signs of recovery by November. A reduction in tourism activity may have a beneficial effect on the wildlife populations in the area, including the bottlenose dolphins (Arora et al., 2020). This project will help us continue to contribute to responsible tourism practices, beneficial for both the wildlife and the economy.

Once developed, the SWORD proposed methodology would be applicable to other resident populations of odontocetes that use signature whistles (e.g., common dolphins (Fearey et al., 2019), humpback dolphins (Van Parijs et al., 2001), belugas (Morisaka et al., 2013), or other species with individually unique acoustic labels (Fig. 5). Our goal is to develop a method to monitor small populations to the individual level in a cost-effective, comprehensive, and accurate way. We believe that this method will enable other researchers or conservationists to do that. Passive acoustic monitoring is a growing industry with

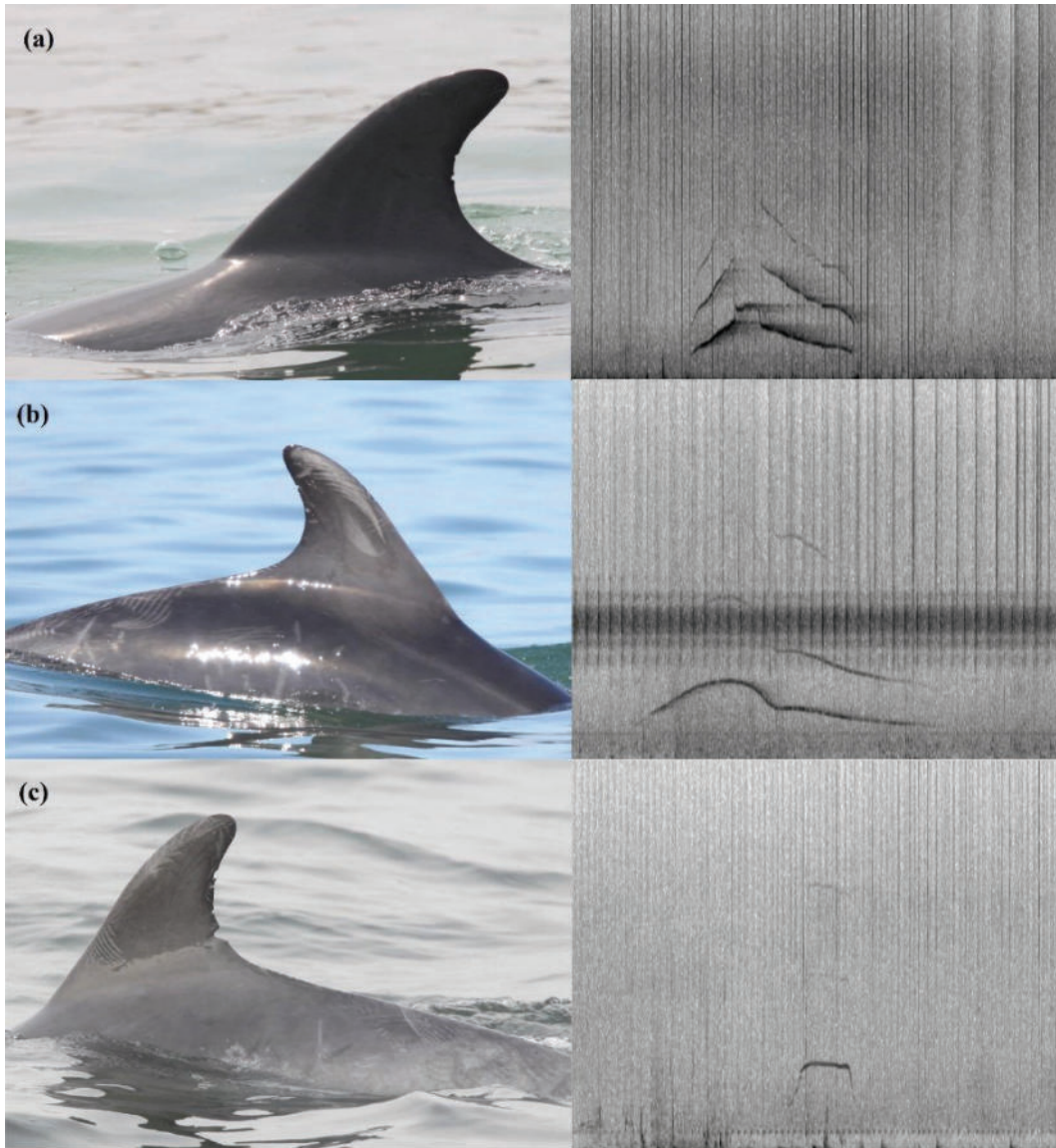


Figure 5: A signature whistle type is unique to each individual, allowing them to be used as an identifying marker; similar to how dorsal fin marks are used to identify individuals in the Photographic Identification method (Rashley et al., unpublished). (N.B. These SWTs do not necessarily belong to the dolphins pictured, this graphic is simply for illustrative purposes.)

rapidly advancing technology. Instruments are now available for less than 100 USD (Gordon et al., in press), making them universally accessible. Cost-effective open access hardware, combined with achievable analysis techniques will make acoustic monitoring an effective option moving forward and will benefit a variety of conservation programs, both terrestrial and marine (Fig. 6). It is our aim that SWORD, and the use of signature whistles to estimate population dynamics, will help these conservation programs and a variety of populations and species.

Acknowledgements

The SWORD method is accredited to Dr Tess Gridley; whom, by acquiring the funding, developed the conceptual design, and provides oversight and guidance in all research methods, results, and implications involved.

We would like to thank the Ministry of Fisheries and Marine Resources for permission to conduct this research. We are also grateful for our colleagues and interns who have supported NDP over the years. Thank you to the NRF of South Africa for funding this



Figure 6: Jack Fearey is pictured here retrieving one of the SoundTrap recording devices in Namibia after a three-week deployment. The SoundTrap is attached to the rope/buoy system and weighted on the sea floor.



*Figure 7: Bottlenose dolphins (*T. truncatus*) socialising in Walvis Bay, Namibia. Signature whistles are often produced during social behaviour.*

research as well as the Walvis Bay Yacht Club, DebMarine, TOSCO, NCE and B2Gold for supporting the NDP Marine Education Centre, field office and work vehicle.

If you want to learn more about this project or other work we are doing, please visit the NDP Marine Education Centre, located next to the Walvis Bay Yacht Club and follow us on Facebook @Namibian Dolphin Project. If you would like to support us, please find our donation page with TOSCO (<https://tosco.org/>).

References

- ARORA S, BHAUKHANDI KD, MISHRA PK (2020) Coronavirus lockdown helped the environment to bounce back. *Science of The Total Environment* 742(January):140573 <https://doi.org/10.1016/j.scitotenv.2020.140573>.
- BEJDER L, SAMUELS A, WHITEHEAD H, GALES N, MANN J, CONNOR R, HEITHAUS M, WATSON-CAPPS J, FLAHERTY C, KRÜTZEN M (2006) Decline in relative abundance of bottlenose dolphins exposed to long-term disturbance. *Conservation Biology* 20(6):1791–1798 <https://doi.org/10.1111/j.1523-1739.2006.00540.x>.
- BIOACOUSTICS CENTER FOR CONSERVATION (2019) Raven Pro: Interactive Sound Analysis Software (Version 1.6.1) [Computer software]. Ithaca, NY: The Cornell Lab of Ornithology.
- BORCHERS D (2012) A non-technical overview of spatially explicit capture-recapture models. *Journal of Ornithology* 152(SUPPL. 2):435–444 <https://doi.org/10.1007/s10336-010-0583-z>.

- CALDWELL MC, CALDWELL DK (1968) Vocalization of naive captive dolphins in small groups. *Science* 159(3819):1121–1123 <https://doi.org/10.1126/science.159.3819.1121>.
- CURREY RJC, DAWSON SM, SLOOTEN E (2009) An approach for regional threat assessment under IUCN Red List criteria that is robust to uncertainty: The Fiordland bottlenose dolphins are critically endangered. *Biological Conservation* 142(8):1570–1579 <https://doi.org/10.1016/j.biocon.2009.02.036>.
- DOS SANTOS ME, LOURO S, COUCHINHO M, BRITO C (2005) Whistles of Bottlenose Dolphins (*Tursiops truncatus*) in the Sado Estuary, Portugal: Characteristics, Production Rates, and Long-Term Contour Stability. *Aquatic Mammals* 31(4):453–462 <https://doi.org/10.1578/AM.31.4.2005.453>.
- ELWEN SH, LEENEY RH, GRIDLEY T (2019) Abundance estimates of an isolated population of common bottlenose dolphins (*Tursiops truncatus*) in Walvis Bay, Namibia, 2008–2012. *African Journal of Marine Science* 41(1):61–70 <https://doi.org/10.2989/1814232X.2019.1572538>.
- FEAREY J, ELWEN SH, JAMES BS, GRIDLEY T (2019) Identification of potential signature whistles from free-ranging common dolphins (*Delphinus delphis*) in South Africa. *Animal Cognition* <https://doi.org/10.1007/s10071-019-01274-1>.
- GILLESPIE D, GORDON J, MCHUGH R, MCLAREN D, MELLINGER D, REDMOND P, THODE A, TRINDER P, DENG XY (2009) PAMGUARD: Semiautomated, open source software for real-time acoustic detection and localisation of cetaceans. *Proceedings of the Institute of Acoustics* 30:2547 <https://doi.org/10.1121/1.4808713>.
- GORDON TAC, CHAPUIS L, WILLIAMS B, DINES S, GRIDLEY T, FRAINER G, FEAREY J, MAULANA PB, PRASETYA ME, JOMPA J, SMITH DJ, SIMPSON SD (in prep) HydroMoth: testing a prototype low-cost acoustic recorder for aquatic environments. *Remote Sensing in Ecology and Conservation*.
- GRIDLEY T., NASTASI A, KRIESELL HJ, ELWEN SH (2015) The acoustic repertoire of wild common bottlenose dolphins (*Tursiops truncatus*) in Walvis Bay, Namibia. *Bioacoustics* 24(2):153–174 <https://doi.org/10.1080/09524622.2015.1014851>.
- GRIDLEY TESS, ELWEN SH, GULLEN A, GENNARI E, FRAINER G, VERMEULEN E, DINES S (in prep) Signature Science: Using acoustic signatures to understand the endangered Indian Ocean humpback dolphin. *Scientific Reports*.
- HEILER J, ELWEN SH, KRIESELL HJ, GRIDLEY T (2016) Changes in bottlenose dolphin whistle parameters related to vessel presence, surface behaviour and group composition. *Animal Behaviour* 117:167–177 <https://doi.org/10.1016/j.anbehav.2016.04.014>.
- HEITHAUS MR, FRID A, WIRSING AJ, WORM B (2008) Predicting ecological consequences of marine top predator declines. *Trends in Ecology and Evolution* 23(4):202–210 <https://doi.org/10.1016/j.tree.2008.01.003>.

- HERZING DL (1996) Vocalisation and associated underwater behaviour of free ranging Atlantic dolphins and bottlenose dolphins. *Aquatic Mammals* 22(2):61–79.
- JANIK VM, SAYIGH LS (2013) Communication in bottlenose dolphins: 50 years of signature whistle research. *Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology* 199(6):479–489 <https://doi.org/10.1007/s00359-013-0817-7>.
- KRIESELL HJ, ELWEN SH, NASTASI A, GRIDLEY T (2014) Identification and characteristics of signature whistles in wild bottlenose dolphins (*Tursiops truncatus*) From Namibia. *PLoS ONE* 9(9) <https://doi.org/10.1371/journal.pone.0106317>.
- LEENEY RH (2014) Towards Sustainability of Marine Wildlife-Watching Tourism in Namibia. *Journal of the Namibian Scientific Society* 62(October):9–33 <https://doi.org/ISBN:978-99945-76-29-6>.
- LONGDEN E, ELWEN S, MCGOVERN B, JAMES BS, EMBLING CB, GRIDLEY T (2020) Mark-recapture of individually distinctive calls – a case study with signature whistles of bottlenose dolphins (*Tursiops truncatus*). *Journal of Mammalogy* *gyaa081* <https://doi.org/10.1093/jmammal/gyaa081>.
- MCGOVERN B, GRIDLEY T, JAMES BS, ELWEN S (2020) Risky business? A note on repeated live strandings of common bottlenose dolphins (*Tursiops truncatus*) while foraging in a shallow water environment. *Marine Mammal Science* 36(1):305–314 <https://doi.org/10.1111/mms.12634>.
- MORISAKA T, YOSHIDA Y, AKUNE Y, MISHIMA H, NISHIMOTO S (2013) Exchange of “signature” calls in captive belugas (*Delphinapterus leucas*). *Journal of Ethology* 31(2):141–149 <https://doi.org/10.1007/s10164-013-0358-0>.
- O’CONNOR S, CAMPBELL R, KNOWLES T, CORTEZ H, GREY F (2009) Whale Watching Worldwide: Tourism numbers, expenditures and economic benefits - A special report from the International Fund for Animal Welfare. *International Fund for Animal Welfare* 295.
- POPPER AN (1980) Sound Emission and Detection by Delphinids. In L. M. Herman (Ed.), *Cetacean Behaviour: Mechanisms and Functions* (pp. 1–52). New York: Wiley.
- SAYIGH LS, TYACK PL, WELLS RS, SCOTT MD (1990) Signature Whistles of Free-Ranging Bottlenose Dolphins (*Tursiops truncatus*): Stability and Mother-Offspring. *Behavioral Ecology and Sociobiology* 26(4):247–260.
- STANDER PE (2019) Lions (*Panthera leo*) specialising on a marine diet in the Skeleton Coast National Park, Namibia. *Namibian Journal of Environment* 3(A):1–10.
- SUTHERLAND C, ROYLE JA, LINDEN DW (2019) oSCR: a spatial capture–recapture R package for inference about spatial ecological processes. *Ecography* 42(9):1459–1469 <https://doi.org/10.1111/ecog.04551>.
- VAN PARIJS SM, CORKERON PJ (2001) Evidence for signature whistle production by a Pacific Humpback Dolphin, *Sousa chinensis*. *Marine Mammal Science* 17(4):944–949 <https://doi.org/10.1111/j.1748-7692.2001.tb01308.x>.

WHITE GC, BURNHAM KP (1999) Program mark: Survival estimation from populations of marked animals. *Bird Study* 46:S120–S139 <https://doi.org/10.1080/00063659909477239>.

WHITEHEAD H (2009) SOCPROG programs: Analysing animal social structures. *Behavioral Ecology and Sociobiology* 63(5):765–778 <https://doi.org/10.1007/s00265-008-0697-y>.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft

Windhoek, Namibia 2021

ISSN: 1018-7677

ISBN: 978-99945-76-74-6

About the Author

Jack Fearey is a PhD candidate at the University of Cape Town, working within two research groups, the Centre for Statistics in Ecology, the Environment Conservation (SEEC) and Sea Search Research and Conservation (SSRC). His PhD is working towards the development of a long term, efficient and cost-efficient method for estimating population dynamics of species with individually distinctive vocalisations. Jack got his undergraduate degree in environmental science from Santa Clara University in California. He has been living in Cape Town, South Africa and Walvis Bay, Namibia, working on his PhD and as a research assistant and student with SSRC and the Namibian Dolphin Project. He has a passion for both acoustics and statistics and hopes that his project will help under-developed countries implement successful conservation strategies for at risk populations. If you would like to learn more about our work, follow us on YouTube, @Sea Search Research and Conservation.



Address

c/o Namibian Dolphin Project
Sea Search Research and Conservation
Muizenberg, Cape Town
South Africa

Contact ONDESE SAFARIS and follow the adventurous Honey Badger - the finest nose for the best spots in Namibia, Botswana, South Africa and to the Victoria Falls!

Since / Seit 1993



P. O. Box / Postfach
6196, 10017
Ausspannplatz
NAMIBIA
+264-61-22 08 76
info@ondese.com



www.ondese.com

Wenden Sie sich an ONDESE SAFARIS - unermüdlich und mit dem treffsicheren Gespür des Honigdacheses in Namibia, Botswana, Südafrika und an die Victoriafälle!

Self-Drives

Accommodation

Fly-Ins

Guided Safaris

Selbstfahrer
Buchen von
Unterkünften

Flugsafaris

Geführte
Safaris



Cultural Villages as Drivers of Rural Poverty Alleviation in Namibia: The Case of Uukwaludhi Royal Homestead

*Goodman Gwasira, Martha Akawa and Ndapewa Fenny Nakanyete
University of Namibia*

Key Words: Cultural villages, sustainable cultural tourism, cultural entrepreneurship.

Abstract

The past decade has witnessed a proliferation of cultural villages and living museums in Namibia. The concept of a cultural village, living museum or open air museum is being promoted as the magic formula for the answer to rural development. The Joint Programme Document of the UN/Spain project on “Sustainable cultural tourism in Namibia” identifies the creation of cultural villages as a way of alleviating poverty among the rural population in Namibia (UNESCO 2008). The late former Minister of National Service, Youth, Sport and Culture, Kazenambo Kazenambo advocated cultural villages to “take a central place in Namibia’s tourism package” (Museum Matters 2010:3).

This paper is located in cultural tourism studies. It interrogates the concept of a cultural village as applied in the Namibian context. The paper investigates the viability of cultural villages using the Uukwaludhi royal homestead as a case study. Using visitors’ statistics (from Uukwaludhi royal homestead), we argue that cultural villages on their own are not viable income generation projects and therefore cannot be catalysts for rural poverty alleviation. Instead, cultural villages are useful for preserving local knowledge systems in the same way museums do. We posit further that cultural villages can stimulate other affiliate projects that can assist in alleviating poverty in rural settings if the unique socio-cultural and environmental characteristics of a given cultural village are harnessed.

Introduction

The concept of a cultural village follows a tradition whereby a set of traditional buildings is exhibited as an open air museum. Van Veuren (2001) defines cultural villages as

purpose-built complexes intended, with the help of cultural workers, as a simulation of aspects of the way of life of a cultural grouping, as it was at a specific period (or over several periods) of time.

In Namibia, this definition of a cultural village fits the Helvi Mpingana Kondombolo cultural village in Tsumeb (formerly Tsumeb cultural village), part of the Nakambale museum and the Uukwaludhi royal homestead. Since Namibia's independence in 1990, the postcolonial nation-state has placed emphasis on cultural pride in new ways of "Namibian-ness", which include a reinvention of new meanings of practices of "colonial representation" (Akuupa 2011:6). The cultural village phenomenon is prevalent in other African countries such as the Ngomongo cultural village on the outskirts of Mombasa in Kenya, the cultural homestead at the Great Zimbabwe in Zimbabwe and the Bahurutshe cultural village in Botswana (Moswete et al. 2015). What is strikingly similar about the use of the term cultural village in the examples given above, except the Namibian examples, is that they are not cultural villages in the strict sense of the term. Instead, they are living museums that present performances of traditional activities. According to (Moswete et al. 2015: 280) cultural villages "showcase the lifestyle of cultural and ethnic groups along with their history, artefacts ..." However, we view cultural villages as presenting carefully choreographed performances that aim at capturing the fancy of the visitor as they are taken back to 'long-lost' and nostalgic African traditions. The 'traditional culture' that they represent is usually informed by colonial anthropologies and hence its authenticity is problematic.

The main aim of a cultural village is to preserve the fabric and structure of traditional buildings and the intangible heritage that is associated with them. Cultural villages have an effect of functioning as subtle ways of resisting the 'modernisation hype' that is currently taking place in rural areas as more and more people opted for modern houses. While living museums are notorious for creating and imposing cultural practices on the actors, cultural villages such as the Uukwaludhi royal homestead are more authentic since they are preserved and presented *in situ*. In the Namibian case, as in other African countries mentioned above, both cultural villages and living museums are intricately connected to the development of rural cultural tourism. Cultural villages are perceived as "opportunities for the advancement of cultural and heritage tourism in developing countries" (Moswete, Saarinen and Monare 2015, 279) See also Ndhlovu and Nyakunu 2013. The discourse of a cultural village attracting visitors and being a sustainable source of income among the rural communities is the focus of this paper. We use the example of the Uukwaludhi royal homestead to argue that cultural villages per se are better off as storages of traditional practices than sustainable income generating projects. However, cultural villages can be linked

to other heritage sites in an area to complement and diversify or expand income generating opportunities as illustrated in this paper.

Methodology

This research followed a mixed methodology research design. Data was collected through both qualitative and quantitative methods. The exploratory research design was favoured in this research because it allowed the researchers to engage with a research problem that had no precedence in terms of data, literature and even theory in Namibia. In-depth interviews were conducted with staff of the Uukwaludhi royal homestead, the King of the Uukwaludhi traditional authority and teachers from Uukwaludhi Primary school that is located near to the Uukwaludhi royal homestead. While we make some arguments based on the preliminary observations from the data, we are aware that this research could lead into a much more robust and wider focus on cultural heritage institutions in Namibia.

A description of Uukwaludhi royal homestead and its history

A typical example of a cultural village in Namibia is the Uukwaludhi royal homestead; which is the one of the few institutions that exhibit the architecture and plan of a royal homestead in Namibia. It is located in the Omusati Region, approximately 2 kilometres from the Tsandi Town and next to the C41 Oshakati-Okahao tarred road (*see the map on page 106*). The Royal Homestead lies on a popular tourist route¹ that links major northern tourist attractions of nature, cultural and historical significance. The tourist attractions in this area include the Etosha National Park, Ombalantu Baobab Tree, Ruacana Waterfalls, Omuguluwoombashe battle site and Nakambale Museum. The royal homestead is also the current residence of King Taapopi of the Uukwaludhi Kingdom.

The Uukwaludhi royal homestead forms part of the attractions that are found in the Uukwaludhi Communal Conservancy, which was developed under the North Central Community Based Natural Resource Management enterprise development programme of the Ministry of Environment and Tourism². The communal conservancy (which covers an area of 1437km²) is rich in both cultural and natural heritage resources. Included among the natural resources are wild animals such as the Elephant, Black faced Impala, Giraffe and Kudu³, while the Uukwaludhi royal homestead offers the cultural package in the

¹ The C41 road is well linked to other main routes, including the D3612 to Ombalantu Baobab Tree, the D3616 to Epupa and Rucuana (and the Waterfalls), the C35 that access you (Otjovandu gate to) the Etosha (Galton Gate) and Kamanjab, as well as the B1 from/to Nakambale Museum and Etosha National Park (Nehale Iya Mpingana and Von Lindequist gates).

² <http://www.met.gov.na/Directorates/Tourism/Pages/GovernmentFundedEnterprises.aspx> (12.08.13)

³ <http://www.met.gov.na/Directorates/Tourism/Pages/GovernmentFundedEnterprises.aspx> (12.08.13)

form of a traditional homestead that houses the King and a display of traditional weapons and clothes. In addition, visitors to the royal homestead may have the opportunity of meeting the King because his new house is on the same grounds as the cultural village. Visitors also have the chance of interacting with the residents of Tsandi as they go on their personal day to day chores in and around the royal homestead. The cultural village provides a curio shop where visitors can purchase handicrafts from the community. The cultural village is a community-based project and does not necessarily have to be registered as a national heritage site. It is of significance to the local community. However, there are some national sites near to the cultural village such as the Omugulugwoombashe national heritage site.

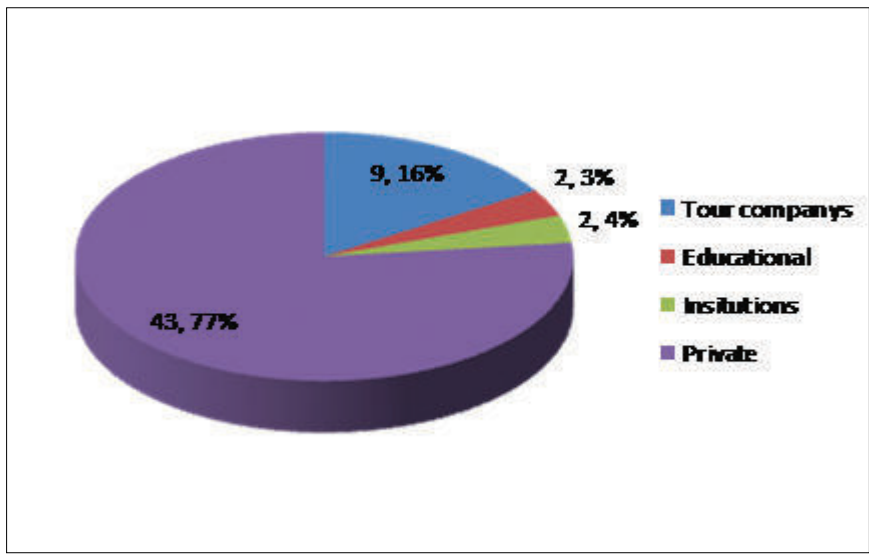
Visitor Survey

The visitor statistics of the first five years of operation of the Uukwaludhi royal homestead (2005-2010) indicate that the majority of the visitors to the homestead were private tourists who were enroute to either the Epupa falls or the Etosha National Park. The completion of the Omakange tarred road shortens the distance between Otjiwarongo and Tsandi and this located the Tsandi royal homestead strategically. The Omakange turn-off is less than five kilometres from the homestead. However, this does not mean that the homestead will automatically benefit from the tourists who pass through Tsandi enroute to Ruacana. The cultural village needs to diversify its cultural tourism package so that it can maximise on the tourist potential of its location. Currently, tourists spend at most, an hour at the site before proceeding to the next destination. The visitor profile for the first five years reveals that 44% of the tourists at the Uukwaludhi royal homestead were private tourists⁴. Such tourists are usually not bound by the schedule of the tour operators. Therefore, they can stay longer at a site provided there are enough attractions and activities for them. However, the statistics indicate that there was some relative interest in the cultural village from tour operators. The second largest number of the tourists were brought in by tour operators. The homestead needs to market its products to the tour operators so that they can increase the scheduled time for visiting the site.

Chart 1 on page 108 shows that the majority of the visitors to the Uukwaludhi royal homestead in the first five years of its existence were self-driven tourists. Such visitors varied in number from an individual to groups of five. This is a potential population that can be capitalised for the benefit of Uukwaludhi royal museum since they are usually not bound by a group programme. The second largest population came by tour companies.

⁴ The category of private in this paper refers to self-driven and self-guided visitors. They do not make use of tour operators.

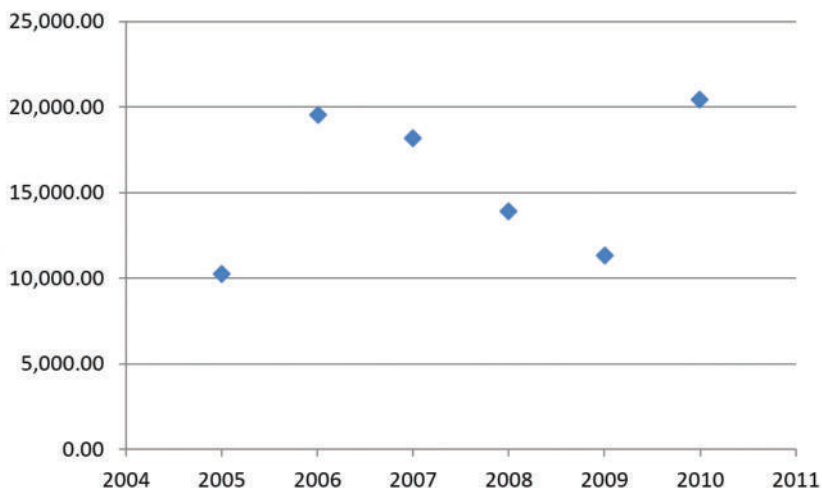
Chart 1: Type of tour operation



Educational tours were not significantly reflected in the statistics. This could partly be attributed to a lack of educational programmes at the site. For cultural villages to attract schools, like other museums, they need to develop educational programmes that link to some aspects of the school syllabus. Educational institutions need to be convinced that by visiting a cultural village, they can augment teaching materials by providing tangible and intangible examples of what is learned in class.

The Uukwaludhi royal homestead made a total income of N\$93,532.00 for the first 5 years. The yearly average for the first 5 years is N\$18,706.00 and monthly average is N\$1,558.87. It is evident from the average monthly income that the site needs to generate more income to become self-sufficient. Cultural villages of this nature are prone to negotiating entrance fees with visitors since they do not receive a consistent and significant number of tourists throughout the year. The visitors' book shows that on many occasions, visitors, mainly self-driven, negotiated the entrance fee and some paid as less as ten Namibian dollars instead of the stipulated forty Namibian dollars. When questioned about this, the staff stated that it was better to earn less than nothing at all. During the low tourism season, there appears to be cases where the centre accepts lower entrance fees.

Chart 2: Yearly Income for the first six years



Need for diversification: An account for Omusati Region

Northern Namibia has had only 3 formal museums (Nakambale museum, Onandjokwe medical museum and Outapi War Museum) and yet, the area is rich in both pre-colonial and liberation history. It is an area where traditional lifestyles have been maintained and survive; parallel to 'modern' lifestyles.

The former Owamboland was a war zone and, therefore, it carries a very rich history of the liberation struggle that is encoded in mass graves of combatants such as those found at Ondeshifilwa, Oshikuku and Ohauwanga battle fields. The area is rich in individual and collective memories about the liberation struggle. In addition, the liberation struggle period significantly transformed local traditional customs while the intensification of evangelism brought along European commodities with new fashions, which challenged the preservation of traditional practices and lifestyle (Shigwedha:2004). All these aspects can be preserved, conserved and disseminated through a formal museum at the Uukwaludhi Cultural village that can also link sites of memory and artefacts. Our analysis of visitor statistics from the Uukwaludhi royal homestead demonstrated that for cultural villages to be viable and sustainable ventures, they need to diversify their activities. Some visitors prefer to see the history and culture of a given area in a mainstream museum setting, while others prefer a combination of museum collections and in-situ living traditions. The concept of a museum in the Namibian case is complex and needs to be interrogated with rigour since the museum was used to validate colonial conquest and apartheid ideology. An example of the politicisation of the concept of the museum in Namibia was described in the work of

Schildkrout (1995), which demonstrates that exhibitions were divided according to race. At the then State Museum, the European culture was displayed in the Alte Feste display centre while the African heritage was displayed side by side with animals in the *Owela* display centre. The dioramas in the *Owela* museum were aptly named “man in his environment” which was precisely the aim of the displays; to support and accentuate the Odendaal commission’s proposal for the development of separate Bantu homelands. The museum was a tool for political expression and for repression. Thus, generally, diversification in the museum industry in an independent Namibia requires a complete re-engagement with the concept of the museum itself. Such colonial undertones require to be confronted, especially, when museums are planned for rural areas where memories of colonial brutality and the effects of a protracted liberation war are still fresh in the collective memory of the residents.

Generally, museums are places that are constructed for the conservation, preservation and representation of various aspects of cultural and natural histories of specific places. Themes in Namibian museums have generally tended to showcase the cultural and natural heritage for the entertainment of the elite. The result of this focus on the elite is expressed in the imbalanced distribution of museums in Namibia, whereby regions such as the former Owamboland did not have a single museum open to the public before independence. In cases where the indigenous peoples’ heritage was accommodated in a museum display, it was separated from that of the colonial settlers as was the case in the then State Museum (Schildkrout, *ibid*). The presentation of local heritages in a cultural village-cum-museum setting can address this imbalance by establishing institutions that will challenge the traditional concept of a museum as a sacred place where visitors view the displays without interacting with them. It has been acknowledged by Silvester (2011, 25) that Namibian museum exhibitions “... are predominantly object-oriented and [...] largely reflect the colonial legacy”.

The Omugulugwombashe interpretive centre can complement the aims and objectives of the Uukwaludhi royal homestead. While the Omugulugwombashe interpretive centre focuses on a specific battle field, event and specific heritage (liberation), the Uukwaludhi royal homestead showcases and preserves the history and cultural traditions of the region. The cultural and natural heritage of the Omusati Region can be linked to sites and memory-scapes of beyond the region. The cultural village can be a centre for restoration, conservation, storage and display of artefacts that are unique to the area. It can also create a forum for the collection and repository of oral histories. In addition, it can diversify to provide a centre for skills and traditional knowledge transfer. Furthermore, cultural villages such as the Uukwaludhi royal homestead can play a pivotal role in community advocacy for social justice. Communities in the Omusati region were affected psychologically, physically and even through the loss of livelihood during the protracted war of liberation. Spaces such as cultural villages can offer psychological counselling services and community discussions about the liberation struggle and how to rehumanise societies that were dehumanised by the colonial war (see Rassool, 2015 for an in-depth discourse rehumanisation of societies).

Omugulugwombashe (variously spelt as Ongulumbashe) is a site that is synonymous with war of liberation in Namibia. It is officially recognised as the site of the first battle of the Namibian war of liberation that took place on 26 August 1966. The site is located in the dense Mopane Forest of the Omusati region, 21.5km from Tsandi Town and 24.4km from Uukwaludhi homestead. The Omugulugwoombashe memorial shrine was unveiled on 26 August 2004 by the Founding Father of the Namibian nation, President Sam Nujoma. It is a prominent and important national monument that honours the heroes and heroines of the liberation struggle. Omugulugwoombashe was established in June 1966 by the South West Africa Liberation Army (SWALA) commander John Ya Otto Nankudhu as a base for receiving and training new recruits (Nujoma 2001). SWALA was the military wing of SWAPO and forerunner of the Peoples Liberation Arms of Namibia (PLAN). The site was also intended to be used as a reconnaissance base. Today, Omugulugwoombashe consists of a relic landscape which once was composed of "... a parade ground, office and kitchen, and a variety of trenches ... for defensive purposes" (Namakalu, 2004:7). In addition, the site is a utilised regional 'Heroes Acre', where heroes (and yet to be buried-heroines) of the liberation struggle from Omusati Region are buried.

An Interpretive Centre was developed at the site under the UNDP/ Spain MDGF Joint Programme on "Sustainable Cultural Tourism in Namibia". A link between the Uukwaludhi royal homestead and Omugulugwoombashe national monument can be complimentary. The Omugulugwoombashe national monument has a national appeal, however, the scope of presentation is restricted to a specific history-liberation history while the Uukwaludhi royal homestead can expand the scope by presenting the history and culture of the region and thus making visitors to the national monument appreciate the wider history of the region better. The Uukwaludhi royal homestead can benefit from the people who come to the heroes' day commemorations at Omugulugwombashe each year on 26 August since it will be able to offer camping accommodation and restaurant facilities. Besides the annual heroes' day commemorations, the Omugulugwoombashe is used as a burial site that attracts huge numbers of mourners coming from different parts of the country. Thus, Uukwaludhi royal homestead can provide accommodation and hospitality facilities for the mourners. In addition, the Uukwaludhi royal homestead can add value to the Omugulugwoombashe national monument by taking up the role of an interpretive centre to contextualise the regional liberation struggle heritage. This can be realised through the development of the Omusati liberation heritage trail. The trail can link Tsandi to Ondeshifilwa and Outapi, which is the next site and point of discussion that can form part of the Omusati trail.

The Ombalantu Baobab Tree Heritage Centre and Camping is situated at the town of Outapi, which is the capital of the Omusati region. The site is located approximately 30km north east of the town of Tsandi. The main attraction is centred on the huge historic and mythical baobab tree that is hollowed. The baobab tree is known by the local people as *Omukwa wa Nakafingo* or *Omukwa wa Ambalantu*. The tree stands at approximately 20 metres high and is believed to be about 800 years old (see also Ndalikokule et al 2010).

It has multiple layers of history that were acquired from its various uses during the pre-colonial, colonial and post-colonial eras. It was used as a hide out during pre-colonial wars, as a post office (in 1940) and chapel during the colonial period. It was also part of a South African military base during the liberation struggle and now, it is a heritage and camping site.

Some remnants of the military base can still be seen around the famous baobab tree; such as bunkers that have been converted into a privately owned war museum. The Ombalantu baobab tree heritage centre and camping site offers camping facilities and picnic spots for day visitors. While the site has a rich history of the liberation struggle, the main attraction is the huge baobab tree.

The Uukwaluudhi royal homestead can house more information and objects and can have more activities than those currently offered at Ombalantu Baobab Tree Heritage Centre and camping site. The Uukwaludhi royal homestead can potentially present the general history of the AaKwaludhi while the Ombalantu baobab tree heritage centre can present a rich and interesting history of AaMbalantu and therefore, will not be in direct competition, rather, both sites can complement each other in recording, preserving and presenting the rich histories of their respective communities.



Picture one shows the Ombalantu Baobab tree (credit Godman Gwasira)

North-central Namibia (former Owamboland) has many baobab trees whose stories can be knit together to produce fascinating cultural traditions. These mythical trees have either been used or have some oral traditions associated with them (Museums Association of Namibia 2016). The Sir Howard's baobab tree is one such example. It is located on the grounds of the Tsandi mission station which is approximately 1 km north-west from the Uukwaludhi royal homestead. Many intriguing myths surround this baobab which was named after Sir Howard Gorges; the first South West Africa Administrator who visited Tsandi in 1916 (Wickens 2008).

Another famous baobab in Tsandi is the King Nashilongo's baobab, which has a direct link to the Uukwaludhi Royal household. It was used as the office of the former King Nashilongo whose rule spanned from 1909 to 1959. King Mwaala gwa Nashilongo was succeeded by the reigning King of the AaKwaludhi, King Shikongo sha Taapopi ya Shitaatala (Mashuna 2012). A trail that links Tsandi, Outapi and Omugulugwombashe can enhance the Uukwaludhi royal homestead and complement the Ombalantu baobab tree heritage centre. Some other cultural and historic areas in the Okahao constituency that can be integrated into the Uukwaludhi cultural village and royal museum heritage route include the Ombupupu magic ponds and the Okahao Baobab. The Okahao baobab tree was declared a national heritage site in 2011 by the National Heritage Council of Namibia. This site was used by the South African Defence Forces during the colonial period as a site for torture, killing and hanging of local communities in a bid to scare them into divulging the whereabouts of the Peoples Liberation Army of Namibia. The Baobab trees have assumed a cultural heritage significance through their uses over time, while, the Outapi war museum provides historical heritage that can also be capitalised on to diversify the tourist attraction of the Uukwaludhi royal homestead.

The Outapi War Museum is housed in a former bunker that was part of the South African Defence Force military base at Outapi. It is situated a few hundred metres away from the famous Ombalantu baobab tree which is the mantel piece of the Ombalantu Baobab Tree Heritage Centre. The reason for converting the bunker into a museum was to preserve the relic as a reminder of the war of liberation that ravaged the region. The Outapi war Museum is a specialised institution that focuses on the relics of war. In addition, it offers a wide range of facilities such as accommodation, a conference hall and a display of war photographs, posters, memorabilia and insignia. This makes it a unique institution in the region.

The socio-economic potential of Uukwaludhi Royal homestead

The existing and planned heritage sites in the Omusati Region mostly have a specific focus (mainly related to the war of liberation). The Uukwaludhi royal homestead on the other hand can fill the thematic vacuum that is created by specialisation. It can provide a platform for a broader presentation of the history and culture of the region. It also

has the potential to offer a good mix of performances, heritage trails and static/ mobile displays.

The King and Queen of Uukwaluudhi reside in the same compound where the current cultural village is located. Visitors can make appointments to meet the King and the Queen when visiting the Uukwaludhii royal homestead. The availability of the King to meet visitors and to explain some royal traditions will be an added heritage attraction. Their residency at the cultural village ensures the royal custodianship of the heritage resources, which can be interpreted as adding a degree of authenticity to the heritage trail.

Currently, visitors to the Uukwaludhi royal homestead can visit the King's former residence and view the traditional architecture and homestead plan. In addition, some objects such as weapons and clothes can be seen on display. The King can meet visitors at the homestead upon appointment and depending on his availability. The envisaged heritage trail will expand the scope of the homestead to include additional structures that showcase the homesteads of ordinary residents. This can be achieved by expanding the tour package to include visits to the different traditional huts where various aspects of local ways of life will be exhibited. Visitors will also be able to book tours to identified neighbouring villages where they can interact with people in situ. The cultural trail will be extended to neighbouring villages to allow the visitors to interact with the current ways of life and appreciate the local traditions. The idea of a cultural trail will be to explain the link between the natural landscape and the livelihoods of the community, for example, extraction of herbs for traditional medicine, local wild food such as omagungu, fruits and other agricultural activities. All tours on the cultural trail will be done with a local tour guide. Local youth groups can offer tour guiding services but they have to be accredited by the traditional heritage management committee. The exhibitions will also include live demonstrations by crafts people whereby visitors can learn how the crafts are fashioned traditionally.

Some objects will demand specialised storage space due to either their fragility or importance. Some permanent displays will be constructed that showcase the history of the region. Such a display hall will be used to introduce the various components of the heritage trail to visitors. It will also serve the purposes of an information centre where visitors who may not have enough time to visit the whole trail can learn about the Uukwaludhi culture. The permanent display can include a map of the region that indicates the sites that can be visited. In addition to the permanent display hall, there can be space for temporary displays. These can be in the form of thematic exhibitions that will be mounted for a short period, for instance in August each year in preparation of the Heroes' Day commemorations, a specific exhibition on a theme about the liberation struggle can be installed. This could be augmented by discussions or demonstrations by people who 'lived the liberation struggle'. The temporary display area could also be used for hosting other displays and awareness material; for example, during the immunisation period, some display on Polio can be hosted and children can be immunised at the museum. Such that a museum will not only serve the interests of the tourists but will also be a useful centre for the community. It could also be a mobile centre for vaccination for instance.

Cultural performances can enhance museum experiences. Some performances such as traditional song and dance can be performed for the visitors in the Uukwaludhi royal homestead. Currently, visitors can pre-book such performances but with more planning, product development and marketing, performances can become part and parcel of a heritage trail programme. Visitors are more prone to booking activities that they know exist as part of a package. Groups comprising of unemployed local youths can be afforded the opportunity of forming cultural groups that are linked to the museum. The dances, songs and instruments used should be traditionally authentic and unique to the region.

Traditional cuisine can be served at the existing royal homestead but meals have to be pre-booked. There is a need for traditional food to be on display and for such food to be prepared on short time request. The traditional performances can also include traditional food that visitors can taste. In such performances, the way traditional food and beverages are prepared can be explained to the visitor. In addition to traditional cuisine, it will be an added advantage that the museum operates a coffee bar. Currently, one cannot even buy a cup of tea or coffee at the royal homestead. The Uukwaludhi royal homestead will be strategically located such that visitors can make use of a restaurant after visiting the displays and this would increase dwell time at the museum, and increase income. The royal homestead has the potential of becoming a cultural hub of the Omusati Region.

Comparative advantage

We carried out a SWOT analysis to determine whether Uukwaludhi royal homestead will be a feasible project that can diversify the cultural tourism package of the Omusati region. A SWOT analysis highlights the internal environmental factors for strengths (positive attributes within the organisation) and weaknesses (negative attributes within the organisation) and these could be management as well as mission or resources that could face the museum. External environmental factors were identified and analysed for opportunities (positive attributes outside the organisation) and threats (negative attributes outside the organisation) and these could be customers, competitors, suppliers, labour force, the economy or shareholders. The SWOT analysis identified and defined clear objectives and ensured that all factors related to the objectives (positive and negative) can be considered and addressed. In essence, the results of the SWOT analysis provide information that is helpful in matching the royal homestead's resources and capabilities to the competitive environment in which it operates.

The results of the of SWOT analysis for Uukwaludhi Cultural Village and Royal Museum are discussed below:

The Museum

Establishing a museum at the Uukwaludhi royal homestead will increase the potential of the cultural village and tourist attraction. The museum will provide space for exhibitions

and can be used as a site for community engagement. The museum will be unique in the sense that it will be the only museum to be situated in an occupied royal homestead in Namibia.

Partners

An analysis of the visitor statistics reveals that the Uukwaludhi royal homestead is already part of the route/package of some tour operators, as it is observed that they frequently bring their clients to the homestead. However, it is reasoned that with strategic partnership and aggressive marketing, the homestead possesses great potential to attract more visitors and tour operators. To achieve this, the royal homestead would need to form partnerships with the tour operators so as to stimulate a constant supply of visitors. The museum can team up with other establishments in the country as well as the region to market and promote each other's programmes and products. The royal homestead can join the national heritage and museum associations, for example, the Museums Association of Namibia (MAN) where it can benefit by sharing experiences, knowledge and attending workshops that cater for various needs. The royal homestead can also join international organisations such as the International Committee of African Museums (AFRICOM) and the International Committee of Museums (ICOM) where it can enjoy and access benefits by being a member.

Audience

The visitor statistics show that most visitors are adult foreign tourists and most of them are taken there by tour operators. Few Namibians visit the homestead and at the bottom of the list are the local people from Uukwaludhi itself. Few schools in the Omusati region have visited the homestead and the record shows that not even one school from Tsandi circuit has visited the royal homestead. This aspect needs serious investigation and effort needs to be put into marketing the site to the local schools. Tourists and visitors learn about the site using various ways including through their tour operator, a guide book, word of mouth and local friends. There is no indication that much of this information is obtained online. Local tour guides at the royal homestead indicated that there is no frequent updating of the website, since the now defunct NACOBTA used to market the site in the past. The size and growth of the number of visitors varies. The statistics have shown that there was a slight growth in the number of visitors from 2008 to 2011. However, the visitors' comments in the visitor's book indicate that they enjoyed the experience and activities, and would recommend the site to others.

The curio shop at the site provides income generating opportunities for the locals and a chance for the visitors to take with them the 'have-been-to' souvenirs. However, the royal homestead can, in addition to the curio shop, have a restaurant that sells good coffee as this is a service that tourists expressed as a need for the site.

Competitors and competitive environment

The royal homestead will be unique because it will be a ‘living museum’ in the sense that the King and his family dwell at the site. It will be a distinct concept of a royal palace-cum heritage site and that will add to its authenticity as a custodian of the Uukwaludhi history and heritage. Thus, the royal homestead might not have direct competitors in that regard. However, the statistics of the establishments in the area, such as the Nakambale Museum and rest camp and the Ombalantu Baobab Tree, indicate that they receive more visitors than the royal homestead. Given this case, the royal homestead will have to re-invent itself creatively in order to capture the needs of the market/audience whose needs are not being met and overlooked by other establishments. This can be addressed for instance by identifying the products offered/not offered by others. Despite the fact that the homestead claims to offer accommodation, its visitor records have no indication that this product is frequently used. The products in the curio shop are sporadically purchased but there is a pressing need to study the spending habits and buying patterns of the customers and to develop strategies for acquiring curios that the tourists desire. The royal homestead will have to customise and tailor make the products and activities it will offer in order to attract more visitors.

Under the powers, duties and functions of the traditional authorities and members enshrined in Traditional Authorities Act 25 of 2000, the Traditional Authorities must “uphold, promote, protect and preserve the culture, language, tradition and traditional value of that traditional community.” This is a clear indication that the various communities, including the Uukwaluudhi community, have the highest support of the government in their quest to promote, protect and preserve their culture.

The other advantage that the Uukwaluudhi royal Homestead has is the fact that the people themselves are keen and are putting energy in trying to make sure that the idea of a museum materialises. However, the negative aspect that might affect the flow of visitors is the current global economic recession and the possibility of a prolonged pandemic of the coronavirus which might prevent people from travelling and spending their limited income. Therefore, the site will have to be marketed vigorously so that it can compete with other prime sites in Namibia. There will be a need for a robust marketing strategy to attract local visitors instead of relying on international tourists.

Conclusion

For the Uukwaludhi royal homestead to be a successful cultural village, it should provide more than just static displays of architectural designs. It should provide spaces for capacity building through skills transfer from the elderly members of the society to the young generations. This will in turn ensure continuity. In addition, cultural villages should be sites for robust discourse about the heritage of a given region. Such sites should be platforms

where local communities can negotiate the future of their heritage. They should let locations for “knowledge transactions” take place as Witz and Rassool have argued elsewhere (Witz and Rassool 2008:12). Heritage is negotiated knowledge that is developed and preserved within a given time and locality. It changes continuously as the communities negotiate new aspects of life that are meaningful to them, and discard others that cease to have value. Ultimately, cultural villages are sites for community advocacy which provide scope for formal and informal employment. As indicated in this paper, cultural villages are not viable in generating income enough to reduce poverty. There is a need to link the cultural villages with other heritage sites in a given area in order to complement, create and diversify revenue generation opportunities.

The Uukwaludhi royal homestead has the potential to develop into a tourist hub in the Omusati region by complementing existing tourist/heritage resources and rebranding itself as a site for postcolonial societal engagement. In some cases, some new heritage resources will have to be developed and marketed at the Uukwaludhi royal homestead. The values and tourism packages of the sites will offer a comparative advantage of the royal museum and assist in diversifying its attraction. However, the success of the cultural village will depend on its ability to confront and challenge the orthodox understanding of a museum or heritage site as a place of satisfying the curiosities of tourists. The new form of a cultural village is one that has relevance to its community; a centre that addresses or provides a site for addressing the daily struggles of the community that surrounds it.

List of References

- AKUUPA, M. U. (2011). *The Formation of ‘National Culture’ in Post-Apartheid Namibia: a Focus on State Sponsored Cultural Festivals in Kavango Region* (PhD thesis). University of the Western Cape, South Africa.
- CHIRIKURE, S., PWITI, G., DAMM, C., FOLORUNSO, C.A., HUGHES, D.M., PHILLIPS. (2008). Community involvement in archaeology and cultural heritage management: An assessment from case studies in Southern Africa and elsewhere. *Current Anthropology*, 49(3), 467-485.
- GOVERNMENT OF THE REPUBLIC OF NAMIBIA; Traditional Authorities Act 25 of 2000. <http://www.lac.org.na/laws/pdf/tradauth.pdf>
- MASHUNA, T. (27 January 2012). Mwaala gwa Nashilongo: The Humanitarian King of Uukwaludhi (1880-1959). New Era Newspaper.
- MOSWETE, N., SAARINEN, J., & MONARE, M. J. (2015). Perspectives on Cultural Tourism: A Case Study of Bahurutshe Cultural Village for Tourism in Botswana. *Nordic Journal of African Studies*, 24(3&4), 279-300.
- MUSEUMS ASSOCIATION OF NAMIBIA. Museum Matters, Newsletter of the Museums Association of Namibia, (2010). Museums Association of Namibia: Windhoek.

- MUSEUMS ASSOCIATION OF NAMIBIA. (2016). Omukwa- Africa's tree of life. A mobile exhibition.
- NAMAKALU, O.O. (2004). Armed Liberation Struggle: Some Accounts of PLAN'S Combat Operations. Windhoek: Gamsberg Macmillan Publishers Ltd.
- NDALIKOKULE, E., NAUYOMA B., AND SILVESTER, J. (2010). Heritage Hunt Report for Omusati Region. Unpublished report: Museums Association of Namibia.
- NDHLOVU, J., NYAKUNU, E., AND AUALA, S. (2011) Community-based tourism in Twyfelfontein conservancy: Exploring Local Community's involvement. *International Journal of Hospitality & Tourism Systems*, 4(2), 38-46.
- NDHLOVU, J., AND NYAKUNU, E. (2013), Re-positioning Namibia as a cultural tourism destination to enhance its competitiveness: A Tour Operators' Perspective, *Journal of Contemporary Management* (10), 117- 134.
- NUJOMA, S. (2001) Where Others Wavered. The Autobiography of Sam Nujoma. My Life in SWAPO and my Participation in the Liberation Struggle of Namibia, London: PANAF Books.
- RASSOOL, C. (2015), 'Restoring the Skeletons of Empire: Return, Reburial and Rehumanisation in Southern Africa', *Journal of Southern African Studies*, (41), 30, 653-70.
- SILVESTER, J. (2011 May). Trading in Tradition: The development of Cultural Villages in Namibia. Unpublished paper presented at the Commonwealth Association of Museums (CAM) Triennial Conference "Commonwealth Museums: Culture, Economy and Climate change and Youth (pp.25-28). Available at https://maltwood.uvic.ca/cam/publications/conference_publications/Jeremy%20Silvester.pdf
- SCHILDKROUT, E. (1995). Museums and nationalism in Namibia. *Museum Anthropology*, 19(2), 65-77.
- SHIGWEDHA, VILHO. 2004. "Pre-Colonial Costumes of the Aawambo: Significant Changes under Colonialism and the Construction of a Post-Colonial Identity." MA thesis, University of Namibia.
- UNESCO, "Sustainable Cultural Tourism in Namibia" available at Namibia_Culture Joint Programme Document vol.1.pdf (mdgfund.org) retrieved 8 June 2021.
- VAN VEUREN, E. J. (2001). Transforming cultural villages in the spatial development initiatives of South Africa. *South African Geographical Journal*, 83(2), 137-148.
- WICKENS, G. E. (2008) Famous Trees. In: The Baobabs: Pachycauls of Africa, Madagascar and Australia. Springer, Dordrecht. https://doi.org/10.1007/978-1-4020-6431-9_2
- WITZ, L., & RASSOOL, C. (2008). Making histories. *Kronos*, 34(1), 6-15.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft
Windhoek, Namibia 2021

ISSN: 1018-7677

ISBN: 978-99945-76-74-6

About the Authors

Dr Goodman Gwasira is a senior lecturer of archaeology and heritage studies at the University of Namibia. He previously worked as a curator of archaeology at the National Museum of Namibia. His research interests include critical archaeologies, history of archaeology, restitution of cultural property, museum anthropology. He is the coordinator of the Museum Outreach Programme (MOP) & the Heritage Conservation and Management Programme at the University of Namibia.



Dr Martha Akawa is a History senior lecturer and Associate Dean of the School of Humanities, Society and Development at the University of Namibia. She has experience and researched widely on Namibian History. Her area of interest is the liberation struggle of Namibia, particularly the area of gender and Heritage relates issues.



Ndapewa Fenny Nakanyete is a lecturer at the University of Namibia (UNAM). Her main research interests are indigenous knowledge, gender, culture, land, livelihoods, urban development, rural environments, and socio-economic factors. She holds a Bachelor of Arts Degree in Geography and Sociology from UNAM, a Master Degree in Geographic Information Technologies from the Autonomous University of Barcelona, and a Master of Arts Degree in Culture and Environment in Africa from the University of Cologne. She is currently pursuing her PhD in Geography at UNAM in collaboration with the University of Cologne.





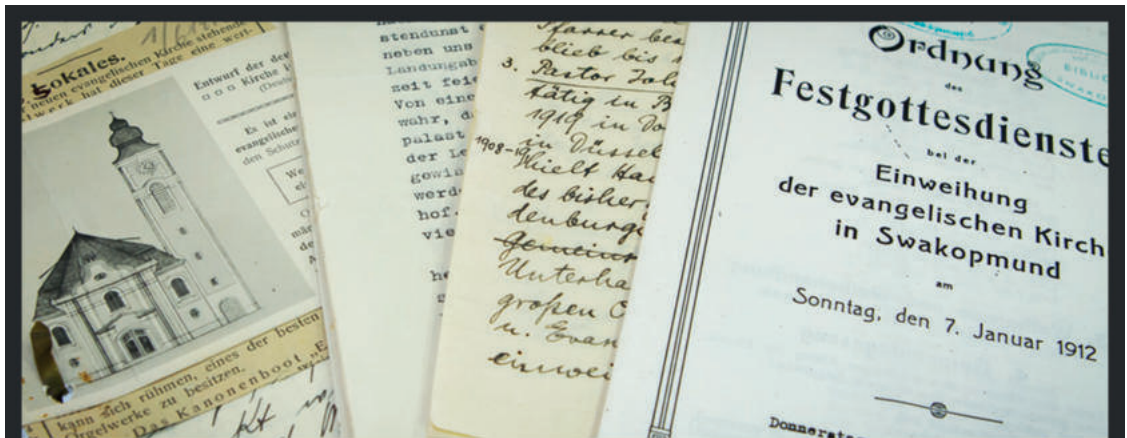
Offshore Investment Specialists

Talk to us about expanding
your wealth in US\$, € or £

wms.com.na
Hanjo Schlabititz - 081 148 3885
hanjo@wms.com.na



WEALTH MANAGEMENT
SOLUTIONS



The Sam Cohen Library was officially opened on the 3rd of December 1977. Being a reference library it hosts a large collection of historic newspapers, photographs and approximately 10.000 books, which include the Africana Collection of Ferdinand Stich, a former bookshop owner in Swakopmund.

Tel: +264 (064) 40 2695

SCIENTIFIC SOCIETY



SWAKOPMUND

Tel: +264 (064) 40 2046

The Swakopmund Museum was founded in 1951 by dentist Dr. Alfons Weber. It is the largest privately run museum in Namibia. On display are various types of indigenous fauna & flora, minerals, an archaeological exhibition, the exhibition "People of Namibia" and a variety of cultural and historical objects.



office@scientificsocietyswakopmund.com - www.scientificsocietyswakopmund.com

Nama Aufstand ab 1904

Michael Vaupel

Stichwörter: Nama, Hendrik Witbooi, Aufstand, 1904, Orlaam, Simon Kopper.

Abstract

This article deals with the Nama Wars from 1904 in the then South-West Africa. What role did the Ethiopian movement play? Was war inevitable or would there have been possibilities for an arrangement between the Nama tribes and the colonial power? What role played personal relations, for example, between Hendrik Witbooi and Theodor Leutwein? *“We learn from history that we learn nothing from history.”* – George Bernard Shaw

Neben Gründen, die auch für die Hereros relevant waren – wie das Fehlverhalten mehrerer Wanderhändler – gab es Nama-spezifische Gründe für deren Aufstand ab 1904. Ich möchte hier zum Beispiel die „Äthiopische Bewegung“ nennen.

Ursprünglich in den USA entstanden, schwappte diese Bewegung zu Beginn des 20. Jahrhunderts auch nach Afrika über. Die Bewegung hatte die Gründung unabhängiger afrikanischer Kirchen bzw. eine zentrale schwarzafrikanische Kirche zum Ziel, einzelne Anhänger gingen jedoch weiter und forderten auch die völlige politische Freiheit vom europäischen Kolonialismus.

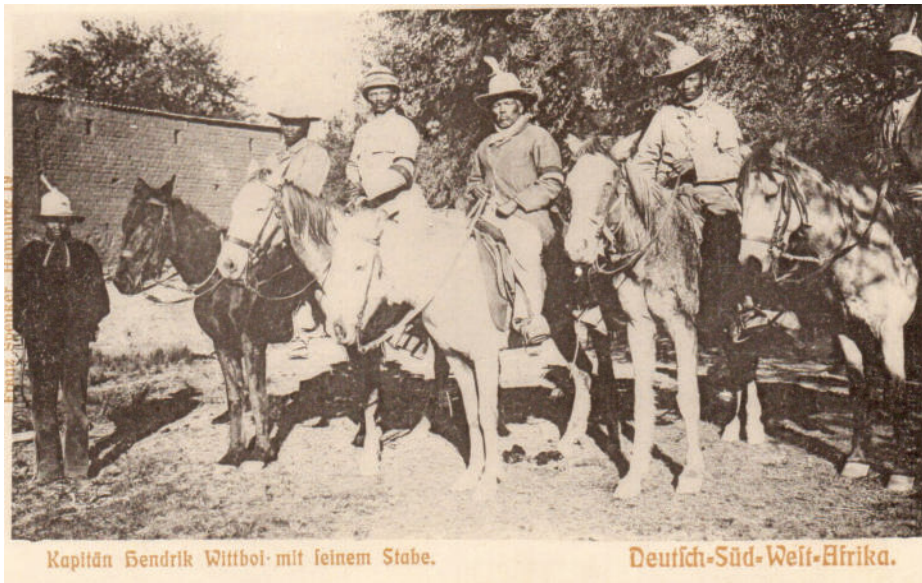
Der Begriff „äthiopisch“ hat nichts mit dem ostafrikanischen Staat zu tun, vielmehr soll dieser Begriff auf den ersten in der Bibel genannten afrikanischen Christen, einen Mann namens „Aethiops“, verweisen.¹ 1904 zog ein Abgesandter der Äthiopischen Bewegung, Stuurman Shepperd, von Südafrika zu den Witboois in Deutsch-Südwestafrika.

Dort versuchte er, Anhänger für die Äthiopische Bewegung zu gewinnen, was ihm auch schnell gelang.² Er rief direkt zum Aufstand gegen die deutsche Kolonialmacht auf, was letztlich als wesentlicher Faktor für die tatsächliche Kriegserklärung an die deutsche Kolonialmacht gewertet werden muss.

Ein weiterer Grund ist die im Zuge des Herero-Aufstands auf deutscher Seite feindseliger gewordene Einstellung gegenüber allen Angehörigen der indigenen Bevölkerung. Auf deutscher Seite waren vermehrt Stimmen zu hören, die gedroht hatten, „mit allen

¹ Vgl. hierzu *Nuhn* (2000), S. 52.

² Vgl. *Menzel* (2000), S. 178 f.



Kapitän Hendrik Witbooi mit seinem Stabe.

Foto: Archiv der Namibia Wissenschaftlichen Gesellschaft

Schwarzen wie mit den Herero zu verfahren und alle Stämme zu entwaffnen und aufzulösen.“³

Die Witboois hatten vertragsgemäß eine Hilfstruppe von 100 Mann zum Kampf auf deutscher Seite entsandt, namentlich deren schlechte Behandlung – die durch 19 Deserteure Hendrik Witbooi mitgeteilt wurde – kann ein Anlass, wenn auch kein Grund, für den Aufstand gewesen sein.⁴

Ebenfalls Anlass, genau zu diesem Zeitpunkt den Aufstand zu beginnen, war die Abgabe des militärischen Oberbefehls durch von Leutwein, den ein persönliches Verhältnis des gegenseitigen Respekts und der Achtung mit Hendrik Witbooi verband.

Generell lässt sich sagen, dass es auf Ebene der deutschen Beamten je nach Person durchaus gute Beziehungen zu den Nama-Kapitänen gab. Ich zitiere dazu als Beispiel eine Grußformel, die ich im Archiv in Berlin (Quelle: *BArch, R151F/FC4703, Bl. 51f.*) vom Distrikt-Chef Keetmannshoop Leutnant Bethe (oder Betke) Brief an den Bondelzwarts-Kapitän Willem Christian gefunden habe:

„Mein lieber Kapitain! ...

Mit Gruß bleibe ich Dein Freund

Der Kaiserliche Distriktchef gez. Bethe, Premier Lieutenant“

³ *Gründer* (1995), S. 120.

⁴ Vgl. *Nuhn* (2000), S. 51.

Auch die Ankündigung der Rückkehr nach Deutschland des Hauptmanns von Burgsdorff kann als Anlass für den Aufstand gewertet werden. Denn von Burgsdorff hatte als Stationsvorsteher von Gibeon mit korrektem Verhalten gegenüber den Witboois ein Vertrauensverhältnis zu den Witboois im Allgemeinen und Hendrik Witbooi im Besonderen aufgebaut.

Militärischer Verlauf des Aufstands⁵

Die erste Phase (03.10.1904 bis 08.01.1905)

Der Beginn des Aufstands lässt sich auf den Zeitpunkt des Erhalts der Kriegserklärung des wichtigsten Nama-Stammes, der Witboois unter ihrem Kapitän Hendrik Witbooi, von der deutschen Kolonialmacht am 03.10.1904 datieren. Dieser Kriegserklärung folgten sofort lediglich die Fransman-Nama in Gochas unter ihrem Kapitän Simon Kopper.

Etwas später schloss sich dann der Nama-Stamm der „Roten Nation“ in Hoachanas unter ihrem Kapitän Manasse Noreseb dem Aufstand an, auch der Stamm der „Feldschuhträger“ in Koes unter ihrem Kapitän Hans Hendrik folgte erst mit einiger Verzögerung.

Die weiter nördlich siedelnden Nama-Stämme der Topnaar und Zwartboois wurden in einer Überraschungsaktion von den deutschen Truppen entwaffnet und konnten deshalb nicht am Aufstand teilnehmen.

Die Bondelzwart-Nama, die nach der Niederschlagung ihres lokalen Aufstands einen Friedensvertrag mit der deutschen Kolonialmacht unterzeichnet hatte, schlossen sich zum größten Teil unter Cornelius Stürmann dem Aufstand an. Ein bedeutender militärischer Führer dieser Gruppe wurde Jakob Marengo, Sohn eines Nama und einer Herero.

Wegen der formalen Kriegserklärung und der Tatsache, dass einige Nama-Stämme erst mit einiger Verzögerung in den Krieg eintraten, konnten sich die meisten deutschen Siedler auf befestigte Plätze wie Gibeon und Keetmanshoop retten. Dennoch wurden in den ersten Wochen nach der Kriegserklärung ungefähr 40 Deutsche, zumeist Siedler und Soldaten auf kleinen Außenposten, getötet.

Die Festung Gibeon wurde von den Nama eingeschlossen und belagert, ohne dass der Versuch unternommen worden ist, die Trinkwasserversorgung der Festung zu behindern. Nach einigen Angriffen mit unzureichenden Kräften gegen die Festung gaben sich die Nama unter ihrem Unterführer Samuel Isaak mit der Belagerung derselben zufrieden.⁶

Ähnlich wie bei den Herero zeigte sich auch beim Nama-Aufstand, dass von Eingeborenenseite nicht gegen Frauen, Kinder und Missionare vorgegangen werden

⁵ Der folgende Abschnitt der militärischen Operationen orientiert sich im Wesentlichen an *Nuhn* (2000).

⁶ Vgl. hierzu *Nuhn* (2000), S. 68 f., der als einen Grund für die Absage eines Generalangriffs auf die Station die Tatsache anführt, dass das Haus und die Missionskirche von Hendrik Witbooi in Gibeon gesprengt worden seien, worauf Hendrik Witbooi der Mut verlassen habe.

sollte. Diese wurden unter dem Geleit von Nama-Kriegern in die Nähe von befestigten deutschen Plätzen gebracht, wo sie in Sicherheit waren.⁷ Eine Ausnahme wurde beim Missionsbautechniker Ludwig Holzapfel gemacht, der nach der Weigerung, Pulver und Patronen zu übergeben, von einem Nama-Trupp erschossen wurde.⁸

Die deutsche Seite bemühte sich, möglichst schnell die durch die Niederlage der Herero am Waterberg freigewordenen Truppen ins Nama-Gebiet zu verlegen und neue Verstärkungen aus dem Deutschen Reich über Lüderitzbucht heranzuführen. Die deutschen Truppen verhielten sich bis zum Eintreffen dieser Verstärkungen defensiv. Militärischer Oberbefehlshaber im Süden war zunächst der noch als Zivilgouverneur tätige Oberst von Leutwein, der jedoch auch hier schnell in Konflikte über die Art der Kriegsführung mit von Trotha geriet. Von Trotha war 1904 zum Oberbefehlshaber der Schutztruppe in Deutsch-Südwestafrika ernannt worden, während Leutwein zunächst weiterhin Gouverneur blieb (zuvor war er zusätzlich Oberbefehlshaber gewesen).

Es fällt auf, dass der deutsche Gouverneur Leutwein in deutlichem Gegensatz zu General von Trotha stand – und wer weiß, was für einen Verlauf die Dinge genommen hätten, wenn der erfahrene und besonnene Leutwein weiterhin das Sagen gehabt hätte.

Im Bundesarchiv in Berlin fand ich in der Personalakte von Leutwein diesen aufschlussreichen Brief von ihm an den deutschen Reichskanzler (*BArch R1002/1104 - Personalakte Theodor v. Leutwein-, Bl. 120: Brief von Leutwein an den Reichskanzler vom 7.9.1904*):

„Meine Versöhnungspolitik zwischen Weißen und Eingeborenen erscheint gescheitert. Die jetzt allseits gewünschte Gewaltpolitik widerspricht meiner Überzeugung. Ich sehe von ihr jahrelanges Blutvergießen und daher kein Gedeihen für die Kolonie voraus. Außerdem Wiedervereinigung von Zivil- und Militärgewalt in jetziger Zeit dringend erforderlich.“

Doch es kam anders – leider aus Sicht des Verfassers: Leutwein setzte sich nicht durch und gab im November 1904 den Gouverneursposten auf und verschwand darauf von der politischen Bühne. Er starb 1921 in Deutschland, in Freiburg im Breisgau.

Daraufhin übernahm Oberst Deimling die Leitung der militärischen Operationen im Süden. Deimling war eine schillernde Persönlichkeit mit einigen Brüchen – so wurde er nach dem Ersten Weltkrieg zum Pazifisten. Doch davon war 1904 noch wenig zu sehen:

Unmittelbar nach Amtsantritt beschloss Deimling, in die Offensive zu gehen. Der Großteil der Verstärkungen befand sich allerdings noch auf dem Marsch vom Herero-Land auf den südlichen Kriegsschauplatz.

Die Nama hatten bis dahin mit der Ausnahme der Angriffe gegen Gibeon keine Großangriffe unternommen, sondern sich auf kleinere Aktionen gegen deutsche

⁷ Vgl. *Nuhn* (2000), S. 65.

⁸ Zu den Details vgl. *Menzel* (2000), S. 187 ff.



*Oberst von Deimling und Oberst von Estorff vor der Feste, Windhuk, D.S.W.A.
Foto: Archiv der Namibia Wissenschaftlichen Gesellschaft*

Außenposten und Nachschubkolonnen beschränkt. Ihre Hauptstreitmacht hatten sie mittlerweile in Rietmond, dem Stammsitz von Hendrik Witbooi, versammelt.

Oberst Deimling beschloss, diese Hauptstreitmacht anzugreifen. Mit der 7. Kompanie/2. Feldregiment zog er Richtung Rietmond, um den Entscheidungskampf mit der Hauptmacht der Witbooi-Krieger zu suchen. Deimling wollte nicht die aus dem Herero-Land anmarschierenden Verstärkungen abwarten, was die Witboois auszunutzen versuchten:

Auf dem Weg nach Gibeon wurde Oberst Deimling mit seiner Abteilung am 22.11.1904 bei Kub mehrmals von rund 250 Witbooi-Reitern unter der Führung von Hendrik Witbooi angegriffen. Diese Angriffe wurden von den Deutschen zurückgeschlagen, nach dem Hauptangriff zogen sich „die Witboois [...] nach diesem Gefecht in Richtung Rietmond zurück, über 50 Tote auf dem Kampffeld zurücklassend.“⁹

Rietmond selbst wurde daraufhin von den Witboois geräumt und am 5. Dezember 1904 von den deutschen Truppen besetzt. Die Witboois hatten sich damit einer Entscheidungsschlacht entzogen und sich Richtung Kalahari-Wüste abgesetzt.

Nach der Besetzung Rietmonds zeigte sich zum ersten Mal ein die deutsche Seite im weiteren Kriegsverlauf stark belastendes Problem: Der Nachschub blieb aus, die deutschen Truppen konnten deshalb nicht zur Verfolgung der Richtung Kalahari-Wüste abziehenden

⁹ Nuhn (2000), S. 84.

Witboois ansetzen. Oberst Deimling zog daraufhin zur Station Gibeon, die dadurch endgültig entsetzt worden war.

Gegen die nun ebenfalls in den Krieg eingetretenen Nama-Stämme fanden kleinere deutsche Expeditionen statt. Das Hauptziel von Oberst Deimling blieb zunächst jedoch die Vernichtung der Witbooi-Krieger.

Diese hatten sich inzwischen weiter nach Osten abgesetzt und sich in Gochas mit den Fransman-Nama unter Simon Kopper vereinigt. Diese Streitmacht unter dem Oberbefehl Hendrik Witboois „umfasste jetzt gut 1000 Gewehre“.¹⁰ Oberst Deimling teilte die ihm zur Verfügung stehenden Truppen, inzwischen wiederaufgefrischt, in drei Abteilungen ein, die konzentrisch gegen Gochas vorgehen sollten.

Hendrik Witbooi konnte die drohende Einkesselung verhindern, indem er die südlich anrückende Abteilung mit schwachen Kräften aufhielt und mit der Masse seiner Krieger die deutsche Nord-Abteilung angriff und nach Norden durchbrach. Nach einigen weiteren Gefechten kam es daraufhin bei Zwartfontein zum letzten größeren Kampf im Nama-Krieg, diesen brach Hendrik Witbooi am 8. Januar 1905 ab. Daraufhin zogen sich die Witboois zusammen mit den Fransman-Nama in die Kalahari-Wüste zurück.

Die Kämpfe bei Zwartfontein gehörten zu den letzten größeren Angriffen der Witboois und der Nama überhaupt: Danach setzten alle Nama-Trupps auf die Kleinkriegsführung. Angesichts der überlegenen Waffentechnik der Deutschen sahen die Nama-Kapitäne keinen Sinn in einer Entscheidungsschlacht, die von den deutschen Truppen in der Folgezeit jedoch weiterhin konsequent gesucht wurde.

Die erste Phase des Krieges, in dem die Nama auch mit größeren Abteilungen offensiv wurden, ist deshalb mit dem deutschen Sieg bei Zwartfontein am 8. Januar 1905 abgeschlossen. Danach gab es bis Kriegsende keine Großangriffe mehr auf Nama-Seite.

Die zweite Phase (09.01.1905 bis 03.02.1906)

Nach dem Rückzug der Witboois und der mit ihnen verbündeten Fransman-Nama in die Kalahari-Wüste beschloss Oberst Deimling, eine aus dem Herero-Aufstand bekannte Taktik auch hier anzuwenden: Der Westrand der Kalahari wurde mitsamt den wichtigsten Wasserstellen von deutschen Truppen abgesperrt.

Damit hätte sich auch hier das Schicksal der Hereros in der Omaheke wiederholen können, die Nama „wussten sich jedoch zu helfen, indem sie ihren Flüssigkeitsbedarf durch den Verzehr einer sehr wasserhaltigen Wüstenfrucht, der sogenannten Tschamas, deckten [...]“.¹¹

Die für die Abspernung der Kalahari-Wüste notwendigen deutschen Truppen unterstellte Oberst Deimling einem untergeordneten Offizier. Er selbst brach nach Keetmanshoop auf, um dort eine Offensive gegen Jakob Marengo vorzubereiten.

¹⁰ Nuhn (2000), S. 92.

¹¹ Nuhn (2000), S. 104.

Oberst Deimling traf am 23. Januar 1905 in Keetmanshoop ein und begann sofort mit den Vorbereitungen der Offensive gegen Marengo. Oberbefehlshaber von Trotha wollte einen spektakulären Erfolg und befahl deshalb eine weitere Offensive gegen die Witboois, von der er sich mehr Erfolg erhoffte.¹² Oberst Deimling handelte damit befehlswidrig, als er trotzdem die geplante Offensive gegen Marengo anlaufen ließ.

Marengo hatte sich in den großen Karas-Bergen verschanzt und führte von dort aus lediglich kleinere, aber aus Nama-Sicht durchaus erfolgreiche Aktionen gegen deutsche Nachschubkolonnen durch.

Oberst Deimling hielt an seiner bisherigen Taktik fest: Er strebte eine Entscheidungsschlacht an. Zu diesem Zweck teilte er seine Truppen in vier Abteilungen, die konzentrisch gegen die Karas-Berge vorgehen sollten. Marengo erkannte die Absicht des deutschen Befehlshabers und nutzte die Zersplitterung der deutschen Kräfte zu einem Angriff auf die nördliche Abteilung. Diese erlitt eine Niederlage, 11 Mann fielen, 28 wurden verwundet.¹³

Nach weiteren Kämpfen konnte Marengo mit seinen Kriegerern durch diese nördliche Lücke entkommen, die von den Deutschen erstrebte Entscheidungsschlacht war wieder nicht zustande gekommen. Die deutschen Truppen verloren schnell den Anschluss an die Truppen Marengos, sodass die deutsche Führung zunächst keine Informationen über deren Aufenthaltsort hatte.

Die Witboois hatten sich inzwischen wieder gesammelt und jenseits der Kalahari-Wüste in englischem Gebiet Proviant und Munition erworben. Überraschend gelang ihnen der Durchbruch zu ihrem alten Stammessitz, da sie von den Deutschen völlig unbemerkt durch ein wenig bewachtes Gebiet gezogen waren. Hier setzten sie ihre Guerilla-Taktik fort, die den deutschen Truppen spürbare Verluste beibrachte.

Bei einem dieser kleineren Unternehmen, dem Überfall auf eine deutsche Nachschubkolonne aus Ochsenwagen, wurde Hendrik Witbooi am 29.10.1905 verletzt und starb einen Tag später.¹⁴ Nach dem Tod ihres Anführers streckten die meisten Wibooi-Unterführer innerhalb weniger Wochen ihre Waffen.

Auf deutscher Seite hatte inzwischen ein Wechsel in der militärischen Spitze stattgefunden: Der Druck gegen von Trotha war wegen des andauernden Krieges gegen die Nama immer größer geworden, auch hatte sich im Deutschen Reich mittlerweile Protest gegen seine inhumane Art der Kriegführung erhoben.

In etwa zeitgleich mit dem Tod von Hendrik Witbooi trat von Trotha deshalb die Rückkehr nach Deutschland an. Der neue Oberbefehlshaber wurde Oberst Dame. Inzwischen war auch der neue Zivilgouverneur für Deutsch-Südwestafrika eingetroffen, Dr. von Lindequist.

¹² Vgl. Ebenda, S. 107.

¹³ Vgl. Ebenda, S. 119.

¹⁴ Die Einzelheiten bei Menzel (2000), S. 203 ff.



Gouverneur Theodor von Leutwein

Foto: Archiv der Namibia Wissenschaftlichen Gesellschaft

Bei den Kapitulationsverhandlungen mit den Witboois zeigte sich auf deutscher Seite ein interessanter Unterschied im Vergleich zur Vorgehensweise beim Herero-Aufstand: Hatte dort die militärische Seite (von Trotha) Friedensverhandlungen konsequent abgelehnt, während der Gouverneur (von Leutwein) für eine politische Lösung plädierte, so war es diesmal fast genau umgekehrt.

Der neue militärische Oberbefehlshaber Oberst Dame trat in Friedensverhandlungen und schloss eigenmächtig Friedensverträge mit den Witbooi-Unterführern. Von Lindequist wurde dabei übergangen und protestierte gegen die seiner Ansicht nach zu milden Friedensverträge.

zahlenmäßig stärksten Nama-Stammes unter Samuel Isaak endet die zweite Phase des Aufstands.

Die letzte große Witbooi-Gruppe unter ihrem Führer Samuel Isaak kapitulierte am 03.02.1906.¹⁵ Auch der Teil der Bethanier-Nama, der unter Cornelius Frederick am Aufstand teilgenommen hatte, kapitulierte im Februar 1906. Mit dem Ausscheiden des

Kennzeichnend für diese Phase ist, dass die Nama unter Verzicht auf große Kämpfe erfolgreich – aus ihrer Sicht – Kleinkrieg führten, hauptsächlich gegen die deutschen Nachschub-Kolonnen. Da die deutschen Truppen ihren Nachschub über relativ große Entfernungen heranbringen mussten (Lüderitzbucht–Keetmanshoop rund 350 km), boten sich immer wieder Möglichkeiten für die Guerillakrieg-Taktik der Nama. Die deutschen Befehlshaber suchten im Gegenzug verbissen eine „Entscheidungsschlacht“, den Gefallen, darauf einzugehen, taten ihnen die Nama jedoch nicht.

Letztlich kam den Deutschen dann jedoch der Zufall zu Hilfe, als Hendrik Witbooi bei einem kleineren Gefecht tödlich verwundet wurde und kurz darauf starb. Nach dem Tod dieser zentralen Figur schieden die Hauptträger des Aufstands, die Witboois, aus dem Krieg aus.

¹⁵ Vgl. *Nuhn* (2000), S. 178.

Die dritte Phase (04.02.1906 bis 16.03.1908)

Auch als die Witboois aus dem Aufstand ausgeschieden waren, kämpften Jakob Marengo und Simon Kopper weiter, obwohl keinerlei Aussicht mehr auf einen endgültigen Sieg gegen die deutsche Militärmacht bestand. Das Zahlenverhältnis spricht für sich: Zeitweise standen rund 15.000 deutsche Soldaten auf dem Kriegsschauplatz, dagegen nur „ein paar hundert“¹⁶ Nama-Krieger. Aber: „Die Deutschen erlitten Niederlage auf Niederlage.

Die Nama überfielen Nachschubkolonnen oder Patrouillen und kleinere Militärposten, sie kamen überraschend und verschwanden wieder spurlos im Gebirge oder in der Wüste.“¹⁷ Marengo war im äußersten Süden der Kolonie aktiv. Von dort konnte er sich gegebenenfalls auf englisches Gebiet zurückziehen und dort seine Vorräte auffrischen.

Die deutschen Truppen, die bereits 1905 verstärkt worden waren, hatten im Gegenzug mit großen Nachschub-Schwierigkeiten zu kämpfen, als Südafrika die Grenze zu Deutsch-Südwest zeitweise gesperrt hatte.

Von dort bezogen die deutschen Truppen einen Großteil ihres Nachschubs, aber „da die Militärs freilich nie genug bekommen konnten und ständig weitere Erhöhungen der Lieferungen verlangten, blieb den Kapbehörden schließlich kein anderer Weg, als die Notbremse zu ziehen und vorübergehend die Grenzen zu sperren.“¹⁸

Die deutsche Seite hatte jedoch schnell erfolgreiche Gegenmaßnahmen ergriffen. Gouverneur von Lindequist äußerte gegenüber einem Vertreter der Kapregierung „dass, wenn die Kapregierung auf ihrem derzeitigen Standpunkt beharrte, dies von der öffentlichen Meinung im Schutzgebiet und auch in Deutschland übel aufgenommen werden [...] und die Arbeit des englischen Kapitals in unserer Kolonie sicherlich nicht erleichtern würde.“¹⁹

Wenig später wurde die Sperrung wieder aufgehoben. Die Geschäfte wurden zudem dadurch erleichtert, dass die Importe aus Südafrika hauptsächlich über die in Deutsch-Südwestafrika tätige britische Landgesellschaft „South African Territories Company (SATC)“ abgewickelt wurden.²⁰

Trotzdem blieben die Nachschubschwierigkeiten bestehen, da „der südafrikanische Markt bereits um die Mitte des Jahres 1905 gänzlich ausverkauft war!“²¹ Zeitweise kam es deshalb zu der Situation, dass sich die Deutsche Armee trotz ihrer ab 1906 vorhandenen rund 10-fachen Übermacht auf die Sicherung der Nachschubwege beschränken musste. Zwar wurden im Dezember 1905 vom Reichstag die finanziellen Mittel zum Bau einer

¹⁶ Helbig (1983), S. 160.

¹⁷ Ebenda, S. 160 f.

¹⁸ Drechsler (1996), S. 251.

¹⁹ RkolA Nr. 2142, Bl. 61-62, Lindequist an Reichskanzler, 8.2.1905, entnommen aus: Drechsler (1996), S. 252.

²⁰ Vgl. Drechsler (1996), S. 249 ff., der die SATC nicht zu Unrecht als Kriegsgewinnler bezeichnet.

²¹ Drechsler (1996), S. 251.

Eisenbahn von Lüderitz nach Kubub bewilligt, dies konnte sich aber naturgemäß nicht sofort auf die Lage auswirken.

Anfang 1906 gaben die deutschen Truppen ihr konsequentes Streben nach Entscheidungsschlachten, durchgeführt durch konzentrisches Vorgehen mehrerer Abteilungen, auf. Die deutsche Führung sah ein, dass Jakob Marengo mit den bisherigen Mitteln nicht beizukommen war, und suchte deshalb die Zusammenarbeit mit Großbritannien (Kapkolonie), „das inzwischen Marengo genauso fürchtete.“²²

Marengo hatte durch seine Erfolge gegen die deutschen Truppen und seine häufigen Grenzübertritte nach Südafrika mittlerweile großes Ansehen unter der indigenen Bevölkerung der Kapkolonie erlangt, weshalb die britischen Behörden letztlich Maßnahmen gegen ihn veranlassten.²³

Gegen die vereinigten Truppen der beiden Großmächte hatte der Nama-Führer keine Chance mehr, da durch die jetzt feindselige Haltung der britischen Regierung ihm gegenüber auch die Möglichkeit wegfiel, in der Kapkolonie Nachschub einzukaufen. Am 21.09.1907 wurde Jakob Marengo mit seinen restlichen Kriegern schließlich von einer britischen Polizei-Truppe aufgespürt. Er fiel in dem folgenden mehrstündigen Schusswechsel.

Dennoch ist es erstaunlich, dass sich Marengo noch so lange halten konnte. Zwar war die Zahl der deutschen Truppen in Deutsch-Südwest ab 1906 schrittweise wieder verringert worden, dennoch standen zum Zeitpunkt seines Todes immer noch rund 6700 deutsche Soldaten²⁴ in der Kolonie.

Die verbliebenen deutschen Truppen konnten sich ab Oktober 1907 auf Simon Kopper und seine „100 bis 150 Guerilleros“²⁵ konzentrieren, den letzten kämpfenden Nama-Führer. Dieser hatte sich in die Kalahari-Wüste zurückgezogen und unternahm von dort aus Überfälle gegen deutsche Patrouillen und Nachschubkolonnen.

Die Deutschen hatten aus ihren Fehlern gelernt und planten ihre Offensive gegen Simon Kopper sehr genau: Es wurde ein mit Kamelen berittenes Expeditionskorps von rund 400



Friedrich von Lindequist

Foto: Archiv der Namibia Wissenschaftlichen Gesellschaft

²² Helbig (1983), S. 167.

²³ Vgl. Ebenda.

²⁴ Diese Zahl nennt Nuhn (2000), S. 248, für Anfang September 1907.

²⁵ Helbig (1983), S. 166.

Mann aufgestellt, Mannschaften und Unteroffiziere wurden „acht Monate lang auf das Gründlichste für den bevorstehenden Kampf taktisch geschult und ausgebildet.“²⁶

Diese Expedition entdeckte im März 1908 Simon Koppers Lager und griff es an. Dieser konnte jedoch mit einem Teil seiner Krieger entkommen.

Dabei war das deutsche Expeditionskorps völkerrechtswidrig ca. 90 km auf britisches Gebiet vorgestoßen, was jedoch ohne weitere Folgen blieb. Der Nama-Aufstand war trotz der Flucht Simon Koppers durch diesen deutschen Angriff dennoch endgültig beendet: Über britische Behörden einigten sich die deutschen Stellen mit Simon Kopper. Gegen die Zahlung eines jährlichen Gehalts versprach dieser, Deutsch-Südwestafrika nicht wieder zu betreten. Bis zu seinem Tod hielt er sich daran. „Jetzt erst herrschte Ruhe im Lande.“²⁷

Schlussbemerkungen

Der Nama-Aufstand unterscheidet sich grundlegend vom Herero-Aufstand. Als zentraler Punkt lässt sich die unterschiedliche Art der Kriegsführung auf Eingeborenen-Seite festhalten: Während die Herero die von den Deutschen gesuchte Entscheidungsschlacht annahmen – und verloren – sahen die Nama schnell ein, dass sie in offener Feldschlacht wegen der überlegenen Waffentechnik der Deutschen kaum eine Chance hätten.

Sie konzentrierten sich deshalb nach einigen anfänglichen größeren Gefechten fast ausschließlich auf die Kleinkriegsführung, die den deutschen Truppen große Verluste zufügte: Nuhn nennt 1676 gefallene und 76 vermisste deutsche Soldaten²⁸, Helga und Ludwig Helbig sprechen von 676 gefallenen und 76 vermissten deutschen Soldaten.

Diese Art der Kriegsführung wurde den Nama durch das Fehlen von Rinderherden (wie bei den Hereros) erleichtert, auch konnten Frauen und Kinder teilweise jenseits der deutschen Grenze auf britischem Gebiet in Sicherheit gebracht werden. Zudem war und ist das Nama-Gebiet, insbesondere die Großen-Karas Berge, für die Guerillakriegsführung sehr gut geeignet, das Gelände ist stark zerklüftet.

Die deutsche militärische Führung stand dieser Kriegsführung zunächst vollkommen ratlos gegenüber, da es sich hier um ein Novum in der Geschichte der kaiserlichen Armee handelte. Es gab zwar keine großen, aber sehr viele kleinere Zusammenstöße: Im gesamten Nama-Aufstand werden an die 200 kleine und kleinste Gefechte stattgefunden haben.²⁹

Letztlich kam den Deutschen der Zufall zu Hilfe, als Hendrik Witbooi und damit die zentrale Figur auf Nama-Seite beim Überfall auf eine deutsche Nachschub-Kolonne tödlich verwundet wurde und bald darauf die größten Nama-Stämme aus dem Aufstand ausschieden.

²⁶ Nuhn (2000), S. 255.

²⁷ Helbig (1983), S. 168.

²⁸ Vgl. Nuhn (2000), S. 275.

²⁹ Vgl. hierzu Witbooi (1995), S. XXVII

Dass bis zum endgültigen Abschluss der Kämpfe immer noch rund 2 Jahre vergingen, spricht für sich. Das Todesurteil insbesondere für Jakob Marengo war schließlich die Tatsache, dass die britische Regierung ihre zuvor als neutral zu wertende Haltung aufgab und sich offen an der Jagd gegen ihn beteiligte.

Obwohl die deutschen Truppen während des gesamten Nama-Aufstands deutliche Verluste hinnehmen mussten – übrigens erheblich mehr als im Herero-Aufstand – so waren die Verluste der Nama noch höher. Legt man eine Schätzung von Gouverneur von Leutwein über die Zahl der Nama zugrunde – 20.000 im Jahr 1894³⁰ – und vergleicht dies mit der offiziellen Zählung im Jahre 1911, die auf 9781 Nama kam³¹, so ergibt sich ein Bevölkerungsverlust in diesem Zeitraum von gut 50 %. Nuhn verweist auf Sudholt, der für das Jahr 1911 eine Nama-Zahl von 13.838 nennt.³² Nach diesen Zahlen hätte sich die Zahl der Nama um rund ein Drittel verringert.

Im Sinne der Einheit der Menschheit rechnet der Verfasser die genannten Verluste nicht gegeneinander auf, sondern bedauert die Toten beider Seiten. Sie mögen in Frieden ruhen.

Literaturverzeichnis

- Drechsler, Horst: *Südwestafrika unter deutscher Kolonialherrschaft. Die grossen Land- und Minengesellschaften*. Stuttgart, 1996.
- Gründer, Horst: *Geschichte der deutschen Kolonien*. 3. Auflage, Paderborn u.a. 1995.
- Helbig, Helga und Ludwig: *Mythos Deutsch-Südwest. Namibia und die Deutschen*. Weinheim und Basel, 1983.
- Menzel, Gustav: *Hendrik Witbooi – eine Biographie in zeitgenössischen Quellen*. Köln 2000.
- Nuhn, Walter: *Feind überall. Der Große Nama-Aufstand (Hottentottenaufstand) 1904-1908 in Deutsch-Südwestafrika (Namibia)*. Bonn 2000.
- Witbooi, Hendrik: *The Hendrik Witbooi Papers*. Translated by Annemarie Heywood and Eben Maasdorp. Annotated by Brigitte Lau. Windhoek 1995.

JOURNAL 68

Namibia Scientific Society / Namibia Wissenschaftliche Gesellschaft
Windhoek, Namibia 2021

ISSN: 1018-7677 ISBN: 978-99945-76-74-6

³⁰ Vgl. Ebenda, S. 274.

³¹ Vgl. Helbig (1983), S. 168.

³² Sudholt (1975), S. 41 ff., entnommen aus: Nuhn (2000), S. 274.

Biografie des Verfassers

Michael Vaupel ist der Finanzvorstand der Wissenschaftlichen Gesellschaft Swakopmund.

(www.scientificsocietyswakopmund.com)

Der Historiker (Magister Artium) und Diplom-Volkswirt arbeitet als freier Journalist und Schriftsteller zu den Themen Geschichte und Geldanlage. Mehr zu ihm finden Sie auf seiner Internetseite www.ethische-rendite.de.

Adresse des Verfassers

E-Mail: michael.vaupel@gmx.de





**70 JAHRE
GOETHE-
INSTITUT**

VERGANGENHEIT. GEGENWART. ZUKUNFT



REPTILES OF NAMIBIA **by Alfred Schleicher**

***Reptiles of Namibia* is a translation as well as an extension of the German version *Reptilien Namibias* and is a must for every household and all travellers in Namibia.**

Namibia is well-known for its large biodiversity of reptiles, be it tortoises, turtles, snakes, lizards and crocodiles. On 271 pages with 480 full-colour photos, distribution maps and an index, this guide comprehensively informs about the distribution, habits and habitats, diet and breeding of Namibia's diverse reptiles as well as the threats that they are exposed to.

**Available at
Namibia Scientific Society**



Guidelines for Authors

The Journal publishes articles related to Namibia. All contributions must be based on original research and should constitute a definite advance in knowledge in that field. Authors bear sole responsibility for the entire content of their papers (accuracy of facts, data and language, as well as their deductions and opinions expressed). If applicable, authors must ensure the consent of third parties involved (i.e. in biographies etc.). It is the responsibility of the authors to make sure that there are no pending copyright issues regarding their articles. Referees will review the papers submitted. Based on their advice, the editor will accept or reject contributions. All refereeing is strictly confidential. Articles of 2,000 words or less may be considered for publication as a short note, in which case no separate introduction, methods, results and discussion are necessary. Short notes must contain references however, and acknowledgements may be made if necessary. Non-reviewed articles of popular or anecdotal nature will also be considered. The latter will be edited to conform to the style required.

Presentation

Write contributions in English, German or Afrikaans. Submit two clear copies of the manuscript, including all drawings, graphs, and photographs. All articles in German should conform to the "Neue deutsche Rechtschreibung". All articles must be in electronic format, preferably in a current version of MS Word, submitted on memory stick, disk or via e-mail.

Layout

The layout must follow the following sequence:

1. Title page with title.
2. Full address of the author (P.O. Box and email).
3. Both abstracts: Abstract to be in language of paper and second abstract in language of choice.
4. Keywords: Maximum 8.
5. Paper should consist of: Introduction, Materials and Methods, Results, Discussion, Acknowledgements and References.
6. Tables: Each on a separate page, not as part of the text.
7. Figures: Group together with captions, on separate page, not as part of the text.
8. Graphs: Send original printout on good quality paper as well as on disk/memory stick.
9. Curriculum Vitae: Please include a short author's biography with a recent photo.

10. References: References in the text should be cited as follows: ‘Mendelsohn and Roberts (1974) stated ...’ or ‘... (Mendelsohn & Roberts 1997)’, when giving a reference simply as authority for a statement. In the list, authors’ names should be typed in capitals as indicated below:
JANKOWITZ, W.J. 1983. *Die plantekologie van die Waterberg Platopark*.
Ph.D. thesis, University of the Orange Free State, Bloemfontein.
11. Tables: Keep tables to a minimum. The same data should not be duplicated in tables and graphs. Each table must be on a separate sheet and be numbered consecutively in order of appearance, using arabic numerals. Bear in mind the limitations imposed by the size of the printed page (A5).
12. Illustrations: Photographs, figures, drawings and graphs should be submitted in a separate file (not embedded in the text file) either as JPG or as TIF with a resolution of not less than 300 dpi or as good sized paper originals (we will scan them and return them to the author).

Manuscripts must be submitted to:
The Editor:
Journal c/o Namibia Scientific Society
P O Box 67
Windhoek
Namibia
E-mail: ceo@namscience.com

Reprints

Every author may receive 5 reprints of his/her full-length paper. These are free of charge. Kindly inform the Namibia Scientific Society about such a request prior to printing.



Felsgraffiti Ausgabe 28 Jetzt überall erhältlich

DAS INTERVIEW: BIRTE DEDIG
LITERATURWETTBEWERB 2021: MENSCHEN IN NAMIBIA
SYLVIA SCHLETTWEIN – UNRUND
INGRID KUBISCH – BANDAGIERT IN DEN KAMPF
JOHN KINAHAN: NAMIB – EINE REZENSION
VON JASMIN KÖTTING-BAUER



Delta Kindergarten - 1 – 5 jährige Kinder

Mit dem Delta Kindergarten, der 1984 ins Leben gerufen wurde, haben wir auch die kleinen Kinder in unserer Delta Familie aufgenommen. Die Kinder werden in fünf Altersgruppen eingeteilt. Sie werden auf altersgerechte, spielerische Art in die deutsche Sprache eingeführt und mit der deutschen Kultur vertraut gemacht.

Die fünf Gruppen sind wie folgt eingeteilt:

Mäuschengruppe: 1 bis 2 jährige Kinder // Krokodilgruppe: 2 bis 3 jährige Kinder

Bienengruppe: 2 bis 3 jährige englischsprachige Kinder, die Deutsch lernen

Elefantengruppe: 3 bis 4 jährige Kinder // Zebragruppe: 4 bis 5 jährige Kinder

Delta Schule Windhoek - Vorschulgruppe + Klasse 1 - 7

In der DSW werden in den ersten vier Jahren, beginnend mit der Vorschulgruppe bis zur 3. Klasse alle Fächer auf Deutsch unterrichtet, um die deutsche Muttersprache zu festigen.

Die vier deutschen Klassenzüge sind wie folgt eingeteilt:

Eine deutschsprachige **Vorschulgruppe** genannt **“Diddl Maus”** und jeweils eine deutschsprachige Klasse je Jahrgangsstufe **1, 2 und 3**.

Ab der **4. Klasse** wird nur noch auf **English** unterrichtet, das Fach Deutsch als Muttersprache und Deutsch als Fremdsprache wird durchgehend für **alle Schüler** von **Klasse 1 – 7** unterrichtet.

Delta Sekundarschule Windhoek - Klasse 8 – 12

Im Laufe der **7. Klasse** kann man sich an der **DSSW** für die **8. Klasse** bewerben. Die DSSW ist eine von fünf Schulen in Namibia, die als **Pasch-Schule** in Deutschland registriert ist.

Tel: 061 – 228 536

Fax: 061 – 220 916

info@delta-school.com

Delta Schule Windhoek
Postfach: 12010 Ausspannplatz

Ecke Dr A.B. May und Rev. Michael Scott Straße

A man in a white t-shirt and dark shorts and a young child in a black wetsuit are walking away from the camera into the ocean at sunset. The sun is low on the horizon, creating a warm, golden glow. The waves are gentle and white-capped. A large, semi-transparent white circle is overlaid on the right side of the image, containing the main text.

1 Preserve your legacy

Grow your investment and protect your family

To cater to your unique needs, Pointbreak Wealth Management, in partnership with FNB Fiduciary, foster a relationship built on trust and transparency. Don't leave what is important to chance.

Let us help you with:

- Planning ahead and managing your living estate
 - Connecting you to a Wealth Manager
- Investment planning, including offshore investing
 - Drafting your Will

pointBreak
wealth management

Real people. Real returns.

Tel: 061 - 225541

**Continental Building
Independence Avenue
WINDHOEK**



**Windhoek
optics**
cc.

Competence for Excellent Vision

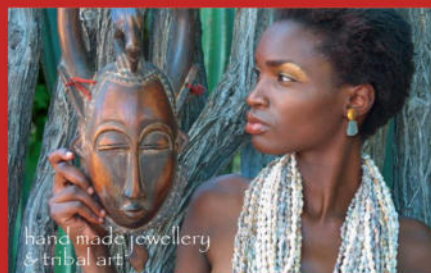
Windhoek Optics
go 

**On the road for
YOUR eyes!**



whkoptic@afol.com.na
www.windhoek-optics.com

A F R I C A N KIRIKARA.COM A R T & C R A F T



SHOPS & STUDIO
SWAKOPMUND

We are open 7 days a week

- Trendhaus at Otto Günther Courtyard
- Brauhaus Arcade

STUDIOS & GALLERY

KIRIPOTIB.COM

GUEST FARM

Home of African Kirikara

160 km south/east of Windhoek

23°19'36"S ◊ 17°57'12"E

☎ 081-1245268 or info@kirikara.com

SHOP & STUDIO WINDHOEK

- Bougain Villas Centre, 78 Sam Nujoma Drive