Different Histories of Buchu: Euro-American Appropriation of San and Khoekhoe Knowledge of Buchu Plants

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ABSTRACT

Buchu is a fragrant smelling South African fynbos shrub widely known and marketed as a traditional remedy of southern Africa's Khoisan herders and hunter-gatherers. It is also an important flavouring agent in commercial food manufacture. This article considers representation of buchu as a traditional remedy in relation to both extensive historical, botanical and commercial interest in the plants and recent and past Khoisan use. The Khoisan account is drawn from detailed ethnographic analysis and fieldwork carried out amongst Namibian Khoisan and northern Cape San. The paper tracks the arrival of buchu onto the European medical market and the subsequent misfit between European and American pharmaceutical representations of the 'true' buchu relative to Khoisan understandings of buchu. I propose that, like the Europeans, the Khoisan have engaged with buchu because of its distinctive odour and properties but, unlike Western appropriators of the plant, Khoisan relationships with buchu relate to smell as an agent of physical and mental transformation. The smell of buchu has been conceived by the Khoisan as a potent force with a role in healing, in perfume use and certain rituals.

KEYWORDS

Khoisan, buchu, colonial ethnography, smell

Environment and History **13** (2007): 333–61. DOI: 10.3197/096734007X228309

Buchu is a herbal medicine used primarily for urinary and kidney problems. It is also thought to be calming on the stomach, a good general tonic, and a useful hangover treatment. As current advertisements are keen to indicate, the use of buchu is derived from the practices of the Khoisan indigenous peoples of southern Africa, a category that includes historic Cape Hottentots and contemporary Khoekhoe and San or Bushmen.[1] In recent contexts, buchu is principally identified as *Agathosma betulina* although other species have been, and continue to be, referred to as buchu. Buchu is characterised by a strong and distinctive smell resultant from the secretion of volatile oils from leaf glands. The smell varies depending on the exact species. Smells range from orange-like to peppermint and camphoric.

Buchu became known amongst Europeans as much as three hundred and fifty years ago. Over the subsequent period it has persistently featured in the ethnography of the Khoisan and has enjoyed a remarkable passage from seventeenth century herb garden, to English medical drug, to a tonic manufactured in the USA, advertised around the world and sold by the proverbial car boot load. What I wish to examine is the appropriation of buchu by colonists, travellers, merchants and emergent biomedicine and its subsequent rejection and relegation to the status of a herbal medicine. Surprisingly, despite buchu's historic prominence, its precise identity has shifted over history and remains somewhat elusive. I identify and examine the multiple European and indigenous historical names that appear for buchu in different periods as indicators of tensions in the process of colonial scientific data extraction.

The history of buchu is an interesting one for what it brings to the history of economic botany, scientific travellers and the colonial construction of science. In particular it has something to add to recent analysis of 'noise' at the coal face of colonial bio-prospecting[2] and anthropological consideration of distinctive indigenous ways of thinking. Buchu history potentially leads to a number of important questions concerning the indigenous and 'Western' boundary of contact over a medicinal plant. A principal issue revolves around how accurately ethnographers of buchu have represented Khoisan ideas and practice over time. This leads in turn to further questions concerning possible similarities and differences in indigenous and biomedical understanding of medical properties and treatments. The contrast between the Euro-American history of buchu and indigenous use and understanding both highlights the partiality of the process of data extraction and draws attention to what seem appropriate ways of thinking about Khoisan relationships with buchu.

For reasons of expediency, I have not set out to produce a detailed indigenous history. What I do present, however, is a Khoisan historical outline with an eye to arguments for the continuity of practices and ideas.[3] The paper begins with a presentation of the earliest records of buchu and a reflection upon how these relate to commercial claims of historical Bushmen or Khoekhoe use. A preliminary analysis of this early Khoisan material sets up a later more detailed

account of Khoisan understandings. The next section moves chronologically through the introduction of buchu to Europe from the 1700s to the introduction of buchu into the mainstream European medical market place in the early nineteenth century. On the way, I examine settler knowledge of buchu around the same period. A third section engages with questions of 'authentic' buchu as identified by science and commerce and examines how the shape of first European contact with Khoisan has influenced European understanding of buchu. A final section picks up on earlier mentioned Khoisan use of *sâi* (*sā*) plants which seem intimately related to buchu and embed buchu knowledge and use in a wider Khoisan cultural context. This section draws heavily on ten months fieldwork carried out in Namibia in 2000 and 2001 and two months amongst the northern Cape San in mid 2006. In particular I examine the Khoisan role of smell in use of buchu and sâi and how this Khoisan understanding differs from European notions of perfume and scientific effectivity.

At the heart of this history of partiality lies a persistent failure by Europeans to recognise that they are dealing with a Khoisan category of use, not a Western one. The Khoisan category encompasses principally perfume and healing balm but also an associated notion of a spiritual and physical sedative and stimulant. The essential understanding of buchu seems to lie in its ability to pacify, awaken, attract and heal. The key to this understanding lies in the ability of smell to bring about physical transformations. Smell, breath, wind and the personal power of people all overlap in Khoisan thought as they do in epistemologies of other indigenous peoples. If a sick or strong smelling, or otherwise 'potent' person stands near someone else, the other person might become sick because of the movement of the essence of the potent person, as smell or wind, into themselves. Buchu smell moves into people and brings about specific effects in accordance with the context of use and what its smell represents to historically and culturally specific Khoisan peoples.

BUCHU – THE EARLY HISTORY

Numerous commercial enterprises seek to confer indigenous credibility on buchu use by emphasising its ancient San ancestry. Smith supports this assumption in his observation that Hottentot use of buchu was 'almost certainly taken over from the Bushmen'. Whilst this may be right, there is little clear evidence to support this claim.[4] The earliest references to buchu appear in the latter half of the seventeenth century and are part of a caucus of knowledge gathered from sailors and travellers familiar with the Cape. European distinction between Hottentots and San was not a regular feature of Khoisan ethnography until Lichtenstein's observations in the early nineteenth century,[5] and even in much later contexts notions of difference have remained controversial. It was, however, clearly with cattle owning Hottentots that European indigenous relations

were first established, and from this contact that early reports of buchu emerged. It was not until around the mid-eighteenth century that travellers penetrated significantly inland and began to furnish detailed reports of Bushmen.[6] On this basis it seems reasonable to claim that it was amongst Hottentots that buchu use was first encountered.

To work through the historical references of Hottentot, or Khoekhoe, buchu use from the seventeenth century to the present is beyond the scope of this article. However, what is known about Khoekhoe use does not change significantly from details presented in some of the earliest information and later accounts repeatedly draw on the early sources. There is also significant evidence to suggest continuity and stability of Khoisan healing ideas over time.[7] In view of this I examine some of the most influential early references to buchu as a way of providing a background to the details that have repeatedly featured across the colonial ethnography and shaped European understanding of buchu.

Possibly the earliest reference to buchu appears in a compilation of material published in Europe in 1668 by a Dutchman, Olfert Dapper. Dapper's authoritative account of Africa reflected a new ethnographic and proto-scientific opening up of the Continent including botanical exploration at the Cape. To briefly highlight the wider context of his account, a 1603 reference to Gouarus de Keyser stands as the first record of a plant collector at the Cape. The earliest mention of a Cape plant concerns the seaweed *Ecklonia maxima* and the first Cape plant conveyed to Europe was *Protea neriifolia*, in 1605. By the later seventeenth century Cape plants were already featuring in European botanical collections, including that of Paul Hermann (1646–1695), a German medic and later director of the botanic gardens at Leiden. [8]

Dapper's sources included information from the first Dutch voyage to the East Indies that passed by way of the Cape in 1595. It is possible that Dapper's buchu details arose from this voyage, but Smith suggests Dapper's information on buchu was 'almost certainly' obtained in 1661 from a visit by Hessequa Hottentots to van Riebeeks fort. Details of the customs of the visiting Hottentots were recorded by Dapper's correspondent in the van Riebeeck administration.[9] Regardless, however, of the exact origin of Dapper's source, buchu only begins to regularly appear in European accounts in the second half of the seventeenth century. Concerning buchu, Dapper simply noted that Hottentot women strewed 'boggoa' over their heads.[10] Shortly after Dapper, Ten Rhyne (1686), a Dutch physician of the East India Company, recounted details gleaned from a stopover at the Cape on the way to the East Indies, including that Hottentots smeared themselves with oil and animal fat and their heads with the ash of 'bouchou'. This is one of the earliest references to buchu being smeared on the body alongside sheep fat.[11]

In 1695 Johannes Grevenbroek, another Dutch East India Company employee and later free burgher at the Cape, provided a more informative account of buchu, and one very probably drawn from more extensive first hand observation.

Grevenbroek mentions 'bochu' in two contexts. In the first he relates how a 'convalescent' is smeared by a 'priest' with sheep fat and sprinkled with 'bochu' powder; 'next the entrails of the animal are plaited and hung round his neck like an amulet; then his blanket is anointed with fat and sprinkled with bochu, and at last he is let go'.[12] Elsewhere Grevenbroek mentions 'bochu' having being rubbed onto the skin together with fat, 'as a protection against the danger of sun, cold or disease'.[13]

In 1706 a mathematician, Peter Kolb, was sent to the Cape by his Prussian patron to research astronomical and meteorological phenomena. Kolb's subsequent account has been highly influential to the writing of Khoekhoe history. It was, he claimed, based on years of contact with different Hottentot groups. Unfortunately, following the ethnographic conventions of his day, he left no account of his travel details and hence the provenance of his contacts. Kolb's contribution to colonial familiarity with buchu is twofold. Firstly, he popularised an early scientific name for buchu, *Spiraea Africana odorata, folis pilosis*, which was the name attributed to buchu around 1692 by Oldenland, one time master gardener at the Dutch East India Company Gardens at the Cape settlement.[14] Secondly, he provides us with more than just passing reference to Hottentot buchu use. In one instance he related an operation in which a testicle was removed and the empty testicular sack was stuffed with a mixture of sheep's fat and powdered 'salutary herbs, particularly the Buchu'.[15] In another, Kolb recorded that when a Hottentot was seized with pain the physician took the caul of a sacrificed sheep and, 'having powdered it with Buchu, twists it in the manner of a rope, and hangs it about the patients neck' saying, 'You will be better now …'[16]. Kolb additionally observed that newborn babies were smeared with sheep's fat or melted butter which was allowed to soak into the child's pores. Once dried the baby was powdered in buchu from head to foot to form a crust.[17]

Elsewhere again, Kolb related that leaves of buchu or dacha were applied to a poisoned arrow wound, following the rubbing on and swallowing of a mixture of snake venom and spittle. The leaves, he suggested, aided in a cure within months.[18] For headaches he reported that Hottentots often shaved furrows through their hair and applied powdered buchu 'which, they believe, does not a little contribute to remove the pain'.[19] A final reference points to the use of powder and infusions of buchu alongside wild sage, wild figs, fig leaves, garlic and fennel, as treatment for 'most other inward ailments'.[20]

In contrast to these Hottentot sources the earliest reference to Bushmen use of buchu seems to come a century later in an account by Wikar, a hunter who lived north of the Orange River in the 1770s. In 1778 Wikar related that buchu made from camel thorn wood was used in a 'marriage' ceremony he encountered at a bushman kraal.[21]

A more extensive early account of buchu can be found in the journals of a soldier traveller, Robert Gordon, concerning his southern African expeditions into the interior between 1777 and 1786. Gordon noted buchu was rubbed on

ostrich feathers that were set in stone animal traps by Bushmen. Elsewhere he observed 'Bushmen hunting stones', on which were placed 'what resembled the heads of people, smeared with buchu'. Around the Doring River area he further observed, 'an old woman practising magic'. She was snorting out 'a devil or evil spirit' from her son, and whilst doing so rubbing his stomach with buchu. She rubbed buchu 'into the noses of several women who were sitting there as well.'[22]

The next clear references to Bushmen and buchu do not appear until the later nineteenth century. From Bleek's and Lloyd's Bushmen research we learn that healers of the Cape /Xam had buchu rubbed onto them to 'make their arteries lie down' when they were suffering from torments associated with the healing process.[23] /Xam also used buchu to pacify the 'rain-bull', a creature of their imaginative twilight world. The rain-bull could be captured if men who went to seize it were smeared in buchu,'If the bull had smelt buchu, it would have been calm, and gone quietly without struggling'.[24]

INTERPRETATION

Recent accounts of buchu emphasise the credibility of the drug by pointing out that Khoekhoe have used buchu for centuries to treat all kinds of ailments, including, rheumatism, strains, bladder and stomach complaints. They additionally sometimes note the historic use of buchu as a perfume. In their authoritative account of medicinal plants of South Africa, Van Wyk and Gericke observe that:

> A.betulina (and several related plants) were used to anoint the body (after mixing the powdered, dried leaves with sheep fat), probably both for cosmetic reasons and as antibiotic protection.[25]

On the basis of the indications of buchu use given above these various claims seem to be reasonable. Yet at the same time there is a deep distortion at work which is understandable at a popular level but feeds insidiously into history, leading to greater partiality and misrepresentation further down the line. There is the normative assumption that healing and perfume are words and ideas that can be used interchangeably not only through history but across cultural divides. As indicated in the above examples, whilst buchu clearly does have a role in healing people, this is not quite the same healing known to biomedicine. Despite some formal resemblance between Khoisan and Western uses of perfume, poultices, oral herbal remedies and ointments – antibiotic or otherwise, there remain fundamental differences or tensions in the understanding of cause, effect and desired outcome. If the understanding of illness, how it is caused, spread and healed is different there is historical slippage in justifying parity of current European medical use with past Khoisan use. The relationship between healing and perfume, which holds much of the context of Khoisan use of buchu in heal-

ing, has no direct equivalent in current European understanding of buchu – a plant used for healing *and* as a perfume. Although similar ideas have existed in European history, such as in aromatherapy which draws on an overlap of smell and healing, Khoisan understanding remains distinctive.

Collectively early ethnographic references to buchu reveal the sort of contexts in which colonists and travellers were introduced to the plant(s). Given the relatively shallow nature of ethnography and travel accounts that characterise colonialism well into the nineteenth century, it is perhaps not surprising that details of buchu use are not extensive. There is, however, enough information to at least begin to reflect upon historical Khoisan as opposed to colonial notions of buchu. In the absence of an indigenous historical literary account, a locally informed reading back that draws on what interdisciplinary evidence there is, including linguistic, archaeological, historical and anthropological, remains the only option. One factor that helps historical and recent understanding of buchu use is an overlapping history of references, starting with Kolb, to 'Saab', sā or sâi plants which point to buchu not being so much a distinct species, but an indigenous relationship with certain sorts of plants in certain sorts of ritual and healing contexts. I return to this issue in the latter section of the paper.

In terms of what we can glean from the Hottentot sources so far referred to, it would be easy to think of buchu as having been sprinkled on bodies largely to counteract the smell of fat and to make people smell attractive. That the picture might be more complex is suggested by the internal healing power of buchu and fat evinced in Kolb's testicle packing account, in buchu use for poisoned arrow wounds and for headaches and inward ailments. The key to understanding these multiple contexts of buchu use, which I explore later, lies in the transformation of personal attributes. The use of buchu with or without fat confers powers or attraction between a person and the wider world and, depending on the context, brings healing or other potency.

Working with these ideas we can also begin to tentatively unravel the various accounts of Bushman buchu use which articulate the same fundamental understanding of buchu in relation to transformational states and the interconnection of potency and illness. How buchu used in an ostrich feather trap might relate to perfume use, begins to make sense if we think in terms of connections between hunters and animals. Buchu on the feathers may have served to transform or disguise the nature of the trap or to attract or reassure potential animal victims. On the skull, buchu might have been a ritual means of opening a channel between the dead and the living, catalysing the dead into vital participation, although this latter point in particular must remain purely speculative. The phenomenon of rubbing buchu under the noses of participants in a healing session is a feature of recently observed Bushmen dances. In this context, and probably similarly in Gordon's encounter, the buchu is said to 'open people' up. Rubbing buchu on those gathered at healing dances makes them receptive to healing forces and serves as a mechanism of ritual binding.

The /Xam uses of buchu point towards an understanding that the smell pacifies animals. This idea is linked to organisms lying down in repose, which in turn is linked to arteries or organs that are over-excited needing to lie down.[26]

The historical points to recognise are, firstly, that buchu use seems as much a 'Hottentot' phenomenon as a San one over the colonial period and, so far, there is no evidence to justify claims to a purely San origin. Without archaeological evidence, there is no easy way of moving buchu history beyond the colonial ethnography. Furthermore, early Khoisan use of buchu did concern vaguely referenced illnesses, but neither they, nor the way buchu worked, can be assumed to resemble current notions of illness and cure. At the very least it seems a historical disservice to justify buchu use in the current herbal medical market with such blandishments as that included in a current website, which states that buchu was 'first used by the San to make tea'.[27]

BUCHU ENTERS EUROPE

As colonial familiarity with buchu grew, attempts were made to cultivate the plant back in Europe. These early attempts were, however, not indicative of medical interest in the plant as much as a wider imperial botanical curiosity. As the eighteenth century progressed there was increasing interest in *Diosma*, a genus that included buchu species. Only by the 1820s, however, did buchu begin to enter a popular medical market.

The first apparent mention of buchu plants cultivated in Europe occurred in 1706, although the plants were referred to as *Diosma*, meaning 'divine smell', and not buchu. In Amsterdam Casper Commelin described three species of *Diosma* which were allegedly grown from Cape seeds in the University's medical garden. Smith however observes that these were the exact same species that were illustrated at the Cape in the *Codex Witsenius* in about 1692. This, therefore, raises the question whether Commelin's description was copied from the *Codex* or truly related to European buchu cultivation.[28]

In 1753 Linnaeus described a number of *Diosma* specimens that he had been sent a year previously by Tulbagh, Governor of the Cape colony. Linnaeus did not, however, mention an indigenous name or use for the plants.[29]

In Miller's *The Gardener's and Botanists Dictionary*, 1752, sixth edition, he included three varieties of *Diosma*: *Diosma foliis linearibus*, *D. foliis fabulatis acutis* and *D. follis fetaceis acutis*. Miller observed that the first of these had been long known under the title *Spiraea Africana odorata foliis pilosis*, or sweet scented African Spiraea. *Diosma* did not feature in Miller's earlier 1743 edition although *Diosma hirsuta* was cultivated at the Cambridge Botanic Gardens in 1731.[30] Miller indicated that *Diosma* came to England via 'curious gardens in Holland'.[31] For Miller not to have included *Diosma* in 1743 suggests that the plants were very new arrivals to the botanical gardens of Britain and that the

Cambridge *Diosma* was probably one of the earliest to have been cultivated in Britain, if not Europe. In the 1759, seventh edition, of his *Dictionary*, Miller extends the above species count with a fourth, noting that other species had been enumerated but only the four were found at that time in English gardens.[32]

British familiarity with *Diosma* grew over the later eighteenth century. In 1766 there were five species of *Diosma* cultivated in Dr. Coyte's Botanic Garden at Ipswich.[33] At the Royal Botanical Gardens, Kew, eight species of *Diosma* were grown between 1759 and 1790.[34]

Between 1772 and 1774 Thunberg, a student of Linnaeus, undertook a series of expeditions that represent the first time a university trained botanist specifically explored the interior of southern Africa with the intention of collecting and identifying plants.[35] In Thunberg's *Flora Capensis* (1818), he includes *Diosma betulina*, noting its strong smell and its use by the Hottentots in the same manner as *Diosma crenata* and *Diosma pulchella*, the latter of which he identifies as 'Hottentottis Bukku'. Thunberg observed that the Hottentots anointed their naked bodies with an intolerably smelly mixture of sheep fat and powdered *bukku*.[36] In the scientific traveller Sparrman's 1786 account of his recent Cape travels, he similarly reported that various species of *Diosma* were used by the Hottentots as 'bucku' although he did not emphasise the role of *D. pulchella*.[37] By the posthumously published revised 1797 edition of Miller's dictionary, no less than 19 species of *Diosma* were included, including the newly mentioned '*Diosma crenata*/*Hartogia betulina*' and '*Diosma pulchella*'. The dictionary quotes the same information as that included by Thunberg on *D. pulchella* as a powder called 'Bucku', used by Hottentots to anoint themselves. The dictionary includes extensive details on the means of propagating the plants but nothing related to medical usage.

SETTLER KNOWLEDGE OF BUCHU

By the early nineteenth century Cape settlers were clearly highly familiar with buchu. Sparrman noted that buchu and dacka 'were known both by the colonists and the Hottentots to be as efficaceous as they are common'.[38] In Burchell's account of his southern African travels, commenced in 1810, he drew attention to Hottentot use of 'Boekoe-azyn (Bookoo vinegar)' as a wash to clean and heal wounds. He commented that Hottentots and Boers had long used buchu as medicine in vinegar form or alternatively infused in brandy. The early ethhnography suggests that such settler medical knowledge of buchu came out of a wider context of familiarity. Buchu was a part of pragmatic fat application to protect the body from the elements. It was also a 'salutary herb' and one of a number of herbal remedies used by Hottentots who were often thought skilled in such matters. At the same time though, buchu was also an element in superstitious rituals observed amongst Hottentot savages. Despite these multiple identities

of buchu, by the time of Burchell's travels buchu had clearly been long since adopted and adapted by settlers and buchu in vinegar or brandy become a folk medicine used by both Africans and settlers. In its colonial folk guise buchu was a remedy thought valuable as a general tonic and antiseptic as much as one for specific conditions. Demonstrating its general applicability, Burchell used buchu vinegar for treating a wrist, the hand of which had been blown off by a shot-gun.[39]

It is perhaps indicative of the inherent flexibility of folk knowledge that settlers used buchu as a broad-spectrum tonic and antiseptic whilst probably aware of its more superstitious applications amongst Hottentots. Similarly, a flexibility in the folk knowledge of what was and what was not buchu, contrasts with the reductionism of some ethnographers, scientific travellers, botanists, doctors and medical merchants keen to identify a 'real' buchu, with an active principal, under a precise scientific name.

Kolb had pinned Oldenburgs *Spiraea Africana odorata, folis pilosis* label to buchu, which by Miller's 1752 *Dictionary* was recognised as *Diosma foliis linearibus*. In Thunberg's listing and Millers 1797 *Dictionary* buchu is equated most clearly with *Diosma pulchella*. Sparrman, on the other hand, pointed more to the fact that a number of *Diosma* equated to buchu. Burchell similarly noted that buchu vinegar could be made with the leaves of numerous kinds of buchu, such as *D. serratifolia*.[40]. Furthermore he, like the traveller Andersson, reported that plants from the Croton family were also referred to as buchu.[41]

The lack of species specificity suggested by Sparrman and Burchell seems reflective of ideas of buchu amongst colonists of the period. Smith identifies a wide range of buchu plants known to nineteenth century Afrikaaner settlers. Given the prolonged use of buchu by this time, it is highly likely that many of these names reflect earlier settler familiarity. Amongst many examples Smith includes *boegoe-Ankerkaroo*, *boegoebossie* and *boegoekapok*. Smith distinguishes a difference between names indicative of pleasing or medicinal qualities, such as *anysboegoe* and *goeieboegoe* and those considered unpleasant, including *bitterboegoe* and *knoffelboegoe*. This application of the word *boegoe* as suffix or prefix to very different plants might be thought to indicate an Afrikaans tendency to use 'buchu' in a loose generic sense for plants that smell similar or are notable for their smell. Although buchu plants are predominantly smelly this is not, however, always the case. In 1854 Moffat recorded that Doornbergen Bushmen and Bastars used non-aromatic plants, *haasboegoe* and *wolfboegoe*, mixed with fat, as a 'cooling substance' for smearing on their cheeks.[42] This link between plants used by Bushmen and Bastars in indigenous 'cooling' contexts with plants labelled 'boegoe' by colonists, suggests that settler principals of naming may be a good reflection of indigenous use and not a purely Afrikaaner naming process based on ideas of similarly smelly plants. This link between buchu plants and plants used in certain indigenous contexts, as opposed to buchu being plants of a specific species, is born out in the ethnography of sā plants.

From this early period we can, therefore, begin to detect a tension between a scientific desire to identify the exact plant of Hottentot Buchu alongside an awareness that other plants were also used. In the commercial markets of the nineteenth and twentieth centuries chemical claims for the most efficacious buchu bind to commercial claims of authentic Khoisan buchu, whilst, at the same time, merchants draw on a broad range of buchu like plants to feed the market.

BUCHU AND THE EUROPEAN MEDICAL MARKET

Although knowledge of buchu in a medical capacity seems to have been commonplace in the Cape before the nineteenth century it is not clear that this knowledge was known in Britain outside the bounds of travel books, despite indications that the Dutch had been cultivating medicinal buchu. Burchell had presciently observed that the long known virtues of *Diosma* would surely become a part of the *materia medica* of Europe.[43] He was right, but the influence came not directly from dissemination of ethnography but from lines of scientific communication that emerged in the context of colonial expansion. Virtually all the *Diosma* that would later be identified in Britain as medically useful buchu were cultivated in British botanic gardens by the late eighteenth century. The Cambridge garden cultivated *D. crenata* in 1774 and *D. pulchella* in 1787 and Kew Gardens, *D. ovata* in 1790.[44] But it was from 'new information' and a shipment of 'new plants' from the Cape that British medical interest in buchu first arose.

Buchu first appears in a medical context in Britain in 1821, when 'a scientific gentleman residing at the Cape of Good Hope', sent the publishers of *The Gazette of Health* 'a considerable quantity' of the leaves of '*Diosna* [sic] *Crenata* ' The *Gazette* editor, Dr R. Reece, commented that, as the provider of buchu 'wishes the leaves to have a fair trial in the country, a quantity of them is deposited at the Medical Hall, 170, Piccadilly with directions for supplying the faculty with them at a very low price'. The leaves were sent to England with the information that in infusion they were an effectual remedy for gleet, mucous discharges from the bladder, flour albus, rheumatism and gravel.[45] A likely contender for the Cape dispatcher of the leaves is Joseph Mackrill (1762–1820), an English born medical doctor resident in Cape Town at that time.[46]

In subsequent articles Reece recounted details from a further correspondent who both corrected the spelling of *Diosma* and reported that 'natives' at the Cape commonly used an ointment of powdered buchu leaves and grease. Publication of these details indicate that Reece had not been previously aware of Thunberg's or others' familiarity with buchu. Reece went on to elucidate that the Dutch were the first to use buchu as a medicine in Europe. It was, however, from one doctor to another, from colony to metropole, that buchu as medicine was first introduced to the British medical market and subsequently the global market.

Following tests of the leaves that far exceeded Reece's expectations, he published further findings in later additions of the *Gazette* and included detailed accounts of the uses of buchu in his popular *Medical Guide*.[47] His Guide proclaimed that buchu was useful for a host of genito-urinary problems, bowel and prostate afflictions and as an external application for contused wounds and rheumatics. In his 1833 edition, he identified *Diosma crenata* as the buchu plant most esteemed for its medical properties.[48]

This introduction of buchu to the British medical market was allied to increased buchu interest back in South Africa and contributed to a considerable new demand for buchu. By 1826 Lord Somerset, Governor of the Cape, observed that the medical demand for 'Boekhoo' was potentially of great benefit to the interests of the Cape Colony, but to meet the possible demand the plant must be protected.[49] Further demonstrating the contemporaneous popularity of buchu an anonymous note in the Cape *Commercial Advertiser*, 1827, reveals that Moravian missionaries at Genadendal sent *Diosma crenata* leaves to Madras and Calcutta, recommending them on the basis that local Hottentots used them as a remedy for intestinal colic pains.[50] Further testament of the growing prominence and economic profile of buchu is its inclusion in Dr Pappe's *Florae Capensis Medicae Prodromus* which was an expanded commentary of the plants displayed by a South African drug company at the Great Exhibition in London in 1851. Pappe's account of *D. crenata* identifies the active principal of buchu as the aromatic oil 'Diosmin' which has 'a particular smell, and a slightly astringent, bitter, taste'. This focus on Diosmin followed earlier pharmaceutical interest in buchu as indicated by research published in the *Archiv der Pharmazie* 1826. In England the *Penny Cyclopaedia* (1837) attributed pharmaceutical analysis of the leaves to 'Cadet de Gassecourt' and specified that 'Brandes considers the extractive to be peculiar and terms it Diosmin'.[51]As Pappe's notes on buchu suggest, the range of ailments supposedly amenable to buchu treatment rose incrementally with the profile of the drug. In addition to the maladies previously mentioned, Pappe noted buchu had been prescribed for cholera morbus.[52]

By the mid-nineteenth century buchu based medicines started to become extremely popular in the USA, particularly as the active ingredient in 'Helmbold's Fluid Extract of Buchu', first advertised in 1850. H.T. Helmbold, a retail druggist based in Philadelphia and New York, was a thrusting business man with big ideas. Although he was declared bankrupt by 1872, his 'Extract' continued to be manufactured by his brother for a number of years. In 1869, 1870 and 1871 he purportedly spent $500,000, in each year, on buchu marketing and at one stage his income from buchu was estimated around a million dollars per annum. His 'Extract' advertisements appeared across North America, in Europe and Asia, on sites ranging from inaccessible looking Rocky Mountain faces to the pyramids of Egypt. The label on his product claimed use of the fluid, as 'an invaluable remedy' used by 'the United States army, and in all the state hospitals and public sanitary institutions, as well as in private practice'.[53] In 1878 Helmbold revealed

his winning formula to one of his managers. For twenty five gross – each bottle held about three and a half fluid ounces: Medley (short buchu, 2 parts, uvarjasi [?] 1 part) 63 lbs.12 oz.; Cubebs..21 lbs.; Liquorice root-cut..7 lbs.; alcohol 18 gal., 9 fl.oz.; caramel 10pts; molasses 5 pts.; oil (peppermint) 8 fl. Drams; water 112.5 gal. The peppermint flavour was used to give the 'highly concentrated compound' a buchu like flavour.[54] Helmbold shared a vigorous buchu market with other druggists including the manufacturers of 'Buchu-Paiba', E.S. Wells Company of Jersey City, New Jersey.[55]

Buchu maintained prominence on the US and British medical markets from the heady days of Helbold's worldwide touting to well into the twentieth century. Buchu was recognised in the U.S. and British Pharmacopeias and derivative compounds and their uses were listed in a host of pharmaceutical publications and herbal guides including the *American Journal of Pharmacy* (1888), *King's American Dispensatory* (1898), *The British Pharmaceutical Codex* (1911) and *The Working Man's Model Family Botanic Guide* (1924). Continuing popularity of buchu into the twentieth century is further evidenced by its inclusion in the *Herbal Manual: the Medicinal, Toilet, Culinary and other Uses of 130 of the Most Commonly Used Herbs* (1936) by Harold Ward, a British medical herbalist.

Over the nineteenth and twentieth centuries the story of buchu becomes increasingly complex as buchu disappears into a mass of synonyms and vernacular references which are indicative of both competing voices in the construction of science and the continued popularity of buchu at a folk and household level. From the early nineteenth century onwards, a key, although still not consistent change in naming, followed the influence of botanist Carl Ludwig von Willdenow (1765-1812), who promoted replacement of the genus *Diosma* by *Barosma*, meaning 'heavy smell' in Greek.[56] To add to the confusion, in 1950 Pillans published justification for further revising the genus *Barosma* to *Agathosma*.[57] Despite this change *Barosma* continues to be popular to the present day.

The commercial story of buchu over the nineteenth and twentieth centuries predominantly concerns short buchu (*Barosma betulina* or round leafed buchu), long buchu (*B. serratifolia* or narrow-leaf buchu) and oval buchu (*B. crenulata* or oval-leaf buchu – synonyms: *Diosma crenata*, Linnaeus; *Diosma odorata*, De Candolle). In the light of extensive chemical testing around the turn of the nineteenth century[58] *B. serratifolia* and *B. crenulata* were both expunged from the British Pharmacopoeia, the former by 1898 and the latter by 1911.[59] *B. serratifolia* was deemed particularly inferior to both *B. betulina* and *B. crenulata* because it was found not to contain diosphenol which was considered an important constituent.[60] Over a similar period numerous substitute plants were tried on the market in response to shortages of 'real' buchu and competitive merchants wishing to improve, consolidate or expand their product range. By 1900 available alternatives had included *Diosma vulgaris, Diosma succulenta*, *Barosma pulchella, Barosma Eckloniana* and *Adrenda fragrans*.[61]

In 1910 two successive short crops of buchu in South Africa, which remained the only source, had led to unprecedented price rises of short buchu to 6s.5d per lb. and UK merchants were finding it hard to compete with the American demand. The problem of supplying *B. betulina* in Britain was exacerbated by US customs making it difficult or impossible to import long and oval buchu into the States. Only good quality short buchu was readily admitted.[62] This led to a particular shortage of short buchu for the British market.

The continuing overall demand for buchu was such that during World War I experiments were conducted at the National Botanical Gardens, Kirstenbosch, to assess the viability of commercial cultivation.[63] In Cape Town in 1920 prices ranged from 9s. to 11s. per lb, a strong price reflecting still growing demand in the US and additionally in Australia. In 1921 an anonymous contributor to the *Pharmaceutical Journal* observed that many colonists were keen to cultivate medicinal plants, and particularly the profitable buchu. The Kirstenbosch gardens assisted in the economic cultivation of buchu by supplying surplus seeds to enquirers whenever possible.[64]

By 1953 buchu had been excluded from the *British Pharmacopoeia* on grounds of it having been superseded by better drugs. The 1954 *British Pharmaceutical Codex* noted that *B. betulina* was still imported into Britain alongside other species which were offered as buchu, the most important of which was *B. bathii*.[65] Buchu continued to feature in the *British Pharmaceutical Codex* until 1963.[66] Since the 1960s buchu has maintained a presence only in pharmacopoeias that include herbal remedies, such as the *Extra Pharmacopoeia* (1967).[67] Buchu features in both the *British Herbal Pharmacopoeia* (1990)[68] and its companion the *British Herbal Compendium* (1992).[69] In terms of the recent regulatory status of buchu, in the 1990s buchu featured on the UK General Sales List, was accepted for specific indications in France and permitted as flavouring by the Council of Europe and the US administration.[70]

'REAL' BUCHU

Two aspects to the story of buchu assimilation help us better understand the processes and transformations of this indigenous knowledge through history. The first of these concerns scientific and commercial desires to identify and promote the real or best buchu. That this story has inconsistency in naming and species selection points to the mechanism of the construction of science. The second concerns how the structure of colonial ingress into Khoisan culture, through certain southern Cape Hottentot groups, has distorted images and understanding of Khoisan buchu relationships.

Thunberg emphasised *Diosmas betulina*, *crenata* and *pulchella* as buchu plants with *pulchella* seemingly the most esteemed. *D. pulchella*, which although its smell is distinctive strongly resembles *betulina*, later drops off the radar in

the commercialisation of buchu which instead includes *serratifolia*. The first medical buchu imported to Britain was *Diosma crenata* which is also very similar to *betulina*. Over the nineteenth and twentieth century *betulina*, *crenata and serratifolia* vied for position as the 'true' or most efficacious buchu. Harvey and Sonder suggested in their influential 1885 *Flora Capensis* that 'Buku' was a referent to a number of Cape species, 'but *Barosma* crenulata is considered to possess the medical virtues of the tribe to a stronger degree than others'.[71] But despite Harvey and additionally Pappe having identified *B. crenulata* as the primary buchu plant it was *B. betulina* with its stronger Diosmin content that was in demand for medical preparations in the US. As the twentieth century progressed *B. betulina* gradually began to take precedence over *crenulata and serratifolia* as the primary buchu plant.

Where accounts of buchu become historically distorted becomes evident in claims concerning buchu such as the following made on a current website: 'Best known is the real buchu, *Agathosma betulina*, which is widely used in medicine.'[72] What, however, does 'real' mean – that *A. betulina* was most important to the Khoisan and that the link between indigenous buchu and a precise species had been made and is consistent? The evidence clearly reveals the fallacy of these assumptions. The predominance of *A. betulina* is contingent upon European identification of efficacy. This is immediately evident when we recognise that the earliest professional botanical evidence, from Thunberg, prominenced *D. pulchella* over *D. betulina*. Focussing on *A. betulina* draws attention away from the different phases and inconsistencies of European understanding. It also suggests that real Khoisan usage should be fixed at some time and at some place, around the south western Cape, where Europeans first encountered Hottentots.

The scientific name variations, including changing of the genus, species synonyms, and preferences in the construction of scientific labelling, such as *B.crenata* versus *B. crenulata* are principally revealing of competing scientific and commercial voices. If one further considers different spellings of 'buchu', one can flesh out a broader account of how indigenous knowledge moves from its shifting indigenous contexts into the wider world.

Published variations for buchu include:

- boggoa (Dapper, 1668)[73]
- puchu (Schreyer, 1669)[74]
- bouchou (Ten Rhyne, 1686)[75]
- bochu (Grevenbroek, 1695)[76]
- buchu (Kolb 1719)[77]
- pucku (Bövingh, 1708)[78]
- bugga (Buttner, 1725)[79]
- buku (Thunberg 1773)[80], bukku (Thunberg, 1818)
- boegoe (Wikar 1779)[81]
- bucku (Sparrman, 1786)[82]

boeghoe (le Vaillant, 1791)[83]
buckee (Percival, 1796)[84]
bookoo, buku, boekoe (Burchell, 1824)[85],
boekhoo (Records of the Cape Colony, 1826)[86]
bu□u (Hahn, 1881)[87],
booko (Wood, 1918)[88]
p/nkaou: two Nama varieties, d/nhora or d/khonsa or Haas buchu and p/kabourie (Laidler, 1928)[89]
borgoe, bergboegoe, Fontein-boegoe, Olifantsboegoe (Watt and Breyer-Brandwijk, 1932)[90]
boochoo (http://www.herbsorganic.co.za, 2005)[91]
bugu (http://www.beneforce.com, 2005)[92]
boechoe, boekoe, buccho, bucchuu, bucco (unprovenanced seventeenth and eighteenth century sources listed by Smith)[93]

International variations include:

boegoe (Afrikaans)
ibuchu (Xhosa)[94]
bucco (Spanish, French, Dutch)[95]
bukko (Italian and Danish)[96]
bucku, bukko (German)[97]
õli-bukopõõsas (Estonian)[98]

The variety apparent in this list is striking but seems more understandable when one considers the factors at work in naming. Anthropologists have distinguished flexibility of ideas as an intrinsic feature of historical and pre-historical Khoisan culture. When one considers variation in dialects encountered by ethnographers in different regions, alongside this flexibility, such variation becomes less surprising. Yet in addition to this one must also take into account both the transformative role of specific translators and the lack of consistency in early European national and international spelling, to say nothing of spelling Khoisan dialects.

The second factor of importance to understanding the assimilation of buchu concerns how notions of real buchu or the role of buchu have become predominantly associated with the geographical and cultural contexts in which buchu was initially discovered. Historical partiality has encouraged notions of Cape Khoisan knowledge as the original Khoisan knowledge which distilled out in somehow less virtuous forms to other Khoisan. Burchell may have encouraged this situation with his suggestion that 'in the countries lying beyond the geographical boundary of that genus [*Diosma*], other plants of various genera are, of necessity, made use of'.[99] 'Of necessity' suggests hardship in the absence of better quality or more suitable alternatives. Smith seems to have fallen prey to this distortion in his observation that: 'Beyond the distributional boundaries

of the Diosmeae, the common name has been applied to a number of other aromatic species which were used as a body perfume by Bushmen, Hottentot and Bastard tribes'.[100]

The transition from plants first identified at the Cape under a broad name of buchu to essentially *Agathosma betulina*, with provisos that other plants might be used, in a sense suggests that all Khoisan might seek out and use *A. betulina* unless it is unavailable, in which case they use another similar plant. This is interesting because it conflates first European arrival at the Cape with discovery of a Khoisan population who subsequently, through their primacy of 'discovery', are promoted in history as somehow original Khoisan. This has led to an often implicit ethnographic message that buchu is principally a Cape phenomenon and in its 'correct' Cape manifestation relates to *A. betulina* and any use of non *betulina* plants beyond the Cape is somehow shadowy and less pure knowledge. The implied usage of less effective plants must, however, be recognised as a result of European bioscience having privileged the scientific effective properties of *A. betulina*.

Whilst it may well be appropriate to associate the word 'buchu' with southern Cape populations, as we have seen plants from beyond the early contact zone, the southern Cape, historically carried an Afrikaaner 'buchu' label, suggesting that they too may have been used in a 'buchu' manner by local indigenous groups. In 1777 Gordon observed that the 'Geissiqua people [...] sat pounding red buchu from camel-thorn bark'.[101] This again suggests that beyond the southern Cape non 'buchu' plants had a role as buchu. Certainly in recent contexts the term buchu is used by Khoisan at least as far north as Namibia's Walvis Bay and is not tied to plants of the southern Cape. My fieldwork indicates that Khoisan from the northern Cape upwards use plants known as sâi (or sā) in a category of practice that compounds ritual, healing and perfume and overlaps with the way buchu is and has been used elsewhere. These plants have a long history of use. Buchu seems therefore to be a southern Cape variant of the broader buchu/sâi cultural phenomenon. Earlier ethnographers equally seem to have recognised overlaps between buchu and sâi.

Following Smith (1966), van Wyck and Gericke suggest the name San may be derived from Bushmen applying perfuming 'San, Son or Sab' plants to the body. Whilst the claim may be hard to sustain they make the observation that these Khoi words originally referred to the aromatic *Pteronia onobromoides* (family Asteraceae) that was used as a perfume and, furthermore, that the meaning later shifted to any shrub.[102] Shearing observes that *Pteronia adenocarpa* is known as 'Boegoekaroo',[103] and other commentators again include *Pteronia erythrocaetha*[104] as buchu. Again, the evidence is unclear but at the very least suggests, coupled with wider links between *Pteronia* and buchu, that variously termed sâi or sā plants relate to plants that overlap with buchu in name and perfuming role.

SÂI AND BUCHU, A SHARED HISTORY

As with buchu a history of sâi can be used to highlight the tensions and the process of colonial data extraction. At the same time the history adds to understanding of the context of buchu.

From the early eighteenth century Kolb noted that *Saab* was used 'to acquire greater swiftness of foot'.[105] Being 'swift of foot' was a classically received exoticising epithet common in seventeenth and eighteenth century travel accounts. Nonetheless, the suggestion is that there is more to *Saab* than simply smelling good.

Francis Galton's 1850 diary of his travels across central South West Africa presents a later reference to *sāāb*. His entry demonstrates a nineteenth century interest in the useful and a different notion of sāāb as a general reference to powders.

> Chou wāb, […] or better khou waap is the name of the herb the Namaqua powder and use as scent, it may be quexonum? the gun-resin? spoken of in the admiralty manual..
>
> They call all their powders sāāb [continuous hyphen over both 'ā' 's]; one sort is made from the inner peel of the coffee Chou [?] tree one which they mix with the Khou waap seems to be a lichen? They are mixed in the specimens I have.[106]

Galton's notes demonstrate the centrality of the commercial eye to colonial travel. The manual he referred to may well have been *A Manual of Scientific Enquiry; Prepared for the Use of her Majesty's Navy and Adapted for Travellers in General*, published in 1849, the year before Galton sailed for Africa.[107] If it were, he would have been alerted to the importance of 'Bucku of the South-African Hottentots'. The manual encouraged readers, 'To determine the different kinds collected by the natives'. [108]

In 1881 the philologist Theophilus Hahn included buchu in a list of regional word comparisons:

	Khoikhoi	/Kham-Bushman [/Xam]
buchu	sãb	tsã[109]

The use of the term *sã* remains evident in the early twentieth century. In 1918 Hoernlé referred to *sãp* as a generic term for powder, elaborating that Hottentots make the powder by grinding sweet smelling bark, or roots, or leaves, which they rub freely on clothes or skin.[110]

In 1928 Fourie, medical officer to the administration of South West Africa, noted that amongst Bushmen:

> a deceased person is believed to move about in the form of a ghost at night. Buchu (tsa) is accordingly sprinkled over the grave to make the spirit of the departed happy so that it may not return at night to molest others... .[111]

Hahn's and Fourie's references support both an interchangeability in ideas of buchu, *sa* [*sãb*] and *tsa* [*tsã*], and the suggestion that the powder is intimately related to more than just perfume or medicine. In 1929 Dorothea Bleek published a comparative Bushman dictionary in which she listed:

> *ʧã*[112] buchu, scented herbs used for toilet or ceremonial purposes, *Lepidum ruderale*, *L.*, *Ocimum feticulosum*, Burch. s. sã, tsã (Na. Sãb) CII.(DB) Ex.: *ʧãtʃa*, *peliostomem leucorhizum*, E. Meyer, *ʧãba, Bouchea pinnatafida*, Schauer. [113]

Bleek's inclusion adds to our list of buchu plants whilst also demonstrating in her use of the phrase 'used for toilet or ceremonial purposes' a potential epistemological cleavage of Khoisan ideas. It assumes a separation of perfume use from matters that seem ceremonial. Might it not be ceremonial to put perfume on? More to the point, might not the two actions or uses be operating the same ideas of the function of buchu?

These various references to buchu, *tsa* and *sã* suggest that travellers and researchers have long been confronted with people who not only use the terms, buchu, *tsa* and *sa* apparently interchangeably but that the names are applicable to many different plants. The variety of botanical Latin names attributed to the plants speaks of the variety of plants that fit the indigenous category, but also of the inconsistency of early and later botanical references and probably of the inability of some Europeans to identify the plants shown to them. A reference by the traveller and artist Thomas Baines in his 1864 *Explorations in South West Africa* begs the question as to how many ethnographers really knew much about the plants they reported:

> Unfortunately, we are neither of us deeply skilled in botany, and besides this, the "Flora Capensis" of Harvey and Sonder, in Chapman's possession, has only reached its first volume. Lindley's "School Botany" gives us considerable help, but this refers only to strictly British vegetation.[114]

Recent researchers readily equate sâi with buchu. Haacke and Eiseb, authors of a Khoekhoegowab-English glossary include, 'sâi.i(/b/s)*n*. buchu (powder)'.[115] Sian Sullivan, an anthropologist who has carried out extensive fieldwork amongst northern Namibian Damara, suggests that sâi is referred to as buchu in historical sources.[116] As we have seen, however, both terms are historical and contemporary and essentially co-exist. What seems more relevant is their geographical provenance. Barring Kolb's reference, sâi or *sãb* seems predominantly a northern Cape or Namibian term. Perhaps this represents disappearance of the term within the southern Cape.

Summary of alternative sã derivatives

Saab	Kolbe 1734 [1719]
sāāb[117]	Galton 1850
sãb	(Khoikhoi); *tsã* (/Kham Bushmen), Hahn, 1881
tsa	Fourie 1928
tʃã	Bleek 1929
sâi	Haacke 1999 cf. Sullivan 1999

In the 1990s Sullivan recorded nearly 40 species of sâi plants that were used by Damara women. The aroma of these plants seemed key to their selection, as it is for most buchu.[118] This considerable variety again points strongly to the two names 'buchu' and 'sâi' relating more to overlapping characteristics or roles of plants than to specific species.

A further clue to the meaning of sâi [*sã*] might also lie in language. In Khoekhoegowab sā means 'to gather, glean, collect, pick up; peck up (of: bird)'.[119] The meaning of sâi may, therefore, lie somewhere around gathering a particular sort of plant in a particular context. Although both the type of click and the tone of apparently similar words is crucial to meaning in Khoisan languages, there is sufficient evidence of variation in clicks and pronunciation to warrant consideration of such apparent root affinities (Köhler (1963), Haacke (1986, 1997), Traill (1986)).[120]

Linguistic relationships might also provide some insight into the ideational context of buchu and sâi use. Haacke's and Eiseb's Khoekhoegowab dictionary gathers words together in clusters of meaning. Perhaps revealingly, sâi sits between a large range of, on the one hand, words for rest, linked to lying down, and on the other, words linked to cooking and related to boiling as in the rising up of steam.

A crucial life-giving juxtaposition between the reclined, asleep or dead and the rising, standing and alive is played out in notions of Ju/'hoan (!Kung) healing. Like other Bushmen the Ju/'hoansi envisage that a healer dances to awaken the *n/um* or healing potency that lies dormant in their stomach. A healer told Lee that, 'You feel your blood become very hot just like blood boiling on a fire and then you start to heal'. Lee notes that *n!um*, to boil, is related to boiling of water and ripening of plants. He proposes that there is a symbolic association between still cool water that boils and activating medicine and plants which are dormant 'becoming nutritionally potent when ripe'. He sees this notion extended in joking metaphor to nubile maidens who have reached menarche and are considered '"ripe" for intercourse and impregnation'.[121]

A similar link between *sãi* as something that boils and awakens love is indicated in Hahn's, *Tsuni-//Goam* in relation to later nineteenth century Khoikhoi. Hahn observed that the name of *Heitsi-eibeb's* son *!Urisib* is derived from *!ũ* which he links to the colour white, the ostrich egg, and *!Uris*, the white one,

also called *Suris*, the sun. *Suris* he continued: 'gives the root *su,* to broil, to be hot; Soris or Suris, therefore, means the broiling one, the heating one, the inflaming one.' Derived from *sū* comes: '*sãi,* to boil', *sūs,* a cooking pot and '*Sureb* or *soreb* (masc.), *sores* (fem.), the lover, the sweetheart, the one who is inflamed- viz., with love, or who inflames with love'[122]

The Khoisan role of buchu and sâi that these linguistic relationships seem to support was something I first encountered as associations of ideas. These associations seem to exist regardless of the validity of these possible linguistic relationships. As the Khoikhoi and Bushmen material suggests, they appear to be associations which are played out in different Khoisan dialects.

BUCHU AS PERFUME

The evidence suggests that buchu operates between day and night, between life and death, between being asleep and being awake. It restores the sick and calms the excited. It anchors those in dangerous liminal states. European accounts of buchu commonly begin and end with the normative and shallow observation that the Khoisan use it as a perfume. Whilst this is, in one sense, certainly accurate, it does nothing to unpack the role of perfume in the wider context of Khoisan plant use nor its relationship to Khoisan notions of potency.

The idea of perfume in both Khoisan culture and beyond is tied to attraction and in some sense ripening. It is tied to the emitting of pheromones stimulating reproductive activity and the fragrance of flowers which encourage fertilisation. Sullivan encountered sâi primarily in the context of Damara women and has interpreted the role of sâi from a highly gendered perspective. Sullivan sees sâi as 'emphatically a constituent of the separate but contiguous realities […] which might be rendered as female'.[123] Sullivan elaborates that use of sâi powder as perfume on the body, garments and bed-clothes imparts female beauty and attractiveness. All aspects of procurement, preparation and cosmetic use are controlled by women and 'underpinned by forceful symbolic significance'.[124] This emphasis of feminine Damara relationships with sâi seems related to Hahn's much earlier claims cited above, that the word '*sãi,* to boil', is related to *sores* (fem.), the lover, […] or who inflames with love'.

Vedder noted in the early twentieth century that during their first menstruation Khoi girls were instructed in the preparation of buchu perfume. They were given their first tortoise shell buchu holder to fill with perfume, which from then on they would keep attached to their clothing. Schmidt observes that 'this powder box was the symbol of her femininity, and buchu the symbol of her feminine potencies, of fertility and giving life.[125]

The theme of giving life ties in tightly with wider Khoisan roles and understandings of buchu. Sullivan relates a myth in which a deceased person is revived when their heart is placed in the ash of a fire and buchu is sprinkled

over it. Additionally she observes that Vedder attributed buchu with calming and taming properties. Sullivan concludes that, ultimately, sâi 'is a substance with power; this power is conferred through its association with the fertility of women'.[126]

Sâi does have a gender specific role which is particularly prominent in female realms of perfume use, menarche and fertility, but the broader context in which this sâi use sits lies in strong smelling plants being envisaged as potent. As the revealing world has demonstrated to the Khoisan, smell as the holder of essence can transfer qualities between organisms and across barriers of life and death. Khoisan understandings of smell sit in a web of relationships linking wind, breath, smell and even arrows. Each person and certain potent animals are envisaged as possessing their own specific winds. A person's wind represents their identity and their power to act in a particular manner in the world, bringing about particular results. The notion of wind crosses over with notions of spirit helpers that inhabit Khoisan. Many Namibian Khoisan refer to these as /*gais* (*b*) or *gais*. If one has the wind of the mamba or the mamba *gais*, there is something of the mamba inside you. If you see a mamba it will not harm you because it will recognise one of its own. I was told if such a person sees a mamba they must say, 'I am one of you, do not harm me' and the mamba will let them pass. Similarly Khoisan healers have long been noted for addressing storms and rain in a personal manner, saying 'do not harm me, I am one of you'. Such people, known as /*nanu aob* or 'rain men' amongst Damara, hold the essence of the lightning or rain.

The key to understanding buchu use in recent and historic contexts seems to lie in a set of ideas that might be termed 'a family of resemblances'. Wind is one aspect of this family, another is breath.[127] In Khoekhoegowab the word for breath and soul is /*om*. Breath is a gift from the divine that both gives life and demonstrates life. It is a vital force that holds the identity and hence potency of a person. Many Khoisan believe the potency, and in some sense breath, is held in the heart. Often the lungs and heart are envisaged as interrelated wind holding organs. That bad thoughts can be expelled harmfully from the heart in the wind of words, or that to lose one's heart is to lose life, are both common Khoisan beliefs founded in deeper notions of wind. The wind of people and organisms and the wind that blows, holds people together in an existentially self evident mesh of revealing relationships.

Arrows are equally tied to ideas of potency that can move on the wind between organisms. Arrows are a medium for acting at a distance. The unseeable activity of poison on the arrow tips works within an organism. The arrow connects the hunter with their prey. The notion of shooting and receiving arrows of power is played out in numerous contexts including struggles with divinity or unseeable malevolent attack that induces fear in wandering bushmen, in movement of sickness and healing potency between and within people, and even in love

arrows fired by Bushmen towards their intended to be accepted or rejected accordingly. Buchu is, like arrows, a way of moving potency.

CONCLUSION

There are cross over points between European understandings of buchu and Khoisan. Smell is clearly an essential distinguishing characteristic of buchu plants to Khoisan and also to Europeans, as the meaning of the Latin names attributed to buchu indicate. Science knows the world around it by refining knowledge that our senses equip us to detect. But in a commercial context 'Western' scientific knowledge of buchu transformed the commonality of the experience and knowledge of buchu. For Khoisan, medical uses of buchu were and in some cases still are, occasions of personal transformation. 'Treatment' is founded in a way of knowing still firmly rooted in notions of smell and potency. In contrast to this, scientific and commercial users of buchu applied a scientific or pseudo-scientific rationale to the apparent efficacy identified in some Khoisan practices and extended the range of buchu uses enormously. In the nineteenth and early twentieth century, preparations of buchu included tinctures, elixirs and fluid extracts. These remedies were indicated for some diseases that Khoisan might have recognised but understood in an entirely different manner.

Khoisan use of buchu demonstrably binds illness to realms of potency abroad in an interlocking world of organisms, phenomena and spirits. The Khoisan difference from scientific understanding represents a divergence. One path follows smell as meaningful potent phenomenon tied to identity, the other as chemical property with physiological potency.

The European uptake of buchu is an account of science appropriating and transforming indigenous knowledge. A significant distortion of indigenous knowledge is evident in the need of commercial science and buchu drug pedlars to identify a true and most efficacious buchu which they then misrepresented as that which had been the most desirous and thought most efficacious amongst Khoisan. It is significant that, as buchu became sidelined from orthodox pharmaceutical use, the indigenous historical usage of buchu has become all the more emphasised, and particularly so in a highly marketable Bushman context. Buchu has thus been more recently sold less on scientific efficacy than its image as an implicitly healthy, indigenous alternative medicine.

In line with other accounts of scientific appropriation, the buchu story detracts from notions of clean scientific data gathering. Contextualising the word 'buchu' amongst its alternatives points to the partiality of the historical legacy. That buchu and not sâi seems the most popular term for the phenomenon, at least in recent British and American contexts, probably speaks of the considerable influence of Cape ethnography on Khoisan history. The variation in Latin names for buchu over time is testament to an impressive netting of information

but the need to find a true and scientifically potent buchu distorted recognition of buchu as a type of human/plant relationship, culturally mediated around a very broad range of strong smelling southern African plants. Closer consideration of what perfume means in European contexts – a powerful scent, still often derived from animal parts, that through pheromonal action operates in a biologically and socially potent manner – brings us closer to Khoisan understanding of buchu. However, to really begin to appreciate Khoisan buchu use, one has to turn to the details of Khoisan life as a culturally rich people with continuing close ties to a rural African environment. Trying to pin down whether buchu or sâi refers to particular plant species, a role for particular plants or even the gathering process of powerful plants opens up the cracks in representation of Khoisan.

Understanding the context of buchu and sâi use requires an appreciation of the links between notions of wind, smell, breath, arrows and healing. That this web of relationships may look untidy and perhaps unconvincing in certain elements, highlights how ethnography, predominantly bound to Euro-American categories of enquiry, has remained blinkered to certain indigenous perspectives.

NOTES

I am very grateful to the ESRC for the funding of the doctoral and postdoctoral work upon which this paper is based.

[1] 'Khoisan' is a European constructed compound of old Nama *khoi* (modern *khoe*), meaning people in most Khoe languages and San (or Sān, Saan) the word Khoekhoe ('Khoekhoen' meaning people of people) use for Bushmen; see A. Barnard, *Hunters and Herders of Southern Africa* (Cambridge: Cambridge University Press, 1992), 7. I use 'Khoisan' as opposed to 'Khoesān' as it remains more readily recognised. Aware of the pejorative nature of the word 'Hottentot', I use 'Hottentot' for historical accuracy, as a simple replacement with Khoekhoe would misrepresent the complexity of the material. In my experience only the most politicised Bushmen insist on being called 'San'. The vast majority I have encountered prefer to be known as 'Bushmen'. This may or may not represent repossession of the word. I use San and Bushmen interchangeably.

[2] Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge (Mass.): Harvard University Press, 2004).

[3] The paper builds on accounts of buchu in my DPhil historical analysis of Khoisan medicine: Chris Low, 'Khoisan Healing: Understandings, Ideas and Practices' (DPhil diss., University of Oxford, 2004).

[4] C.A. Smith, 'Common Names of South African Plants', in *Botanical Survey Memoir*, 35, ed. E. Percy Phillips, (Pretoria: Dept. Agricultural Technical Services, 1966), 134.

[5] See Elphick for further discussion of this point: Richard Elphick, *Khoikhoi and the Founding of White South Africa* (Johannesburg: Ravan Press, 1985), 4.

[6] There are arguments that the difference between Khoekhoe and Bushmen has historically been economic (see John Wright, 'Sonqua, Bosjesmans, Bushmen, aba Thwa: Comments

and Queries on Pre-Modern Identifications', *South African Historical Journal* 35 (Nov. 1996): 16–29. However, evidence seems to suggest that there is validity in envisaging a distinctive Bushmen culture founded in a hunter-gatherer culture that persists in certain dimensions despite significant social change. The Bushmen I am looking for historically are people connected to hunter-gatherer culture as described by the Marshall family, Richard Lee, Megan Biesele, Mathias Guenther, amongst others.

[7] Chris Low, 'Khoisan Healing'.

[8] Mary Gunn and L.E. Codd, *Botanical Exploration of South Africa* (Cape Town: A.A. Balkema, 1981), 5, 12, 14, 27.

[9] Smith, 'Common Names', 138.

[10] Olfert Dapper. 'Kaffrarie, of Lant der Hottentots', in *The Early Cape Hottentots: described in the writings of Olfert Dapper (1668), Willem Ten Rhyne (1686) and Johannes Guielmus de Grevenbroek (1695)*, trans. I.Schapers and B. Farrington, ed. I Schapera (Cape Town: The Van Riebeek Society, 1933), 40.

[11] Schapera, *The Early Cape*: 115 and Smith, *Common Names*: 136.

[12] Schapera, *The Early Cape*: 245.

[13] Schapera, *The Early Cape*: 263.

[14] P. Kolb, *The Present State of the Cape of Good Hope*, trans. Mr. Medley, 2 vols. (London, 1731), I: 96; Oldenland cited by Smith, 'Common Names',138.

[15] Kolb, *Present State*, 113.

[16] Kolb, *Present State*, 133; similarly: 99.

[17] Ibid., 141

[18] Ibid., 305

[19] Ibid., 305

[20] Ibid., 309.

[21] H.J. Wikar, *The Journal of Hendrik Jacob Wikar* (1779), with an English translation by A.W. van der Horst, ed. E.E. Mossop (Cape Town: The Van Riebeek Society, 1935), 63.

[22] R.J.Gordon, *Cape Travels, 1777 to 1786*, ed. Peter R. Raper and Maurice Boucher (Houghton: The Brenthurst Press, 1988), 87, 122, 216.

[23] Roger Hewitt, *Structure, Meaning and Ritual in the Narratives of the Southern San*, Quellen zur Khoisan-Forschung (Hamburg, Helmut Buske Verlag, 1986), 294.

[24] Dorothea Bleek, 'Customs and Beliefs of the /Xam Bushmen', *Bantu Studies*, 7:4 (Dec. 1933): 382.

[25] Ben-Erik van Wyk, Bosch Van Oudtshoorn and Nigel Gericke, *Medicinal Plants of South Africa* (Pretoria: Briza Publications, 1997), 34.

[26] Khoisan envisage that illness can be caused by moving organs. Often these are said to 'stand up'; see Chris Low 'Khoisan Healing'.

[27] http://www.evitamins.com/product.asp?pid=475 (accessed March 15, 2007)

[28] Smith, 'Common Names': 136.

[29] Ibid.

[30] J. Donn, *Hortus Cantabrigiensis or a Catalogue of Plants Indigenous and Exotic*, 5th edn. (Cambridge, 1809), 50.

[31] Philip Miller, *The Gardener's Dictionary*, 6th edn. (London, 1752), listing '*Diosma*'.

[32] Philip Miller, *The Gardener's Dictionary*, 7th edn. (London, 1759), listing '*Diosma*'.

[33] Coyte, *Coyte's Botanic Garden* – Facsimile edition of Hortus Botanicus Gippovicensis (Ipswich, 1988): 26.

[34] 'Kew Record Books' 1793–1847 MS.

[35] V. S. Forbes, ed., *Travels at the Cape of Good Hope 1772–1775* (Cape Town: Van Riebeek Society, 1986), xix.

[36] Carol Pet Thunberg, *Flora Capensis*, 2 vols. (1818), II: 139–43.

[37] Andrew Sparrman, *A Voyage to the Cape of Good Hope … from the year 1772 to 1776*, 2nd edn. (London, 1786): 184.

[38] Sparrman's Voyage, cited in Oxford English Dictionary, online: http://dictionary.oed.com: 'dagga' (accessed March 15, 2007).

[39] William J. Burchell, *Travels in the Interior of Southern Africa*: reprinted from the original edition of 1822–4, 2 vols. (London: The Batchworth Press, 1953), I, 330–31.

[40] Ibid., 331

[41] Burchell, *Travels*, 275; John Andersson, *Lake Ngami; or, Explorations and Discoveries, during Four Years' Wanderings in the Wilds of South Western Africa*, 2nd edn (London: Hurst and Balckett, 1865), 259.

[42] Smith, 'Common Names', 141.

[43] Burchell, *Travels*, 331.

[44] Donn, *Hortus Cantabrigiensis*, 50; 'Kew Record Books' 1793–1847 MS.

[45] Richard Reece, ed., *The Gazette of Health*, 6:62 (to Feb 1, 1821): 799.

[46] Gunn and Codd, *Botanical Exploration,* 239.

[47] R. Reece, *The Gazette of Health*: 6:63 (to March, 1821): 812–13; 64, April 1821; First Addition to the Appendix of the Gazette of Health (May 31, 1822); *The Medical Guide for the Use of the Clergy, Heads of Families, and Seminaries and Junior Practitioners in Medicine* (London, Longman, 1833).

[48] Reece, *Medical Guide*, 151.

[49] Records of the Cape Colony, Jan–Feb 1826, Vol XXV, printed 1905: 224.

[50] Cited by Smith, 'Common Names', 137.

[51] Constantini, 'Ueber die *Diosma* crenata', *Archiv der Pharmazie*, 19:3 (1826): 255. *Penny Cyclopaedia* (1837), IX, 5/1. The reference is probably to the French pharmacist Charles Louis Cadet de Gassicourt (1769–1799).

[52] L. Pappe, Florae *Capensis Medicae Prodromus; or An Enumeration of South African Plants used as Remedies by the Colonists of the Cape of Good Hope*, 2nd edn. (Cape Town, W. Brittain, 1857), 7.

[53] 'Who was Henry Helmbold', *Druggists Circular* (Nov. 1912), listed on http://www.bottlebooks.com/helmboldstory/Helmbold.htm (accessed 27 Sept 2005); 'Supreme Court of New York. A.L. Helmbold v. The H.T. Helmbold Manufacturing Co.', *The American Law Register (1852–1891)*, 26:3, New Series Volume 17 (Mar. 1878): 170–71.

[54] 'An Ex-Manager', 'Who was Henry Helmbold'.

[55] William H. Helfand, 'Historical Images of the Drugs Market', *Pharmacy in History* 28:1 (1986): 55.

[56] William H. Harvey and Otto Wilhelm Sonder, *Flora Capensis: Being a Systematic Description of the Plants of the Cape Colony, Caffraria & Port Natal* (London: Reeve & Co., 1885): 373, 393.

[57] N.S.Pillans, *Journal of South African Botany* 16 (1950): 55–183.

[58] See e.g. Y. Shimoyama, 'Chemistry of Buchu leaves', *American Journal of Pharmacy* 60, (12 Dec. 1888), http://www.swsbm.com/AJP/AJP_1888_12.pdf

[59] Annotations, 'Advancing Buchu Prices', *The Pharmaceutical Journal and Pharmacist* (20 Aug 1910): 271.

[60] 'Buchu Folia, B.P.', *The British Pharmaceutical Codex* (London, The Pharmaceutical Press, 1911), no page number, http://www.henriettesherbal.com/eclectic/bpc1911/barosma.html (accessed 15 March 2007).

[61] E. M. Holmes, 'Buchu Leaves', *Pharmaceutical Journal* (Oct. 1900): 70.

[62] Annotations, 'Advancing Buchu Prices', *The Pharmaceutical Journal and Pharmacist* (20 Aug. 1910): 272.

[63] Anon., *South African Journal of Industries*, 2 (1919): 748.

[64] Editorial Articles, 'The Cultivation of Buchu', *The Pharmaceutical Journal and Pharmacist* (22 Oct. 1921): 308.

[65] *British Pharmaceutical Codex* (London: The Pharmaceutical Press, 1954), 108.

[66] *British Pharmaceutical Codex* (London: The Pharmaceutical Press, 1963), 102–104.

[67] R.G. Todd, ed., *Extra Pharmacopoeia*, 25th edn. (London: The Pharmaceutical Press, 1967), 1509.

[68] *British Herbal Pharmacopoeia*, vol. 1, (Dorset: British Herbal Medicine Association, 1990).

[69] Peter Bradley, ed., *British Herbal Compendium*, vol. 1 (Dorset: British Herbal Medicine Association, 1992), 43–4.

[70] Ibid.

[71] Harvey and Sonder, *Flora Capensis*, 373.

[72] http://www.plantzafrica.com/plantab/acmadeniaheterophylla.htm (accessed 14 Feb. 2007).

[73] Schapera, ed., *The Early Cape*, 40.

[74] Cited by G.S. Nienaber, *Hottentots* (Pretoria, J.L. Van Schaik Beperk, 1963): 222.

[75] William Ten Rhyne, 'A Short Account of the Cape of Good Hope and of the Hottentots who inhabit that Region', Schapera, ed., *Early Cape Hottentots*, 115.

[76] Schapera, ed., *The Early Cape*, 245.

[77] *The Present State*: 96, 113, 133, 141, 305, 309.

[78] Cited by Nienaber, *Hottentots*, 222.

[79] Ibid.

[80] Ibid; Thunberg, *Flora Capensis*, 143.

[81] Cited by Nienaber, *Hottentots*, 222.

[82] Sparrman, *A Voyage to the* Cape, 145, 184.

[83] Le Vaillant *Travels into the Interior Parts of Africa by the Cape of Good Hope in the Years 1780, 81, 82, 83, 84 and 85* (1791), 68.

[84] Cited by Nienaber, *Hottentots*: 222.

[85] Burchell, *Travels*, 275, 331.

[86] Records of the Cape Colony, Jan–Feb 1826, Vol XXV, printed 1905: 224.

[87] Theophilus Hahn, *Tsuni - //Goam: The Supreme Being of the Khoi-Khoi* , (London: Trübner & Co., 1881), 23.

[88]Wood, George Bacon and Franklin Bache *The Dispensatory of the United States of America USA*, revised by J.P. Remington et al (Philadelphia and London: J.B. Lippincott Co., 1918): 39, http://www.swsbm.com/Dispensatory/USD-1918-complete.pdf (accessed 3 Feb. 2007).

[89] P.W. Laidler, 'The Magic Medicine of the Hottentots', *South African Journal of Science,* XXV (Dec. 1928): 441.

[90] Mitchell Watt and Gerdina Breyer-Brandwijk, *The Medicinal and Poisonous Plants of Southern Africa: being an account of their medicinal uses, chemical composition, pharmacological effects and toxicology in Man and animal* (Edinburgh: E&S Livingstone 1932), 90.

[91] http://www.herbsorganic.co.za/pages (accessed 18 March 2005).

[92] http://wwwbeneforce.com/buchu (accessed 29 Sept. 2005).

[93] Smith, *Common Names*, 135.

[94] Ben-Erik van Wyk and Nigel Gericke, *People's Plants: a Guide to Useful Plants of Southern Africa* (Pretoria: Britza, 2000): 139.

[95] Wood, *Dispensatory of the United States*: 39; Henriette's Herbal Homepage, www.ibiblio.org/herbmed/php/get?id=418 (accessed 20 Sept. 2005); http://liberherbarum.com/pn0872.HTM (accessed 20 Sept. 2005).

[96] http://www.liberherbarum.com/pn0872.HTM; http://www.botanic-garden.ku.dk/eng/index.htm (accessed 18 March 2005).

[97] Wood, *Dispensatory of the United States*: 39; http://www.heilfastenkur.de (accessed 18 March 2005)

[98] http://www.liberherbarum.com/pn0872.HTM (accessed 20 Sept. 2005).

[99] Burchell, *Travels*, 275.

[100] Smith, 'Common Names', 140.

[101] Gordon, *Cape Travels*, 339.

[102] van Wyk and Gericke, *People's Plants*, 215.

[103] David Shearing, and van Heerden, K. Karoo, *South African Wild Flower Guide 6* (Kirstenbosch, Botanical Society of Southern Africa, 1994), 174, cited by http://www.museums.org.za/bio/plants/asteraceae/pteronia.htm (accessed 21 Sept. 2005).

[104] http://www.museumsnc.co.za/McGregor/othermusems/victoria.htm (accessed 21 Sept. 2005).

[105] Kolb, *The Present State*, 116.

[106] Francis Galton, MS, Journal, 1850 (University College London archives).

[107] *A Manual of Scientific Enquiry; Prepared for the Use of her Majesty's Navy and Adapted for Travellers in General*, ed. Sir John F.W. Herschel (London, John Murray, 1849).

[108] Herschel, *A Manual*, 415.

[109] Hahn, *Tsuni - //Goam*, 7.

[110] A.W. Hoernlé, 'Certain Rites of Transition and the Conception of !Nau among the Hottentots', in *Harvard Studies* (1918): 71; Hoernlé included a " ' " above her *a* which is not available typographically.

[111] L. Fourie, *The Native Tribes of South West Africa* (Cape Town: Cape Times, 1928), 104.

[112] ʃ denotes a glottal stop

[113]Dorothea F. Bleek, *Comparative Vocabularies of Bushman Languages* (Cambridge: Cambridge University Press, 1929), 224. CII.(DB) refers to the provenance of her information: central Kalahari / Botswana and Dorothea Bleek.

[114] Thomas Baines, *Explorations in South West Africa being an Account of a Journey in the Years 1861 and 1862 from Walvisch Bay, on the Western Coast, to lake Ngami and the Victoria Falls* (London: 1864), 220.

[115] W. Haake and E. Eiseb, *Khoekhoegowab-English, English Khoekhoegowab Glossary/ Mīdī Saogub* (Windhoek: Gamsberg Macmillan, 1999), 35.

[116] S. Sullivan, 'Perfume and Pastoralism: Gender, Ethnographic Myths and Community-Based Conservation in a Former Namibian Homeland', in D. Hodgson *Rethinking Pastoralism in Africa: Gender, Culture and the Myth of the Patriarchal Pastoralist* (Athens: Ohio Press, 2000), 152.

[117]]hyphen over both 'ā' 's [

[118] Sullivan, 'Perfume': 152.

[119] Haacke and Eiseb, *Khoekhoegowab*, 33.

[120] Oswin Köhler, 'Observations on the Central Khoisan Language Group', *Journal of African Languages*, 2 (1963): 227–234; W.H.G. Haacke, 'Preliminary Observations on a Dialect of the Sesfontein Damara', in *Contemporary Studies on Khoisan 1*, Q.K.F. 5.1, ed. R. Vossen and K. Keuthmann (Hamburg, H. Buske, 1986), 375–396; W.H.G. Haacke, E. Eiseb, and L. Namaseb, 'Internal and External Relations of Khoe-Khoe Dialects: a Preliminary Survey', in *Namibian Languages: Reports and Papers*, ed. W.H.G. Haacke and E.E. Elderkin (Windhoek,1997), 125-210; A. Traill, 'Click Replacement in Khoe', in *Contemporary Studies on Khoisan 2*, Q.K.F. 5.2, ed. R. Vossen and K. Keuthmann (Hamburg: H. Buske, 1986), 301–320.

[121] Richard B. Lee, 'Trance Cure of the !Kung Bushmen', *Natural History* (Nov. 1967): 31, 33.

[122] Theophilus Hahn, *Tsuni-//Goam*, 141.

[123] Sullivan, 'Perfume', 152.

[124] Ibid., 153.

[125] Cited by Sullivan, 'Perfume', 153.

[126] Ibid.

[127] Chris Low, 'Khoisan wind: hunting and healing', in 'Wind, life, health: anthropological and historical perspectives', *JRAI* Special Issue (2007): 71–90.