CHAPTER TWO

KNOWLEDGE AND POWER IN ORAL CULTURES

INTRODUCTION

'Education of initiates continued throughout life, for knowledge meant power, responsibility and regular ceremonial duties' (Flood 2006, p. 151).

Cross-cultural ethnographic evidence is unequivocal: in small-scale oral cultures, control of knowledge is the major source of power. When there is no sign of individual wealth or social control by force, the elite in small-scale oral cultures maintain power through the control of knowledge.

Everybody learns; all day, every day. We observe and gain new knowledge constantly. Informal knowledge acquisition is not what this book is about.

Goody (1987, p. 156–7) argues that there are effectively three modes of acquiring knowledge which he feels are widespread in oral societies. Firstly, basic knowledge is acquired in daily interaction, which is the way in which the bulk of the culture, the sum total of learned behaviour, is acquired. Secondly, a specialised form of knowledge is transmitted in bounded situations, which comes largely from participation in ceremonies and discussion with elders. Thirdly, there is the knowledge that comes direct from the spiritual beings. It is the second and third categories which are addressed here. As Goody acknowledges, these are so closely entwined as to make separation artificial.

The formal knowledge bank maintained by a culture has to be learned formally; it needs to be consciously studied in order to be remembered.

Literate cultures record that knowledge on paper or electronically. Without writing, however, the knowledge of the culture must be committed to memory – it is practised, repeated and stored for future use in fragile, unreliable human memory. It is the way formal knowledge is stored in oral cultures which is the basis of the following discussion.

ORAL TRADITION

It is now well accepted that oral cultures are not the 'miserable savages' depicted so widely only a century ago. In 1913, for example, Sigmund Freud wrote: 'I shall select as the basis of this comparison the tribes which have been described by anthropologists as the most backward and miserable of savages, the aborigines of Australia' (Freud 1960, pp. 1–2). I shall also select those tribes, but when described by better informed anthropologists, the complexity and depth of the knowledge systems of the Aborigines of Australia is undeniable.

We can assume that the individuals within oral cultures have the same range of intellectual potential, physiology and memory ability that has been typical of all humans for at least the last few millennia. We need to look beyond superficial differences and accept our similarities. It is only when the complexity of oral tradition is acknowledged that the control of knowledge can be seen as a tool for power.

It is important to state what oral tradition is not. It is not teaching how to hunt or how to gather during daily excursions. It is not about stories casually told around the campfire at night – these are more folk tale than myth and are usually for children (Goody 2010, p. 8). Oral tradition is about formal knowledge, about the way oral cultures store, maintain and transmit knowledge which is central to their physical and social worlds. Throughout this book, I will be using the term 'oral tradition' as defined by Rubin (1995, p. 8):

Oral traditions:

- are universal; that is, they appear in all present cultures and past cultures that have been studied
- are fixed only within the accuracy of human memory
- exist in genres; that is, they appear in restricted, coherent forms
- are transmitted in a special social situation, such as a performance or a ritual
- are entertaining by modern literate standards, but this is not always the primary traditional function
- · are considered special speech, either art or ritual
- transmit useful cultural information or increase group cohesion
- are poetic, using rhyme, alliteration, assonance, or some repetition of sound pattern

- are rhythmic
- are sung
- are narratives
- are high in imagery, both spatial and descriptive

ORAL TRADITION AS HISTORY

Oral tradition is often equated with oral history (see, for example, Attwood & Magowan 2003, pp. xii–xvii). Fentress and Wickham consider the difference between 'oral tradition' and 'oral history' to be 'relatively unimportant' as both, they consider, involve recounting past events (1992, p. xii). This blurring of definitions can lead to scholars neglecting the vast store of scientific information, which is constantly reinforced or enhanced by current experience. 'Oral tradition' is defined by Jan Vansina as 'testimonies of the past which are deliberately passed from mouth to mouth' dating from beyond the lifetime of the informants (1960, p. 43; 1985, p. 13). However, oral tradition reflects all aspects of current social life, all expressions of the culture, with intentional historic accounts yielding only a small proportion of the entire corpus.

The history recorded in oral tradition tends to be only that which is still relevant to the needs of the society at that point in time (Vansina 1985, pp. 119–20) and is not so much an accurate chronological history in the literate sense, tending to reflect concrete social requirements more than abstract historical ones (Henige 1974). Elements of historical record which cease to have current relevance are forgotten (Goody & Watt 1963). Consequently, oral tradition is constantly changing as new information is added and information which is no longer relevant is lost.

Wiessner notes that the Enga of Papua New Guinea distinguish clearly between myth and historical traditions, the latter containing 'information on subsistence, wars, migrations, agriculture, the development of cults and ceremonial exchange networks, leadership, trade, environmental disasters, and fashions in song and dress' (2002, p. 237). Critically, knowledge of the natural sciences may be encoded within mythology, as will be discussed in Chapters 5 and 6.

The Native American writer Donald Fixico describes oral tradition as involving 'oratory, myths, legends, songs, parables, and prophecy', while oral history is the 'non-Indian interpretation and understanding of native oral tradition' (2003, p. 34). It is generally accepted that oral tradition is unreliable as chronological history (Vansina 1985). This does not mean, however, that long-term memory is not possible. It just means that oral tradition stores information that is of more value to the culture than an accurate chronology of events. Aboriginal Australians, for example, appear to be remarkably

ahistorical in outlook, while some Maori can recite an 800-year genealogy from when their ancestors reached New Zealand (Flood 2006, p. 140).

Myth in oral cultures is often interpreted as purely fanciful stories, ignoring its role as a complex mnemonic technology. The eminent British prehistorian, Richard Bradley, for example, argues that studies of oral history reveal that cultures do not tend to remember events over much more than two generations and that memories 'become increasingly inaccurate until they are so corrupt that they can hardly be distinguished from myth' (2003, p. 221). Researchers working with oral traditions have shown that accurate retention can certainly extend more than Bradley's 'two generations', but that the accuracy depends on political needs, not historical ones. The Australian anthropologist John Bradley argues that history, as it is captured by the Australian Yanyuwa people

is not the chronologically ordered, linear, teleological sense of time suggested by the term 'history', although Yanyuwa know time-lines by articulating relationships to both deceased and living kin. As people move through certain events, their significance becomes etched into memory according to associations with country, which Yanyuwa have constantly sought to maintain. These memories create sediments of narrative and song that are not fixed strata, but constantly shifting as information is recalled and used. Knowledge, then, of kin, country and kujika¹ are in perpetual negotiation (Bradley 2010, pp. 86–7).

Examining research from Australia, New Guinea and Africa, Australian rock art expert Iain Davidson argues that 'although material signs such as rock art may act as mnemonics, it is extremely unlikely that accurate information is retained in oral histories for more than a couple of hundred years' (2010a, p. 388). Vansina writes that where 'social structure required the use of long genealogies, as among the Fang of Gabon and Cameroun where one remembered sometimes up to 30 generations in depth, events of several centuries back could still be given a place in time' (1985, p. 117). Well documented are the praise songs of African cultures, sung in honour of political rulers. These serve as a repository of associated historical and political knowledge. Inca praise–narratives devised by the Inca's descendants report an idealised version of historical events. They serve as political propaganda creating a religious and historical reality to achieve a political purpose (Niles 1999, p. 27).

Accurate chronologies may not be possible for more than a few hundred years, but Australian indigenous cultures offer examples which appear to record events from thousands of years ago. The geography of tribal land is accurately recorded in oral tradition for many reasons, including agreements between neighbouring tribes, rights to resources, navigation and because landscape features are integral to the mnemonic structure of the knowledge system.

Australia's Tasmanian Aboriginal population was isolated from the mainland at the end of the last ice age. Analysing the archaeological record, Flood concluded that the

basic belief system of Aboriginal Australia known as the Dreaming² clearly existed long before Tasmania was isolated. This shows that the Dreaming is of ice age antiquity, not a mere 1500 years as has recently been claimed (2006, p. 70).

Analysing possible causes for food taboos, Flood (2006, p. 72) asks: 'Could oral tradition sustaining taboos survive three millennia?' She quotes a number of examples to indicate that it is highly likely that it does.

The Dyirbal language group has been in the same area for at least 10,000 years (Dixon 1972). Dixon writes that 'beneath the veneer of fantasies some myths may provide accurate histories of events in the distant past of the people. There is, for instance, a Ngadyan myth that explains the origin of the three volcanic crater lakes Yidyam (Lake Eacham), Barany (Lake Barrine) and Ngimun (Lake Euramoo)' (1972, p. 29). The myth includes what Dixon describes as 'a plausible description of a volcanic eruption' (1972, p. 29). The Dyirbal storyteller, in 1964, remarked that when this happened the country around the lakes was 'not jungle – just open scrub'. Scientists were surprised, less than a decade later, to find that the rain forest in that area is only about 7,600 years old. The formation of the three volcanic lakes took place at least 10,000 years ago (Dixon 1972, p. 29). Dixon goes on to note that this indicates that knowledge of the volcanic eruptions and changes in the rain forest have 'been handed down from generation to generation for something like 10 millennia' (1972, p. 29). Dixon cites further evidence of the longevity of oral tradition from the myth of Girugar, a legendary man who came from the south, visiting each mountain, lake and island and giving it a name. The storyteller remarked that in Girugar's day it was possible to walk across to Palm, Hinchinbrook and other islands. Geographers now believe that the sea level was sufficiently low for it to have been possible to walk to these islands at the end of the last ice age.

Land formations, now beneath Port Philip Bay in southeastern Australia, were flooded at the end of the last ice age, 10,000 years ago. The flooding and the former river path were recorded in the songs and stories of the creation ancestor, Bunjil, the wedge-tailed eagle of the Boonwurung and Kurnai people. This knowledge was documented by the Select Committee of the Legislative Council in 1858. These landforms were only documented by Western scientists early in the twentieth century (Blake 1979, p. 34). The 10,000-year-old date has been recently questioned as the bay may have dried significantly as recently as 1,000 years ago (Holdgate et al. 2011), but this is still a significantly long time. Linguistic studies (for example, Dixon 1972)

show that tribes are not insular entities and language is constantly changing due to interaction with other tribes and new knowledge. He argues that a continuum of oral tradition over 10,000 years does not imply a stagnant culture over the same period. What is demonstrated, however, is that some aspects of knowledge are so highly valued that they can be reliably retained over millennia.

Although an accurate chronology of events is not recorded over long time spans, pragmatic information stored within the oral tradition such as knowledge of the environment, plants, animals, astronomy, navigation, laws and ethical expectations is constantly being reinforced through experience and updated through new knowledge.

There is robust evidence, however, that pragmatic information can be retained accurately over long time spans. Knowledge from many past generations is critical to the survival of social groups facing rare and extreme resource stress. Hunter-gatherers such as the Nunamiut and Tareumiut of northwest Alaska experience wide seasonal fluctuations in the availability of resources. Of significance are the unpredictable annual variations in the migration patterns of their most important game animals, the caribou and the whale (Johnson & Earle 2000, p. 172). Potential crises occur every ten to twenty years for the Nunamiut and as often as one in five years for the Tareumiut (Minc 1986), but these crises take many different forms requiring knowledge from many generations past. While belonging to the same cultural and linguistic group, the Tareumiut depend on cooperative whale hunting while the inland Nunamiut are typical family-level foragers, aggregating only for semi-annual caribou drives or sometimes settling in a group for security in winter. Ceremonies such as the elaborate Tareumiut Messenger Feast secure inter-village relationships while facilitating distribution of surpluses throughout the coast as well as inland (Johnson & Earle 2000, pp. 177-8).

Minc (1986) explores the role of 'secular' and 'sanctified' oral tradition in encoding information about how to deal with resource crisis situations for the Nunamiut and Tareumiut. She concludes that the secular forms of songpoetry include the transmission of specific values or behaviours relating to group survival across seasonal or short-term shortages. In order to retain a body of reference knowledge on the much longer pan-generational timescale, ritual performances were employed. From this sacred knowledge, rational decisions were made between alternative choices. Minc lists thirty recurrent themes which reflect critical survival strategies. These include complex relationships with critical trading partners, storage methods, the pooling of labour, utilising kinship ties, setting community responsibilities, treating strangers with suspicion, using secondary resources, intercommunity marriage and feasts, exploring resource potentials of other habitats and

moving into other habitats. Strategies also included marriage with those from different habitats, inter-habitat trade and feasts and learning to hunt unfamiliar resources via the skills learnt through that social contact. There are also oral tradition references to past hardships, seasonality, famines, starvation and death, as well as climatic change and its impact on resources.

Similarly, subsistence stress is an explicit theme in twenty-eight Klamath and Modoc myths from North America, and is also recorded for other societies (Sobel & Bettles 2000). In discussing the famine myths of the Tsimshian of British Columbia and Kagruru of eastern Tanzania, Cove (1978) notes that oral tradition is the ideal way to store and transmit survival knowledge, particularly for infrequently occurring stresses for which the information would otherwise be lost. He argues that 'it is difficult to overestimate the importance of trans-generational continuity encapsulated by mythology' (Cove 1978, p. 231).

ORAL TRADITION AS RELIGION

It is well beyond the scope of this book to define and discuss religion in all its variations. Clearly, spiritual beliefs are woven throughout oral traditions, while actual beliefs are culture specific. However, certain generalisations can be made. In a broad, geographically diverse range of non-literate cultures, stories are told of spiritual beings who had a major role in the origins of the land, plants, animals and people. Commonly these beings have animal or human form, or a combination of the two. Humans are often seen as part of the animal world, sometimes even taking on the identity of totemic species. Natural forms, which Western culture describes as inanimate, such as rocks and mountains, are often included as life forms.

Reports from early contact with indigenous cultures were often written from a Christian ethic, if not actually by missionaries themselves. Gods, worship and prayers are part of the natural language of Christian writers, and often assumed to be part of all cultural belief systems. In his huge collection of Central Australian Aboriginal songs, T. G. H. Strehlow writes that 'it is a striking characteristic that there are no invocations or prayers to the spirits or to the totemic ancestors contained in these songs' (1971, p. 284). Sir James Frazer makes a similar point:

it is a serious, though apparently a common, mistake to speak of a totem as a god and to say that is worshipped by the clan. In pure totemism, such as we find it among the Australian aborigines, the totem is never a god and is never worshipped (1968, p. 5).

In reading contemporary indigenous writing (for example, see Briggs 2008; Buku-Larrngay 1999; Perrurle Dobson 2007), or in videos made by indigenous

Australians (for example, see Aboriginal Nations Australia 2004; Cameron 1993; Graham 2006), the words 'gods' or 'worship' are not used. The talk is of 'Ancestral Beings' or 'Spiritual Beings' whose stories they tell. Nungarrayi, a Warlpiri colleague, emphasised that 'the Dreaming' is better translated as 'the law' and 'the knowledge' and is not merely simplistic stories about religious beliefs as so often portrayed (pers. comm., September 2009).

Although it is acknowledged that personal biases and background cannot be eliminated when trying to understand a different belief system, they can be minimised. By seeking analogies in the ethnographer's own belief system, the ethnographer distances him or herself from looking more deeply at the purpose of ceremonies and supernatural beliefs, reducing them to primitive versions of what contemporary religious individuals might consider their own superior belief system. In this book, the terms which derive from analogies with Western cultures, words such as 'gods', 'priest', 'prayer' and 'worship', will be avoided. Cultural beliefs will be represented, as much as possible, in the terms used by the indigenous people in question.

Historical and religious knowledge can be modified to meet the politicosocial needs of a society at any time. Pragmatic knowledge, in particular knowledge of the natural sciences and environment, cannot be adapted at the will of the knowledge brokers. It can be updated and revised with new knowledge, but the constant audit against reality forces a consistency with the environment observed. Survival, particularly in times when there is a stress on resources, depends on this consistency.

ORAL TRADITION AS PRAGMATISM

Oral traditions constantly refer to actual landscape forms, the behaviour of a wide variety of animals and the properties of a huge variety of plants. Lists of properties are extremely difficult to remember without writing (Goody 1977; Ong 2002, p. 99). In fact, Abram argues that

Without writing, knowledge of the diverse properties of particular animals, plants, and places can be preserved only by being woven into *stories*, into vital tales with specific characteristics of the plant made evident through a narrated series of events and interactions (1997, p. 120; emphasis in the original).

Ruth Finnegan (1988) claims that the knowledge stored within indigenous oral tradition includes the laws of gender roles, expectations of conduct, rules for trade, how to bind wounds, the use of medicinal plants and animal products, dealing with dying and death, menstruation, sex, birth, aging, rites of passage, genealogy, observations of the seasons, the sun, the planets and the stars, religion, spiritual beliefs and origin stories, among many other themes.

All oral cultures abide by some form of legal system and moral code stored within their oral tradition. Among many aspects of the law is the need for different clans and tribes to regulate who has access to particular resources – in Western terms, who owns the land. In 2000, during a land claim on Kangaroo Island, Yanyuwa people sang their *kujika*, their sung narrative of the cartography and knowledge associated with it. This public singing in the land claim court served to demonstrate their knowledge and love of country and their link to ancestors (Bradley 2010, p. 176). It is by owning the *kujika* that the local clan lays claim to the land, although in Australian Aboriginal terms, the land owns them and they are the custodians.

My natural history research, specifically of crocodiles (Kelly 2006) and spiders (Kelly 2009), indicates that indigenous stories reflect a very detailed observation of the physiology and behaviour of the specific animal species in the local environment, those which are eaten, avoided or simply observed. Although other aspects of the culture will change with time, the behaviour of animals and properties of plants observed thousands of years ago will still be fundamentally the same as today. The natural sciences, being essentially the same for literate and non-literate observers, offer a valuable tool to explore different understandings of similar information.

Classifications by non-literate cultures have long been recognised as scientific in the Western sense of the word (Durkheim & Mauss 1970). Mobile hunter-gatherer plant and animal classifications normally recognise four to six levels within the taxonomy, with subsistence farming groups going into even greater depth (Fowler 1999, p. 419). Sedentary non-literate cultures also classify extensively, such as the bird classification of the New Guinea Kalam Country (Majnep & Bulmer 1977, pp. 45–9), the Dogon classification of about 300 vegetables (Goody 1977, p. 59) and the Pacific navigators detailed fish taxonomy (Turnbull 2000, p. 150). The Navajo classify over 700 insects, with names, sounds, behaviour and habitats encoded in myths, songs and dry paintings (Wyman & Bailey 1964). It is simply impossible for any culture to retain all this knowledge without some formal information system. Knowledge of the indigenous animals and plants is clearly critical to the survival of huntergatherer peoples, and will be explored more fully in Chapter 5.

Subsistence farming is not simply planting out seeds and adding water. Richard Ford analysed the many varieties of corn maintained by the Pueblo in New Mexico's harsh and unpredictable climate (Ford 1980). Ford showed how the seed selection and storage necessary to retain the many pure strains was dependent on the knowledge stored in ceremony and song, reproduced through ritual practices of the powerful clan elite, as will be explored in detail in Chapter 8.

Pragmatism is not only a matter of eating. As individuals move across their land or sea territories, they need to navigate. Terrestrial and astronomical

knowledge is employed to aid navigation, but also to enable elders to maintain a calendar to optimise hunting and gathering, or planting and animal husbandry. The calendar is essential to maintain the ceremonial cycle so closely interwoven with knowledge maintenance and transfer. It is also essential that small-scale communities avoid inbreeding. Laws on marriage, as well as extensive genealogies, are recorded formally by oral cultures across the world. The depth and complexity of astronomical, navigational, calendrical and genealogical knowledge will be addressed in Chapter 6.

The pragmatic knowledge of interest here is often stored within practices which are reported in ethnographic and popular reports as spiritual or divinatory. Chadwick (1942, pp. 29–32) presents evidence that a variety of the 'seer', 'oracles', 'shaman' and 'shamaness' chants, recorded in Africa by earlier ethnographers, are linked to observations of wild animals, weather phenomena, observations of the sun and moon, ground, rocks, soil and rivers, along with narrations of hunting, military expeditions and historical information. This knowledge 'is given to scholars at the initiation ceremonies. The instruction is largely carried on in the form of 'question and answer' in 'African oral academies' (Chadwick 1942, p. 31). Chadwick also describes ritual in terms of knowledge systems within the Pacific and the way history and science are taught in what she referred to as a 'mobilised seasonal school' (Chadwick 1942, p. 87).

All human cultures are built up of individuals with a range of emotions and problems. Knowledge of how to deal with mental health issues is stored in the tradition, along with the treatments of physical ailments. McClelland describes the African Yoruba tradition:

There are the problems of emotional instability, periods of uncontrollable rage and its dire consequences, and many other signs of impaired mental health. Cares and doubts are centred on emotional reactions, lack of prestige, fear of failure, greed, envy, suspicions of neighbours, belief in the hidden malice of those in authority, loss of family, loneliness, poverty in old age and untimely death. They have a familiar ring (1982, p. 114).

Groups of humans will fight, whether physically or intellectually, over resources and relationships. Dispute resolution takes a prescribed, often ceremonial, form in virtually every oral culture, usually involving the skill of specialist orators who act on behalf of others needing their skills (Feldman 1991). Formalised events for the maintenance of social harmony are very widespread in oral cultures (Finnegan 1988, pp. 52–4; Keary 1996, p. 255; Urban 1986). The performance of Eskimo taunting songs, for example, involves two hostile singers who work off grudges and disputes through the performance of songs which ridicule their opponents, victory being awarded to the most loudly applauded (Finnegan 1977, p. 157).

Non-literate knowledge systems are integrated. Knowledge of the plants and animals, landforms and weather often serve to provide metaphor for discussion of human behaviour, ethics, expectations and social interactions. Probably the greatest store of knowledge is in the stories which talk about observations in the natural world and relate these back to laws for behaviour in the society. Despite Freud's lack of expectation 'that the sexual life of these poor, naked cannibals would be moral in our sense' (Freud 1960, p. 2), moral issues dominate the hundreds of indigenous stories read during research for this book, and the basic ethical issues reflect a common theme in all cultures, both literate and non-literate.

Western culture has only recently come to recognise the depth and formality of indigenous knowledge. Havelock (1978, p. 335) argued that the control of culture lies in information that is accumulated and recalled, which is rendered in a language specifically used for this purpose. That role is so important that it offers great power to those who hold it.

WHEN KNOWLEDGE WAS POWER

The first indicator, Indicator I, that an archaeological site might be a mnemonic monument is that there are signs of complex organisation, a stratified society, but no sign of individual wealth or coercion. Evidence of individual wealth may be seen in highly differentiated housing and/or valuable grave goods. For example, Great Zimbabwe, at first sight, could be considered a possible mnemonic monument. However, the area referred to as 'Dzimbabwe' or the 'Hill Complex' is considered by modern African scholars as a 'Royal Enclosure' for a wealthy ruler (Asante & Asante 1983, p. 85).

The ethnographic evidence is consistent across a broad range of unconnected non-literate societies: oral specialists in small-scale cultures maintain power through the control of knowledge. Cultures with no apparent stratification are designated as 'egalitarian'. They may be egalitarian in terms of material possessions, but they are not egalitarian when it comes to knowledge. There are no true egalitarian societies, nor are there any simple societies – there are only societies which have egalitarian aspects to them (Flanagan 1989, pp. 261–2; Wiessner 2002, p. 234).

We need to look beyond material wealth for signs of power. Societies are organised according to individuals' access to information as well as the more familiar access to matter and energy (Moore 1983; Root 1983). Flannery and Marcus argue that:

Egalitarian societies do not simply remain egalitarian because they are poor, marginal, or underdeveloped; most have 'levelling mechanisms' that work to prevent the emergence of rank. Such societies may have

numerous *acquired* differences in status, but their egalitarian ideology counteract any tendency to such status difference to become *hereditary*, or 'institutionalized' (1996, p. 355; emphasis is original).

Many terms are used for those who have access to knowledge which is not available to the entire population. This book will adopt the term 'knowledge elite' as it is a relatively neutral term with no further connotations. The knowledge elite serve a similar purpose in cultures throughout the world, but the specifics of the role are unique to each culture.

Power in the hands of oral specialists is recorded for mobile huntergatherer cultures, including Australian cultures (Morphy 1991) where ceremonial leaders, often referred to as 'clever men', have great prestige in their community through control of knowledge (Clunies Ross 1986, p. 238). Similar roles are performed by the *n/om k"ausi* of the !Kung San and the *!gi:ten* of the /Xam of southern Africa (Lewis-Williams 2001), the *noajdde* of Scandinavia (Bradley 2000) and the *towoski* of the Trobriand Islands (Bradley 2005). Hayden and Villeneuvre talk about the political power and esoteric knowledge associated with secret societies among North American huntergatherers, including the Chumash, Pomo, Northwest Coast and Interior cultures (2011, p. 346).

As a society grows and settles, an increasingly restricted knowledge elite emerges (Couch 1989, pp. 593–4), such as the *bangara* ('Big Man' and calendar-keeper) of the Solomon Islands (Green 1998, p. 191), the Inca 'Rememberers' (Couch 1989, p. 593) and the American Indian Shoshonean 'talker' (Moore 1983). The Pueblo 'Sun chief' or 'sunwatcher' controls the calendar, granting him a role equivalent to a chief in the society (Reyman 1987, pp. 123–9).

In a detailed paper on the link between power, politics and ceremony, Reyman (1987) argues that Native American cultures are non-egalitarian despite the lack of obvious personal wealth. Rank, although often hereditary, is dependent on ceremonial knowledge, character, interest, skill in oratory, intelligence and the ability to memorise long, difficult chants. Access to knowledge is restricted and maintained through institutionalised secrecy. Power is particularly invested in the person who watches the sun and therefore controls the calendar. The powerful political role of 'medicine' societies among North American Indian cultures is exemplified by the *mitewiwin* of the Ojibwa (Vennum 1978) and *kachina* clans of the Hopi (Titiev 1972). Although often known as the 'medicine men', these societies performed many tasks other than healing, often also acting as tribal historian (Vennum 1978, p. 753)

A similar pattern can be seen in traditional African cultures. Roberts and Roberts (2007, p. 21) argue that, in many African societies, power derives from unequal access to knowledge, its ownership, protection, transmission, and the retelling to meet current political needs. They consider that the

control of knowledge is key to understanding many traditional African political systems such as the Luba royal culture. Within the Luba, the *Mbudye* secret society retains control of knowledge while serving the king or chief. Experts within African oral cultures, the so-called encyclopaedic 'men of memory' or oral historians, know more than any other because they systematically pursued historical information, often out of sheer curiosity (Vansina 1985, p. 151).

African oral specialists are central to the development of political power (Vansina 1960; Schmidt 2006; Akinnaso 1992). Examples include the bulaam of the Kuba (Vansina 1985, pp. 109–10), the Xhosa imbongi of southern Africa and the griot of West Africa (Kascula 1999), the Haya embandwa (Schmidt 2006), the Yoruba Babaláwo, the practitioners of Ifá (McClelland 1982) and the Bambudye society of the Luba (Reefe 1977). Studstill (1979, p. 71) refers to the members of the African secret societies of Congo tribes as the 'educated elite' (1979, p. 71). Within the Yoruba people, most kings maintain an advisory group of oral specialists, but even those who do not hold political office are extremely powerful (Akinnaso 1992, p. 101). Little (1949) links the role of West African secret societies to specialisation. For example, in the Akan states of Ghana, there are at least eleven different oral specialists, each of whom had to remember a particular part of the state history and transmit it to his or her successor in office (Vansina 1985, p. 38). Comparing various African traditional cultures, Vansina argues that specialists, such as iron smelters or medicine men, have information about their craft that is simply not accessible to others due to its complexity and esoteric nature (Vansina 1985, pp. 154-5). Similarly, each one of a group of secret societies in west African Kpelle cultures controls particular aspects of the knowledge system (Murphy 1980, p. 195), while the 'claim to esoteric knowledge constitutes their significance as mysterious, powerful, and dangerous' (Murphy 1981, p. 670).

The power of the knowledge elite tends to be reduced in larger, sedentary cultures where specialisation occurs between different roles within the society. As Goody describes for the African Gonja, performers tend to be of lower status than the recipients for whom the performances are directed, usually a senior chief and his entourage (Goody 1987, p. 105). In the Mesoamerican Inca empire, the *quipumayos* retained historical information in memory, assisted by the mnemonic device which will be discussed more fully in Chapter 4, the *khipu*. Serving the ruler, the Inca, the *quipumayos* maintained extensive lineages to support claims for rights, property and power (Niles 1999). These societies are clearly not egalitarian.

It is the pervasive role of the knowledge elite in small-scale oral cultures which will be assumed in the prehistoric cultures explored in the archaeological case studies. In the transition from small-scale hunter-gatherer cultures to larger sedentary farming communities, the role of the knowledge elite gradually

changes from one of total power to specialist societies serving the chiefs or kings. It is this transition, this book will argue, which can be seen in the material remains of the enigmatic monuments associated with cultures in the very early stages of settlement.

PUBLIC AND RESTRICTED KNOWLEDGE

The second indicator for assessing a monument as a mnemonic space (Indicator 2) states that there should be a dichotomy between public and restricted performance sites. In most, if not all, oral cultures, knowledge is stored in both public and restricted forms. Many critical knowledge performances are for very small audiences – only those who are initiated or being initiated into the higher levels of knowledge.

Public narratives are adapted to new knowledge and change with fashion and the whims of the narrators, usually in response to their audience. 'Public' songpoetry is communicated to all within the culture. Although adaptable, the public chants and narratives will maintain an underlying consistency of theme (Couch 1996; Finnegan 1988, pp. 69–70; Ong 2002). Using the Kuba as an example, Vansina (1960) quotes the theme of the story, the sequence, the essence of the episodes, the names and places, and the general indication of time as remaining traditional, while the singer is able to vary the story and the telling of it. Goody (2010) argues that many recitations, such as the 'Myth of the Bagre' of the African LoDagaa, vary significantly over time. But the sequence of ceremonies, stored in the White Bagre, is less variable. The structure is maintained.

Although public knowledge may be adapted, there is a great deal of information which must be maintained accurately or it would prove useless, such as aspects of navigation routes, seasonal information, genealogies, animal behaviour, plant properties, astronomy and so on. Not surprisingly, oral cultures have methods by which non-varying data can be maintained accurately in oral tradition, and one of the critical components is by restricting the repetition of the knowledge to a limited number of individuals under controlled circumstances.

Hugely different cultures show the same pattern of increasing restriction as the knowledge becomes more complex (Couch 1989, pp. 593–4). This is observable in cultures as different as the Australian Yolngu (Morphy 1991, pp. 77, 92–4), the Baktaman of Papua New Guinea (Barth 1975), in Tanzania (Schmidt 2006, p. 142) and North America (Radin 1911, p. 153). For the Native American Pueblo, access to knowledge is restricted and maintained through institutionalised secrecy (Reyman 1987, pp. 123–9), while the extraordinary ability to cross open ocean by the Micronesian navigators relies on their accurate song–poetry, which is limited to a select few (Hage 1978).

Secrecy is rigorously enforced. For example, the Winnebago place guards on all sides when the secrets of society are imparted to the candidate (Radin 1911, p. 153).

Flood (2006, p. 140) writes that public versions exist of Australian Aboriginal myths to be shared by all, but the restricted, sacred instruction, including higher meaning within the myth, is only gained through initiation. The stories of non-literate cultures sometimes appear simplistic. This is because those of us who are not initiated into the culture are only told the public version, the version told to the children to start their training in the knowledge system.

Access to restricted material is not readily available to those outside the culture, and consequently ethnographic knowledge of it is, understandably, limited (Clunies Ross 1986, p. 246). Even anthropologists with decades of close involvement with a given culture found answers were not forthcoming to questions which were restricted (see, for example, Rose 1992, p. 30; Bradley 2010). The Protestant missionary Rev. W. F. P. Burton was one of the few to write about the powerful African Luba secret society, the *Bumbudye*, while it was still active. Despite a great deal of effort, he was unable to gain any information about the upper three levels of the seven level initiation system (Studstill 1979, p. 75).

Much of the practical knowledge is taught by women to young girls, and by men to young boys. As restricted knowledge, it would not be available to those of the opposite gender. As Nichol (2011, p. 52) pointed out when discussing research into Australian Aboriginal cultures, the fact that most anthropologists were male meant that the women's initiation and learning was greatly underrepresented in ethnographic reports.

RESTRICTING KNOWLEDGE INCREASES POWER

In the Australian Aboriginal cultures, men do not acquire full knowledge, and so attain status and authority, until they are quite old (Stanner 1979, p. 39). Morphy writes that the

creation of secret knowledge is part of the process of mystification by which other members of the society are persuaded by the authority and power of those without access to it. Control of such knowledge enables groups of people – elders, members of a secret society – to exercise some degree of control over other members of society (1991, p. 77).

Similarly, Schmidt writes that in Tanzania

the groups that directly controlled iron production did so with highly esoteric technological and ritual repertoire. The ritual that surrounded iron production mystified the technological process to such a degree that it appeared to be mastery over something natural, human fecundity, rather than control over specialized technological knowledge. Such powers of mystification conferred certain economic advantages to the groups that controlled them (2006, p. 142).

Couch (1989, p. 593) describes the instrumental knowledge – calendars, agricultural practices and navigational knowledge – as being more restricted, and more jealously guarded, than the public knowledge. The Inca, for example, retain their astronomical knowledge orally, with the oral specialists known as 'rememberers' being a critical part of the administrative structure. Oral accounts of the past were maintained in two versions, one for the elite and the other for public performance (Couch 1989, p. 593). Couch goes on to describe the way the sun chiefs of the Hopi, the navigators of the South Seas and the day-keepers of contemporary Maya are examples of oral specialists who maintain a knowledge monopoly. As the Hopi oral specialists say: 'Power talked about is power lost' (Couch 1989, pp. 594–7).

By restricting information to an elite group through initiation processes, more accurate retention of critical knowledge can be assured. Restriction helps to avoid imperfect repetition of knowledge – the 'Chinese whispers' effect. Oral specialists instigate formal methods for ensuring accurate rendition of the songs. For example, when recording Wihu festival songs in the Rera (Ronrang) variety of Tangsa in India, linguist Stephen Morey noted that one of the singers (Mohen Rera) did most of the singing, and the other (Womjong Rera) responded with a formulaic and repeated refrain:

'It will be good for eating, like the deep place where the fish are.'

'It is true, it is right.'

'It will be good for eating, like the deep place where the fish are.'

According to Morey, 'the repeated refrain confirmed to the listeners, and perhaps also to the spirits, that what Mohen was singing was correct. Mohen had said that to sing incorrectly would be dangerous' (Morey 2009, pers. comm., 28 March).

The reliance on the presence and confirmation of other knowledge specialists to ensure accurate rendition has been noted for cultures as far distant as Australia (Haynes 2000, p. 63) and Africa (Vansina 1971, p. 446).

KNOWLEDGE IS TRADED

Indicator 6 suggests that an imbalance of trade may be an indicator that the site in question is a knowledge trading site. Not only material goods are traded. There is broad evidence that knowledge, in the form of song, has been purchased or traded by the knowledge elite in a wide variety of oral cultures. In fact, Turnbull argues that in Australia 'knowledge is the primary marker of

status and an item of exchange' (2000, p. 34) while Peterson refers to Australian cultures as 'economies of knowledge' (Testart et al. 1988, p. 21). Songs are traded in New Guinea and on the Trobriand Islands (Vansina 1985, p. 98), within the 'Grand Medicine Society' of northern America (Radin 1911, p. 150; Rajnovich 1994, p. 61), in Californian hunter-gatherer cultures (Hayden & Villeneuvre 2011, p. 349) and in Africa (Goody 1977, p. 42). Australian songs, dances and even whole ceremonies are traded, often in return for desired trade goods and ceremonial artefacts (Clunies Ross 1986, p. 238; Flood 2004, p. 268; Turnbull 2000, p. 34). According to Flood, a ceremonial dance appeared on the Great Australian Bight only twenty-five years after it was first 'exchanged' in northwestern Queensland, over 1,600 kilometres to the north (2004, p. 273). Ellis and Barwick (1989, p. 30) write that the selling of ceremonies is well documented. One of the routes for transmission they document, between Alice Springs and Port Augusta, is over a thousand kilometres, yet women who had purchased the ceremony could give very detailed information about the places named within the song series.

Systems of gift exchange are found among many communities worldwide, but those gift exchanges are not only of material goods. Knowledge is a valued resource that is also exchanged. Root writes that the *hxaro* is a system of delayed gift exchange among the !Kung San hunter-gatherer culture of southern Africa which serves to spread information and confirm social relations. *Hxaro* chains extend hundreds of kilometres, although knowledge of others on the chain usually extends less than eight links. *Hxaro* partners are distributed regionally in order to grant broad access to resources, mates and information, as well as secure food supplies during periods of local scarcity (1983, p. 204). Similarly, Malinowski writes that customs, songs, art motifs and general cultural influences are exchanged in the ritualised Kula gift exchange ring of the Trobriand Islands. Within the Trobriand culture, 'spells' are known only to a select group that may be purchased, given as a gift or inherited, after which they are taught in instalments (1979, pp. 168, 216).

Sometimes training is bought with labour rather than material goods. For example, a boy often begins his training in the West African *Ifá* divination and knowledge system at around the age of seven. The initiate lives with his teacher and provides labour for domestic or farming duties as well as acting as a messenger with other *Babaláwo*. Every day, the trainee must learn a quota of verses on which he is regularly tested (McClelland 1982, pp. 87–8).

FORMAL KNOWLEDGE IS FORMALLY TAUGHT

Oral specialists work hard to commit formal knowledge to memory. In non-literate societies, huge community investment, including labour, is devoted to institutionalised education (Akinnaso 1992, p. 81).

Havelock (1963, p. 41) claims that there is an assumption that the preservation and transmission of the laws, traditions, history and technical skills of an oral culture 'is left to the unconscious mind of the community and to the give-and-take between the generations without further assistance', and concludes that 'it is never the case.' There is always formal teaching of the knowledge, usually through various levels of initiation into ever more restricted knowledge.

With anthropology qualifications from both his homeland of Nigeria and from the United States, Akinnaso (1992) rejects the idea that education in non-literate societies is purely informal, or that certain areas of knowledge, including science, are linked specifically to literacy. He provides a detailed analysis of the formal and highly disciplined learning schools and of complex cognitive and mnemonic devices used in Africa. He describes the many years of training within a range of what he refers to as 'secret societies' of West and East Africa, such as the Poro of Sierra Leone and Liberia, the Luba of Zaire and the Yoruba diviners of southwestern Nigeria. Akinnaso argues that the 'major misconception is that education in non-literate societies either does not exist in terms of organised training or the systematic transfer of advance knowledge or, if it exists, does not promote social differentiation or foster sub-cultures' (1992, p. 69). Akinnaso acknowledges that 'literacy involves major changes in forms of communication and the organization of knowledge' (1992, pp. 71–2) but criticises Havelock, McLuhan and Ong for the assumption that schooling developed only after writing was adopted.

In concluding a book on anthropological perspectives on education, prominent anthropologist Stanley Diamond regrets the lack of interest in education within 'primitive societies', which he represents as having no formal schooling. All learning is, according to Diamond, embedded in socialisation. He states that there are no learning institutions, no examinations systems and no 'educational elite'. The actual process of learning was 'rarely, if ever, subject to careful and informed scrutiny'. He even goes as far as to state that '[f]ormal schools in primitive societies would be as strange and repugnant as jails' (1971, p. 301).

Objecting to Diamond's claims, Studstill, having been initiated to the first level of the Luba *Bumbudye* secret society, argues that the learning structure involved precisely the sort of impersonal, hierarchical, formally examined learning groups, leading to an educated elite, which Diamond associates only with modern schooling (1979, p. 76). Studstill also criticises other well respected anthropologists, such as Lévi-Strauss and Mead, for their implication that education in 'primitive' societies was an informal process of enculturation of children through kinship over the lifetime of the person (1979, pp. 68–9). Despite his landmark work on primary orality, Walter Ong wrote that '[h]uman beings in primary oral cultures, those untouched by writing in any

form, learn a great deal and possess and practice great wisdom, but they do not "study" (Ong 2002, p. 8). Diamond and Ong demonstrate the lack of recognition of formal schooling which has been recorded in traditional cultures all over the world.

Mobile hunter-gatherer cultures such as the Australian Yarralin people have formal contexts in which gender-specific knowledge is communicated (Rose 1992, p. 114). The Baktaman of New Guinea, for example, are trained from childhood for over twenty years through seven degrees of stepwise initiation (Barth 2002). Studstill describes formal schooling in non-literate cultures, such as the New Zealand schools that were opened for five months of the year, during which the young Maori studied from dawn until midnight (1979, p. 70). There were numerous stages and sub-stages of initiation into the Luba secret society, the Bumbudye. Payment of fees was required at each level (Studstill 1979, pp. 72-3). Vansina talks about formal schooling in Rwanda, Hawaii, the Marquesas Islands, New Zealand and among the Inca, as well as through levels of initiation in the non-centralised societies found all over the world (1985, pp. 47-8). Goody describes the teaching of the LoDagaa Bagre when the Neophytes are shut in for many hours in the long room of the house while the elders repeatedly recite the long 'myth' - Goody likens the process to formal schooling in literate societies (1987, pp. 150-1).

Julius Caesar, who invaded Britain in the first century BC, reported the presence of oral specialists who were exempted from military service, taxes and civil duties. 'These pupils are said to learn by heart a vast number of verses. Some, in consequence, remain under teaching for as many twenty years' (Caesar, as quoted in Ellis 1980, p. 30).

Within the Ojibwa(y) of North America and Canada, the mitewiwin (also written mide) (Grand Medicine Society) train in the song-poetry to a number of different levels, each requiring stressful examination of every detail, especially of the origin-migration songs which are central to the oral tradition (Radin 1911, p. 188). The Ojibwa are recorded as training mite at ten years old (Vennum 1978), with initiates spending years learning the medicine songs and scrolls (Rajnovich 1994). Over 1,000 songs were identified in the mitewiwin rituals, including medicinal, historic and cultural laws, among many other themes. Animals featured heavily. This knowledge was expected to be recounted exactly, without error. Although there were public songs known to all the tribe, the mite training was sacred knowledge, limited to the initiated, with mnemonics recorded on the sacred birchbark scrolls which could only be 'read' by those trained within the society. Should a mite lack suitable initiated heirs prior to his death, then his mnemonic scrolls and ritual paraphernalia would be burnt to ensure that they did not get into the hands of the uninitiated (Radin 1911; Rajnovich 1994; Vennum 1978).

Generalisations about hunter-gatherer cultures are often made from !Kung studies. For example, Biesele (1986, p. 163) argues that hunter-gatherer learning is informal, but makes specific reference only to the !Kung. As is acknowledged in the foreword to the 1999 edition of Lorna Marshall's seminal work on the NyaeNyae !Kung, 'the !Kung knew both black and white people, and they used many artefacts obtained from those communities' (Marshall 1999, pp. x–xi). They had no knowledge of stone tools, only of the metal knives they currently used (Marshall 1999, p. xi). In fact, Kelly writes that 'Bushmen have not been "pure" hunter-gatherers for at least several hundred years, perhaps more than a millennium' but are 'the lowest strata in a class society' (1995, p. 27). Consequently, generalisations about hunter-gatherer knowledge structures from the !Kung may not be as instructive as those drawn from Australian cultures, or from cross-cultural studies such as Morley (2006).

In Australian Aboriginal cultures, Flood writes that it took thirty or forty years for initiates to learn the full song cycles and dances, and to know all the sacred sites, sacred objects and designs associated with each ritual performance. 'Authority rested with these legitimate keepers of ritual knowledge, and tended to increase with age' (2006, p. 157). Nichol (2011, pp. 53–5) describes the way in which central-western New South Wales cultures involved little formal instruction for children who learnt by imitating adults. At the time of initiation, however, initiates were removed from the community for an intensive period of instruction in sacred, social, artistic and environmental knowledge. The entire society made economic sacrifices in order to ensure that initiates received this intensive formal training. Nichol generalises across Australian and Melanesian cultures by saying that 'to be truly knowledgeable one needed to have high ritual status and age; the authority, control, influence and prestige [that] came with knowledge was not open to young people' (2011, p. 56).

THE INTEGRATED NATURE OF TRADITIONAL KNOWLEDGE SYSTEMS

Non-literate knowledge systems are not structured according to topic. Oral cultures explore their understanding in a much more integrated format. Rigorous classification of knowledge itself only came with the logical structure of the storage of knowledge in writing (Fentress & Wickham 1992).

A Dreaming story of an Australian Aboriginal culture, for example, may tell of the creation of the landscape, the natural history of an animal species and the expectations of the people who claim that animal as their totem, while entertaining and teaching moral codes (Rose 1992) – a trait which can be seen in many documented songs (see, for example, Dixon & Koch 1996; Doring 2000; Goddard & Kalotas 2002; Perrurle Dobson 2007). Some stories

or dances, however, may tell the specific information needed, such as the Yolngu Bee-fly Ancestor dance (Graham 2006) showing how to track a tiny parasitic fly to locate honey.

In *Dyirbal Song Poetry* (Dixon & Koch 1996), the practical and didactic aspect is clear within the collection of 174 of the much larger body of songs of the Australian Dyirbal language group song specialists. Along with the specialists' retention of the complex kinship system and associated social responsibilities, much of the daily singing pertains to everyday events – the birds, mammals, fish, insects, reptiles, techniques for hunting and fishing, about places and the land, the cause of thunder, the cause and cure of illness, love, grief and bravery, plus historical events of the distant past but also quite recent events. A song telling of the breaking of the edible bulbs of an indigenous plant, say, would be combined with an account of the related creation time. These songs were released to non-indigenous researchers due to the few remaining elders' fear that they will otherwise be lost.

McClelland (1982) describes not only the divination aspect of the Ifà cult of the Yoruba, of West Africa, but also the way in which the oral literature memorised by the 'priests', or Babalaéwo, encodes an extensive, and integrated, knowledge system. Known as the Odù Corpus, the 260 sets of ordered verses include stories of varying kinds, from myth to straight narrative. Encapsulated within this vast corpus is acute observation of animal behaviour, the twisting of snakes in the trees in battle, the shape of badger burrows and the different birds' nests, along with details of the way the animals move on land, in water or in the air. Animals are used within parable, as conceptual metaphors for human behaviour and moral lessons. There are many examples of plant properties, for eating, building, weaving and for the pharmacopoeia. A high proportion of verses deal with the theme of death, while others include descriptions of the rivers and their navigation. There is a body of law giving precedence for almost every conceivable situation and setting out how the law is to be administered impartially, the rights of every party and how disputes are to be resolved. There are verses covering fair dealing in trade, the use and abuse of power and authority and an orderly framework for the election of local leaders. The historical aspects include such things as the defeat of the Ìgbò due to the development of iron weapons, the introduction of wrestling and Islam, the development of markets, towns, buildings, gates and roads, the way in which kingships developed and consequently the rules for choosing kings and chiefs. Material mnemonics are used to assist with memory and sequencing the Odù Corpus, as will be discussed in Chapter 4.

Someone familiar with the entirety of their own oral tradition can extract from it what they need for any given occasion – the behaviour of a prey animal, the properties of a plant, the route to follow to arrive at a desired location.

Should a researcher from a literate knowledge system ask about a particular bird, say, then the elder may extract the knowledge from a variety of sources to present the combined information that Western science needs.

CONCLUSION

Geographically diverse oral cultures maintain complex formal knowledge systems – the corpus of knowledge required for a society to survive. There are compelling reasons to suggest that *all* oral cultures maintain a knowledge elite and formally train initiates in the knowledge of the culture into an integrated system of pragmatic, religious, historical and metaphorical knowledge. The dichotomy between public and restricted knowledge is a dominant feature of all oral cultures, a feature which is so important as to be listed as the second indicator of a monument being used for purposes of memorisation.

Even with repetition and formal training, the human memory is unreliable. With no writing to rely on, oral cultures have developed mnemonic technologies to aid memory of the knowledge on which their culture depends. It is these technologies which will be the subject of the next two chapters.