

Tangkic Orders of Time: an anthropological approach to time study

Paul Memmott

Introduction

This paper considers the traditional time constructs and orders of Aboriginal coastal hunter - fisher - gatherers who occupy the Wellesley Islands and adjacent coastline of the southern Gulf of Carpentaria in northern Australia. They are divided into four tribal groups, the Lardil, Yangkaal, Ganggalida and Kaiadilt (the last were speakers of Kayardild). Because their languages are closely related, anthropologists categorize them as the “Tangkic” language group based on the shared word, *tangka*, meaning “person” (Evans 1995: 9).

The four Tangkic cultures display many commonalities reflecting at least five millennia of adaption to coastal lifestyles. The Tangkic customary marine knowledge encompasses plants, animals, the weather, tides and the behaviour of the seas. There is a detailed classification of the seasonal cycle, and extensive knowledge of the nature of offshore winds, the movements of fish schools, the times of the fattening of fish and the reproduction of sea animals. As well as various techniques used to catch sea resources, traditional practices apply to the consumption of certain species. For example, butchering of dugongs was a rule-governed exercise throughout the region, with different parts of the animal ideally being distributed to people of different status. Cosmological and cosmogonic belief systems have developed and evolved from a dependence upon the sea for survival. This aspect of the Indigenous cultures in this area is referred to locally as “Sea Law” or “Saltwater Law”. For the Tangkic groups, classical elements of Australian Aboriginal religions are embedded within a system of marine environmental knowledge (Memmott & Trigger 1998). I shall argue that these in turn are based on and generate from culturally distinct constructs of space and time.

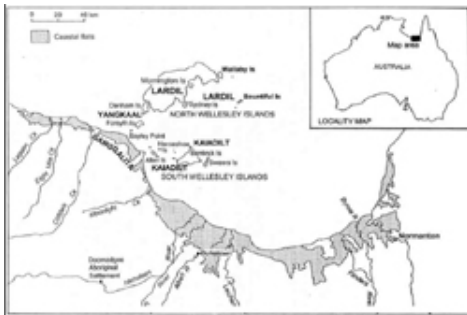


Fig.1: Map of Wellesley Islands and mainland coast showing the territorial distribution of the four Tangkic groups in the study. [CLICK IMAGE TO ENLARGE]

In this analysis, care has been taken to separate and avoid confusion between the language of time (Evans 1992, Ngakulmungan ...1997) and the cosmological constructs of time, a problem that Whorf was guilty of in his portrayal of the Hopi of Arizona (Malotki 1983:625-626, Gell 1992:135; also see Goddard 2003:420-427). For like the Hopi, the Tangkic language speakers employed only two tenses, non-future and future, but as was also the case with the Hopi (despite Whorf’s claims of their having a timeless language), the Tangkic people had no difficulty in communicating unambiguously about temporal context in their speech using other grammatical techniques embedded in their languages.

Natural time units and cycles

The importance of natural time orders in traditional Aboriginal life is stressed throughout the ethnographic evidence for the whole continent. These orders consist of solar rhythms and associated diurnal/nocturnal cycles, seasonal cycles, changes in climate, flora, fauna and other environmental conditions (e.g. quantities of surface water); also lunar rhythms and associated tidal movement and animal behaviour. Many units of Tangkic time which are embedded in language are, predictably, natural units of time.

For example the Kaiadilt have terms for “early (pre-dawn) morning”, “daybreak”, “morning”, “midday”, “late afternoon”, “just before sunset”, “sunset” and “middle of night”, and lexicon for the lunar cycle includes “new moon”, “half moon”, “full moon” and “old moon”. Temporal reference can also be made using tidal conditions since all coastal-dwelling Tangkic people are conscious of tidal movement. Thus the Kaiadilt have words for “high tide”, “rising tide”, “half-tide”, “low tide”, “very low tide” and “ebbing tide”. In organizing and sequencing marine hunting which traditionally involved nets, raft travel, and the use of bark torches, the solar time units (divisions of day and night) are correlated with lunar units (tidal conditions).

The seasonal cycle in the southern Gulf of Carpentaria is of the northern Australian monsoonal type with a striking contrast between “the wet” and “the dry” (see Table 1). The dry season proper (May to October) is marked by distinct seasonal south-east winds whilst the transition periods between the dry and the wet (October/November) and the wet and the dry (April), are marked by shifts in wind direction and humidity, and changing plant and animal life characteristics. As for many other Aboriginal groups, the seasonal cycle had (and still has) a strong influence on many aspects of traditional Tangkic life including identification of a discrete number of climatic periods, local movement patterns, exploitation of resources, campsite selection, settlement and shelter form, and types of camp behaviour (see Thomson 1939).



[Click here for Table 1 - the seasonable factor in Lardil life.](#)

The Lardil for example refer to these seasons by reference to the prevailing wind. Thus the *larumpen wanngal* is the south-east wind but can also denote the time of the south-east wind. Whilst the *jirrkurumben wanngal* or the *jirrkaraalin* is the prevailing north wind, which starts to blow intermittently in September and persists during the wet season and similarly can be used to denote this season. The Lardil term for the persistent heavy-falling monsoonal rain during December to March is *birrinju*.

Another category of natural time units pertains to those plants or animals which display a characteristic phase of their annual life cycle at a particular time of the year. The Kayardild thus have a term *darrmirra* meaning “in season” (literally “time-good”). Thus one might say “*Jawarlda* [oyster] *darrmirra* [in season] *jirrkaraalinji* [north wind],” or “Oysters are in season during the time of the north winds” (Evans 1992:38). References of this sort can be made to certain flowering and fruiting plants, schools of fish which run seasonally, the migratory appearance of bird species, etc.

In considering the various natural time events in the Tangkic calendar, it is important to note the widespread Aboriginal belief system whereby a sequence of seasonal changes such as plants flowering, fruits ripening, animals appearing in abundance, seasonal winds arriving, etc, were believed to be all causally inter-related and inter-dependant, one event triggering the next. Morphy (1999:265) has commented that Aboriginal people have a capacity “to measure one event by another and to take one

thing as a sign for another". Such seriation introduces relative time.

Relative time

In Tangkic grammar, relativity to the present can be expressed in a number of ways; most obviously through tense. In Lardil for example, there are constructs of future and non-future tense. Non-future tense is used in stating propositions which are now, or were once generally true and can therefore be used to describe past or present events. If one wishes to refer to a specific event then an actuality suffix is added (Ngakulumungan ...1997:24-27).

One may question whether the employment of only two tenses limits the linguistic capacity to contextualise events into past, present or future. This is not the case. A relevant technical linguistic concept is "deixis", the ways by which an expressed meaning can be anchored to some essential point of context in speech. There are three typical categories of deixis:- "who is speaking or hearing the expression – personal *deixis*; when it is being said – *temporal deixis*; and *where* it is being said – *spatial deixis*". The techniques of temporal deixis that are available in a particular language (including verb tense) thus allow the speaker to contextualise what he or she is saying into some temporal context – past, present or future, close-up time or distant time - and in reference to some point in time (commonly the present time when the utterance is made, but not always so) (Frawley 1992:274,281-283).

The linguistic techniques of "modality" broaden the potential of imputing temporal context to meaning in speech. Modality is that area of semantics that concerns the factual status of statements. It is readily modelled through the opposed terms *realis* and *irrealis*, the opposition of the real or actual world of events to those of non-actual worlds, ie to events that do not occur in the real world. In between are a scale or range of propositions – potential, possible, plausible, imaginable, doubtful or unrealistic worlds – with varying degrees of divergence or convergence between the "reference world" and the "expressed world". "In many languages, this deictic structure surfaces purely in the realis/irrealis distinction; in others, these parameters overlap with tense, person, and specificity" (Frawley 1992:390). In Tangkic grammar, a range of six modal cases can be signalled using a system of suffixes attached to certain nouns or noun phrases as well as verbs (noun/verb inflection). There are further innovations in Kayardild whereby there are rules independent of verb tense that can assign modal case on a semantic basis ie "modal case does not always depend on the verb inflection, but to some extent can be varied independently, allowing for a multiplication of subtle meanings" (Evans 1995:405). This permits an *irrealis* event (a certain ability or prospect or likelihood) to be semantically contextualised in time without needing an accompanying tense marker or mechanism implicit in the verb(s).

In addition to these grammatical devices, numerous lexical items can be employed in constructing relative time. In referencing the past, there are words for "last night", "yesterday", "the day before yesterday", "several days ago", "some time ago" (in the order of weeks or months), and "long ago in the olden days". For referencing to the future there are words for "in a little while", "later, not yet, but in the present time period", "tomorrow" and "the day after tomorrow". Most of these forms are in reference to the time of utterance. The Kaiadilt employ a root *barruntha* with a core sense of "not too far away in time" or "close up in time" which can be modified into either a past or future reference by the addition of particular suffixes.

Relative time constructs can be abstract, without overt reference to natural time units (day/night). In Lardil the root *dilaa* generates a suite of terms with the meanings "some time ago", "in recent (or later) times, in modern times", "a considerable time ago" (often prior to some previous period of time) and "long ago, in previous times". Relative time understanding can also be achieved in speech through the use of the numerous Tangkic terms of seriation that permit the ordering of events in time. The Kaiadilt for example have words meaning "again", "after", "next time", "first before doing something else", "happen after something else", and "happen last". Then again, causative verbs can generate a relative (as well as an active) concept of time as they indicate that a change in the state of being of some phenomenon occurs, e.g. something causes an object to fall, somebody to laugh, or somebody to fall sick.

Duration in time

Like other Australian hunter-gatherers, the Tangkic people had no quantitative measurement system for either space or time. There are specific words for the numbers one to four in Lardil and Kayardild, and then a range of words are used to refer to larger numbers of phenomena but are imprecise in exactly how many. Nevertheless measurement generally, and including that of time (or "time-reckoning"), was also possible using a simple system of visual marks to denote units. This technique is best illustrated through the example of Lardil message sticks which were used in coordinating large socio-economic events.



A traditional message stick announcing a forthcoming canoe made for the author by Fred Jarran. The decorations consist of grass string on a pointed white (A), bands of white ochre paint (B), red ochre paint (C), marks incised with a piece of glass (D), at one end there is a string handle for carrying whilst at the other end there is attached a bunch of feathers (E). The rectangle represents the starting ground, and the parallel lines represent individuals from the different clan groups located in the north, south, east and west of Mornington Island (Dunurra).



A four-sided message stick obtained from the missionary Bether. It announces a proposed initiation ceremony. The parallel strokes represent the various social groups to be involved. Group A are the people of the mission camp, C and E represent the 'northern' tribal groups, D being those from Damban Island and E those from Forsyth Island. F and G represent the Larumbanda division of the Lardil, and probably the Jilarambada division. B is the complete (next to the mission station), G shows ten boomers which are symbols of authority, a warning of the importance of the event. The stick itself is a piece of milled softwood. Traditionally sticks were cut from bush timber and were two-sided as above.

Fig. 2: Two Lardil message sticks. (Source: Memmott 1979: Fig.29.) [CLICK IMAGE TO ENLARGE]

The duration of time was however expressed in language, albeit in qualitative ways. For example, duration can be indicated by the nominal term *darri* in Kayardild which means "for a period of time". Thus "for a long time" can be expressed using *muthaadarri*. A more abstract Kayardild unit is *birrjilka* which simply means "occurring once in time" (ie at a particular time or occasion), and in the context of "something happening". Thus the term *wuuja birrjilka* literally translates as "transferring information or ownership on a particular occasion" and specifically means to "instruct in law" or in ritual business.

Active duration can be also constructed into phrases using a verbal reduplication whereby a verb is repeated with a particular durative word (eg *tharr* or *tharrurr* in Lardil). This produces phrases like "to keep on throwing", "to continue spearing fish", etc. In Lardil, the stem *karna* of the noun *karnan* meaning "long", tall or "extensive", can be reduplicated as *karnkarn* to mean "for a long time". A period of short duration can be qualified in Lardil using the noun *burdu*. If referring to nocturnal duration, the Lardil verb *bujaa* can be employed, meaning "to pass the night; to be or stay somewhere through the night" or "to spend the night doing something" (also *kirrbikarnan*, "all through the night").

There is another Kayardild word *yulkaanda* which expresses an infinity of duration, with meanings such as "forever", "eternal" or "permanent". The root *yulka* has a core sense of "the way things should be" which can also be framed as "the natural order of a thing or being" or "the perpetual rightness of a thing". A range of concepts are generated from this root which mean variously, "perfect", "always", "reliably", "do with lasting effect" and "go away for good..." (Evans 1992:182). This construct of *yulka* also has implications in religious practice, specifically in relation to sacred sites, ritual and ceremony. It is believed that sacred sites cannot be inappropriately disturbed, otherwise their perpetual rightness will be disrupted resulting in some sort of disaster or catastrophe. The construct can be applied in the sense of "correctness of way" during any ritual activity or a ceremony. Much intellectual energy is spent on decoding the memory knowledge of past religious events, seeking a consensus

on correctness of way and generally engaging in the politics of “standing accounts” (Williams & Mununggurr 1989: 80,81). Things must always be done in the proper manner.

Tangkic social time and the emphasis on the sequencing of events in space and time

Following on from the work of Durkheim, Mauss (1905) and their colleagues in the late 19 th and early 20 th centuries, Munn (1992:94-95) has defined the anthropological construct of “social time” as one of “collective representations” which derive from and reflect the categories and rhythms of social life. Time units were thus built on processes and sequences of human behaviour and activity. Here time unfolds in the completion of such activities, whether such activities occur within days or lunar months or seasons. This construct is in contrast to an abstract, homogeneous temporality, one of motion, flow and flux. Munn (1992:116) also defines a process of “temporalisation” that models time as a symbolic process continually being reproduced in everyday practices:

People are “in” a sociocultural time of multiple dimensions (sequencing, timing, past-present-future relations, etc) that they are forming in their “projects.” In any given instance, particular temporal dimensions may be foci of attention or only tacitly known. Either way, these dimensions are lived or apprehended concretely via the various meaningful connectivities among persons, objects, and space continually being made in and through the everyday world.

In the case of the Tangkic people, the geographic focus of their social time was the campsite. Thus each Lardil patriclan country contained multiple campsites, but at any given time most Lardil campsites were unoccupied. When a camp did form at one such site, a complex unit of place was generated. Size and length of campsite occupation varied. They ranged from small camps occupied by one or several domiciliary groups for a few days to large camps of a specialized nature containing several or more Lardil sociogeographic groups, as well as possibly inter-tribal visitors, for up to six weeks or so when concentrated food supplies were available. As noted before, such options of camping style were made within seasonal parameters, and seasonal camps were often economically specialized, e.g. the dugong camps, handcraft camps, water-lily camps. For the Lardil, both seasonal and social factors affected the scheduling of an individual’s time at each camp in Lardil lands. Sociogeographic (territorial) divisions did not restrict movement and visitation rights in order to attend public dances, *mirndi* or “square-up” events (redressing emotions) and initiation ceremonies (Memmott 1979:182,183).

Another outstanding aspect of Aboriginal social time was the extensive periods of waiting behaviour enacted at places (Memmott 1979:481). For example people patiently waited at a particular home camp for a messenger to travel throughout 20 or 30 clan countries inviting key individuals and families to attend a social event, and then for all of those people to travel to the venue. This waiting time reflects the lack of necessity to continually quantify time and the emphasis on the social quality of the event and its sequential, serial and causal relation to other events.

These ideas apply similarly to the Aboriginal attitude towards space. The cognitive operations used by the Lardil in spatial measurement and mapping are not those emphasised in Western culture (e.g. scale, planar geometry) although orientation is always considered important. Distances are not measured in finite quantitative units. During geographic discussion emphasis is on the correctness of spatial sequence of places during travel, and on the variation of qualitative features between places. Spatial units are not added or totalled but rather individualized. Geographic knowledge is decoded from memory in a sequential operation as if one is going for an imaginary walk through the environment along traditional bush roads, and naming each place as one comes to it. In the case of the Tangkic peoples, regular coastal movement provided the operational basis for memorising the extensive system of coastal geography (Memmott 1979:482).

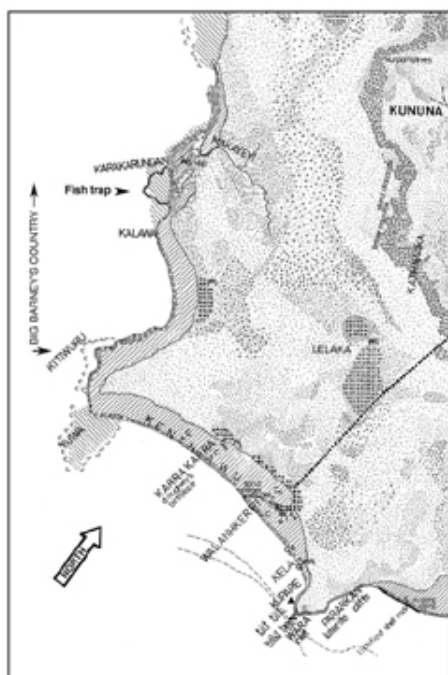


Fig. 3: Map of the Kenthawu locale (and Kupare Point) on the southern side of Mornington Island showing typical environmental units and Lardil geography. Note the general concentration of coastal place names with fewer names in the interior. The sand-based coastal strip at Kenthawu (diagonal hatching) contains about seven discrete campsites (denoted by 'c') used in conjunction with particular seasonal water resources. The triangular symbols denote Story Places. [CLICK IMAGE TO ENLARGE]

There are then no abstract units of time and space that Aboriginal people used to measure distance between events, i.e. no quantified geometry of space or chronology of time. The overall result was the possibility of expanding or compressing time and/or space in historical and geographical thought. Scale is less important than sequential correctness of events in space and time, and the nature of causal links between them (Memmott 1979:482). Such concepts of space and time correspond closely to the topological concept of space. Topology is the study of space, not concerned with distal measurement, but rather with certain spatial relationships between objects and their immediate environments: neighbourhood or proximity, enclosure (in two dimensions), envelopment (in three dimensions), continuity and connection, separation, inclusion and order (Sauvy & Sauvy 1974:25).

I have not attempted in this short paper to address the temporal structure of social exchange. However it is worth noting that in an outstanding sociolinguistic study, Liberman (1985:3-5, 72-74) argues that Western

Desert Aboriginal people have a culturally distinct (non-Western) set of rules concerning turn-taking in social discourse. Discussion is not structured in addressor–addressee diads but rather, speaking rights are corporate within the domain of a particular topic. “The serial order of accounting provides the right for anyone to make a contribution” (1985:73). This serial order of speakers however is flexible in that there is no prescribed ordering of speakers according to rank or status. Liberman argues (1985:5,76) that this systemic organization of social communication is productive of congeniality and consensus within a social organization that lacks centralization of political power.

Introduction to the “Dreamtime” or the “Dreaming”

The “Dreaming” or “Dreamtime” represents another important time construct in the Tangkic world. In Lardil, *Kuwalkujin* means “Dreaming” or “totem”, whilst *Mirndiyan* means “Dreaming” and more specifically, the Dreaming (or totem) of one’s patrimoiety. In Kayardild, *kuwalkulanda* means “dream”, whilst *kuwalkulatha* is a verb meaning “to dream”, or “see in a dream”, and the term *yuujbanda* in its core sense means “long ago”, also meaning in “the Dreamtime” or “the old time”, “the creation time”. Thus, *Yuujbanda ngunguk, kanthathu ngunguuja ngalawanji... Namu waldarr dangkaa waldarr*, translates from Kaiadilt as “It’s an old-time story, father told it to us... (He’s) not just the moon, the moon’s a person”; and *Yuujbanda nyinyaaki, yuujbanda yarbud*, translates as “It’s a dream-time frog, a dream-time animal” (Evans 1992:91,184).

In introducing the religious belief systems of the Tangkic groups, it must be first asked what is or what was the Dreamtime or Dreaming? One semantic aspect of this term is that it refers to the ancient past, many millennia ago, during which Aboriginal people and other fauna and flora were adapting and evolving in a continent of changing environmental conditions. Aboriginal sacred histories across Australia are concerned with this time and contain accounts of the doings of ancestral beings, some of

whom seem to have been animal, some human, but in many cases a combination of both (Elkin 1969:86, Munn 1970:143).

The terms “Dreaming” and “Dreamtime” are an intriguing lexical subject in their own right. They are one of a limited category of English words that took on continental currency amongst the many forms of Aboriginal English that evolved in various regions relatively independently, albeit with some influences diffused between groups along traditional trade routes and the new economic exchange paths, during the first century of colonisation. “Dreamtime” corresponds to a word or phrase in many Aboriginal languages, e.g. the Yolngu *Wangarr*, the Warlpiri *Tjukurrpa*, and the Arrernte *Altyerrenge* (Morphy 1999:265). To these we can add *Kuwalkujin* or *Mirndiyan* in Lardil and *Yujbanda* for the Kaiadilt.

According to Lardil and Yangkaal history, all the animals had human qualities in the Dreamtime. Individuals were a synthesis of a human and an animal or plant species, or some other natural phenomenon, e.g. dog man, barracuda man, yam woman, tree man, moon man, etc. These ancestral beings travelled about the country and through the sea, interacting with each other and the environment, experiencing adventures, making places, leaving signs of their presence, even parts of their bodies, and eventually dying and/or going into the ground, the sea or sky. *Maarnbil*, *Jirnjirn* and *Diwaldiwal* were the human colonizers of the country and seas, but they also had supernatural powers. They believed to have created the coastal land systems and various off-shore features which contain a wealth of geography, resource places, campsites and religious sites (Story Places). All subsequent Lardil and Yangkaal people are believed to have descended from this trio.

In her analysis of Warlpiri time philosophy, Munn argues (1973:23-24) that there is a fundamental division between the Dreamtime or the *Tjukurrpa* and the *Yitjaru* which “denotes the world of the living, the ongoing present, or events within the memory of the living” (*Yitjaru* also means “the time of awakesness”, whilst *Tjukurrpa* means “dream”). Munn argues that *Tjukurrpa* refers to “persons and events outside the memories of living actors” and that “none of the persons or events of this world overlap in time with the living.” Despite employing this structural separation, Munn also makes it clear that humans each identify with a certain number of these Dreamtime beings as their ancestors, from whom they have obtained their totemic identity. In the case of the Lardil and Yangkaal, a clear structural connection occurs back from contemporary social time into the Dreamtime era by way of backward genealogical projection to the ancestors, *Maarnbil*, *Jirnjirn* and *Diwaldiwal*.

Mention was made earlier of how cognitive maps of named places are construed as sequences of place-names corresponding to experienced travel routes. Similarly, knowledge of sacred historical events is stored sequentially in the correct time order but without any system of quantitative temporal measurement. However upon hearing the sacred histories of the Lardil, one at first has a sense of history as a set of disconnected stories. The past horizon is not presented in secular story-telling within a causal-temporal continuum but rather embedded in various eras, or episodes, which at first appear to be discontinuous episodic periods (after Munn 1992:112). There is no attempt to present them in a flow of time with a sequential context. Nevertheless when the author conferred with various Lardil philosophers, they placed strong emphasis on knowing the correct order of past events in their historical repertoire, but they did not necessarily always agree, generating vigorous debate. Cross-reference was often made from sacred histories to geological events, specifically the changing Holocene sea levels in the Gulf of Carpentaria and associated coastal geomorphological change (cutting of channels, creation of sand features), in order to assist with correct sequencing.

The activities of the ancestors are said to have left traces of their energies in the environment. The ancestors seemed to have an unlimited source of energies which were reproduced and deposited at places they made, even touched. Energies were also left in the environment in parts of themselves, such as faeces, sperm, broken bones or limbs, etc. For example *Thuwathu*, the Rainbow Serpent’s ribs were embedded in riverbanks to grow into *kurrburu* trees (*Acacia alleniana*) from which boomerangs can be made that are believed to contain his spirit (Memmott 1979:189). This introduces a more complex definition of the “Dreamtime”. Certain properties of energy from distant historical time are believed to continue to exist into the present at these sacred sites. Such energies may be transmitted to contemporary humans through their associations with such sites, either through birth or through ceremony and ritual at them.

The effect of the Dreamtime is to displace events in time so that things that happened in the past often have an immediacy that makes them part of the present. The Dreamtime is lived. Cosmological time has this characteristic in many societies since it is infinite in its duration and can be as much as part of the present and the future as it is of the past. (Morphy 1999:265.)

The Tangkic ethnographies indicate that they also believe in not just energy manifestations of the Dreamtime in the contemporary environment, but in a second contemporary universe, coexisting in time but inaccessible to normal human perception. It was at this time that humans as we know them today, separated apart from animals, although humans did retain certain properties of animals (totems) and vice versa. From the Lardil cosmological viewpoint, these two universes are in constant interaction and balance. Individuals (of the known universe) play an active role in this cosmic balance. Interactions can be made by persons into the Dreamtime world by a number of important methods. “Story Places” form key geographic foci in this regard.

Story Places and Time

There are widespread reports in the Australian anthropological literature of Aboriginal groups performing increase ceremonies at sacred sites or Story Places. “Natural cycles were replenished from inexhaustible dreamings” (Elkin 1969:94), i.e. from ancestral energies. It was man’s responsibility to maintain the ecological balance of his world (Strehlow 1970:132).

Of the different coastal place types in Tangkic geography, Story Places have the most complex set of properties. Each Story Place is believed to be inhabited by a separate spiritual entity which generates energies at the site. These beings reproduce at these sites, whether they are inside the ground or under the sea. Aboriginal people are able to catalyse processes of reproduction or fertility by performing simple ritual actions or songs at these places. Some sites are said to generate plant or animal species, whilst others produce meteorological phenomena.

Another cosmological significance of Tangkic Story Places is that they acted as sources of personal (or totemic) energies. Many individuals identify with saltwater totems or “Dreamings”, believing that they have some essence or vital energy in their human make-up that derives from their particular totem. The name of the resident of a Story Place (e.g. Rock Cod, Blue Fish, Sea Hawk) may be passed along successive generations as a name for local clan members. Totems are therefore connected with places and people and social identity is inextricably linked to geographic and religious rights distributed at sacred sites (Memmott 1979:193).

Howard Morphy (1999:265,266) points out that “...the Dreamtime has as much to do with space as with time – it refers to origins and powers that are located in places and things”. Spatial and temporal dimensions cannot be easily disentangled. Munn (1992:94,108) noted that the study of time is in itself embedded in space and it is difficult to privilege one over the other. However Morphy (1999:266,267), in his review of Aboriginal time conception elevates space, or more specifically place, over time:

Place has precedence over time in Aboriginal ontology. Time was created through the transformation of ancestral beings into place – the place being forever the mnemonic of the action or event. They “sat down” and, however briefly they stayed, they became part of the place forever. In Yolngu terms they “turned into” the place. Whatever events happened at the place, in whatever sequence they occurred and whatever intervals existed between them – all this becomes subordinate to their representation in space. Sequences in time are represented only if they were spatially segregated and occurred at separate places in association with separate features, and even then synchronicity or perhaps timelessness is built into the way they are presented.

Similarly, the place theorist Malpas notes the emphasis given “to the spatial; or better the topographic”, stating further:

Indeed, the way in which narratives [social histories] are always taken to be embedded in place might be taken to imply, not only a significant role accorded to narrative in the constitution of place, but also a conception of narrative as itself essentially spatialized and placed, rather than as primary temporal. (Malpas 2001:237.)

However Malpas goes on to argue that in devising an ontology of both place and experience, a dynamic approach is required, one that involves recognizing both spatialisation and temporalisation in the narratives (recounting of happenings) of place.

In summary, there is an emphasis on the qualitative nature of the events at specific places, the accompanying transformation of properties of place and the sequence of events, but not on the duration of events nor the intervals of time between events. Turning to the Central Australian deserts, Munn also writes of “the concretising of mythic-historical pasts in named places and their topographies through ancestral activities, especially travel”. She refers to the “enduring topography of ancestral “camps” and “paths” created out of transient, sequential activities”, establishing spatio-temporal linkages that can transcend the given moment; also how everyday life can involve a momentary awareness of the historico-mythical past triggered by the vision of an ancestral site and thus another kind of temporalisation occurs whereby the present is charged with the ancestral past and vice versa. The co-existence of numerous potential places for this type of experience in the immediate cultural landscape, generates “multi-featured spaces” saturated with varied temporal meanings (Munn 1992:114). Myers (1991:54) makes a similar set of points for the Pintupi, noting place as the mnemonic for significant events, evoking memory as one travels through country.

In the Tangkic belief system, place also dominates over time. For example natural time cycles can be influenced in certain ways at Story Places. It was believed seasonal changes could be catalysed by ritual action at appropriate Story Places. Prevailing winds could be called up or abated, as could cyclones and storms. Meteorological events could be “increased” in the same way totemic animals and plants could be increased at their story places. In this context Levi-Strauss wrote (1966:94,95) that “...natural conditions are not just passively accepted...they do not exist in their own right for they are a function of the techniques and way of life of the people who define and give them a meaning...” Here he was drawing from Warner’s analysis of Yolngu beliefs of the association of seasonal contrasts with economic and dietary divergences, as extrapolated into a binary classification embedded in sacred history. Thus:

Just as the seasons and winds are divided between the two moieties (the rainy season together with the west and northwest winds are Dua while the dry season and southeast wind are Yiritja), so the protagonists of the great mythical drama, the snake and the Wawilak sisters, are associated with the rainy and the dry season respectively... They must collaborate if there is to be life. (Levi-Strauss 1966:92)

Morphy (1999:267) writing about the same region, also notes that the “seasonal cycle and its relationship to the environment are understood in the minutest detail...[but are] seen to be intimately involved with the action of ancestral beings – for example, the lightning snakes, who bring about the wet season and cause the flood waters to rise.”

A critical point which these quotations raise is that the constructs of natural time outlined earlier are not merely embedded in the sacred histories as temporal frameworks but their origins are often explained and embellished in those historical narratives. Thus the Lardil sacred history of the Moon Man, *Kirdikir* which involves him dancing and feasting at a corroboree, stealing women and fleeing across the island, being pursued and speared, and then rising into the sky, explains the cycle of full moon to crescent moon as symbolizing a transformation from times of ample sustenance to times of scarce resources.

Story places or sacred sites thus contain perpetual energies that can be untapped with the correct sequence and/or performance of ritual activities. As Munn reported for the Australian desert ancestors, they go “inside”, “where they remain hidden yet available to externalisation in contemporary ritual performances” (Munn 1992:113). An interesting Alyawarr example from Central Australia that involves an influencing of natural time is the phenomenon of the Dark Dreaming. The particular clan who have inherited this Dreaming can perform rituals at a sacred site to either shorten or lengthen the duration of night. An Alyawarr Lawman and philosopher Albert Morton once impressed this idea of the eternal power of places on the author in a memorable passage of speech (see Table 2).



[Click here for Table 2 - the dreamtime as translated by Alyawarr elder Albert Morton.](#)

There is yet another method of influencing time in the Tangkic belief system, through crossovers between body time and structural time, or between social time and the Dreamtime. This introduces the ethnographic categories of “dreams” and “unseen people”, both of which have their own classifications in Tangkic ethnoscience.

Dreams and the unseen people

The Dreamtime is believed to co-exist in time with the natural environment, but is situated in a separate space dimension which is not visually accessible to living humans under normal circumstances. Rather it is inhabited by “unseen people”, the spiritual forms of the deceased ancestors, including the apical ancestors, i.e. the Hero Ancestors of the creation time. In Tangkic belief, connections can occur between these two universes via dreams and/or Story Places. Supernatural communication via dreams was a general trait of Aboriginal belief systems; the ancestral beings were thought to have “provided dreams as a means of communicating with the living” (Stanner 1963:39).

The aggregate of Lardil and Yangkaal Story Places are the geographical sources of their sacred knowledge. By frequenting a Story Place, individuals may receive gifts of knowledge usually encoded in songs, via dreams from “unseen people” in the Dreamtime dimension. Knowledge received in a dream at such a place is likely to deal with the nature of the local Story Place inhabitants. Lardil and Yangkaal Elders believe that to maintain a balanced system of communal and ecological knowledge, it is essential to have contributions of knowledge imparted through dreams in the vicinity of each and every Story Place (of which there were at least 105). The basis of knowledge, and hence social authority, can be seen to lie in social geography, through the association of dreamt knowledge by members of local clan groups with Story Places.

The type of knowledge that is transmitted varies, and includes trivial and lighthearted stories about animal behaviour, but the most important communications concern cosmology and cosmogony - the creation and origin of the parts of the universe, the processes of nature and the inter-relation of plants and animals, including humans, and laws for their behaviour. It is believed that pieces of knowledge will be communicated to people whom the unseen people know to properly observe the behavioural traditions and rules of the tribe (“the Law”). Thus Lardil Elder Lindsay Roughsey has said “old men give you Law back” (once they are dead), and his sister-in-law Elsie Roughsey has stated it is “part of the gift from people who have died; are for ones like them, who care to do good to others” (Memmott 1979:194-197).

In the Tangkic beliefs and practices of dreaming, we see phenomena from the past (deceased ancestors) created in the sub-consciousness (through dreams) and brought forth into personal consciousness in personal time (through songs) and thence through dance events into social time, as the dream knowledge is shared within the group. It is within personal time that is situated the problem of memory i.e. how the past is created in consciousness and the accompanying theory of mnemonics... signs that link constructs of past events to present places, people, groups, objects etc. (Munn 1992:95). Thus, the past is brought forward to the present, and even to the future, and can be conveyed from an individual’s personal time constructs

through the use of social processes of communication and various other media in order to become part of the social time of a group.

Before an old Tangkic person who was a regular dreamer dies, it is considered important that he or she pass on their knowledge to their children. Knowledge obtained from one's parent is held as being more reliable than that which has come from an individual who is not closely related, and the authenticity of knowledge received in dreams is unquestionable. This returns us to the idea of "correctness of way". The Lardil and Yangkaal Elders are very aware of the ebbs and flows of their pool of knowledge. Fragments are continually lost and gained. The question of accuracy of knowledge demands much philosophic attention from them. Each time a dance is performed, or its meaning explained, it should be done exactly as it was seen or instructed in the original dream. The author has witnessed lengthy debates between Tangkic and mainland Elders, reviewing the exact travel routes and events of particular hero-ancestors travelling from the mainland to the islands (e.g. Shark, Dingo, Pelican, Crane). The emphasis on "correctness of method" is a trait displayed generally by traditional Aboriginal groups. "For the ceremonial acts were believed to be capable of producing their practical effects only if they were performed in their entirety, and without deviations from the exact patterns that had been instituted by the supernatural beings at the beginning of time" (Strehlow 1970:111).

Conclusion

"Temporalisation" is the process of cultural time construction whereby actors construct and plan their activities and their temporal reference points during their life projects, thereby engaging the past and the future in the present (Munn 1992:104). A number of theoretical propositions have been made concerning the Tangkic ordering, associating, and integration of time concepts within their religious, social, economic and cognitive dimensions of life. Natural units and cycles of time are incorporated into and formed an important basis of the secular perception of time in the traditional Tangkic world. Tangkic temporalisation involves events of both natural, social and bodily origins. Such sequences and associations of importance to the Lardil and Kaiadit include diurnal and nocturnal hunting, births and deaths, ceremonies and ecological catastrophes, seasons and prevailing winds, moons and tides, the flowering of plants and the ripening of fruits, etc.

The movements of local groups and their activities conferred social time properties on places, e.g. when one might expect to find people at a particular camp at a particular time of the seasonal year. These transformations in population distribution tended to form a cyclic structure roughly correlating with the seasons and the tides but this pattern was regularly disrupted by other events in social time (dances, initiations, duels and other *mirndi* events).

In the Tangkic languages, relativity to the present or to other temporal reference points can be expressed through tense, causative verbs, modal cases or terms of seriation. The use of discrete abstract terms of time can also be used to express both temporal relativity and duration in time. Duration in time was for the most part qualitative rather than quantitative. Duration can also be conveyed using terms of active duration including verbal reduplication. Active duration or engaging in certain activities in time, is also linked to the ideology of "correctness of way" which is in turn inextricably linked to place management as well as to the political protocols of managing the historical knowledge of past ceremony and ritual.

Cognitive maps of named places are construed as sequences of place-names corresponding to travel experiences. Places are linked through sequential mental operations representing imaginary journeys through the landscape. Similarly sacred histories are disconnected episodes but are arranged by Aboriginal philosophers in their correct sequence of perceived occurrence. There is no quantified geometry of space or chronology of time that Aboriginal people used to measure distance between events. The overall result is the possibility of expanding or compressing time and/or space in historical and geographical thought. Emphasis is on sequential accuracy of events in space and time, and the nature of causal links between them.

The construct of the Dreamtime provides an additional complexity to the structuring of Tangkic time. The Tangkic system of religious knowledge has evolved to explain environmental changes and transformations. This belief system involves a configuration of human and environmental elements that are believed to be inter - connected in a variety of ways, often via systems of environmental signs and indices (animal, plant and meteorological reproduction), as well as through a spatio - temporal model of the universe and notions of visible and invisible phenomena. In Lardil cosmology, people, places and natural species are seen as interdependent, each with a set of beliefs consistent with the other. The Dreamtime universe forms a fourth interdependent domain, and links into this domain can be found at Story Places in the landscape. It is believed that through these links, certain displacements of time could be achieved. The totemic entities at Story Places are believed to provide personal subjective connections into the co-existing world, and render everyday life experience both profound and personalised. As Morphy wrote (1999:267) of Aboriginal Australia, "there is a shorter distance between historical time and infinity... As a consequence, infinity is more readily graspable as part of the present".

One striking observation of the current analysis is that the Tangkic lexicon and grammar of time provides a negligible understanding of the subtlety and complexity of the Dreamtime construct. There is certainly no case here to argue that grammatical temporality determines semantics in Whorfian terms.

The cultural practices of how various historico-mythic "pasts" are brought into the "here now" of the ongoing social world, i.e. how "presence" implicates "pastness", is a central problem of the study of historical (or collective) memory. Such practices encompass the forms of expression of the past in particular media (ceremony, oration, song etc), the rules about their reproduction, and the associated beliefs of supernatural cross-temporal linkages and effects (Munn 1992:112,113). Traditional Aboriginal societies place much emphasis on correctness of way in managing past memory knowledge, particularly in reference to ceremony, ritual, the content of dreams and other spiritual experiences at Story Places. In the contemporary Tangkic world, belief in the Dreaming continues to have a strong effect on the ways events are perceived and how temporalisation is constructed. However, temporalisation is now also a product of bi-cultural time constructs, Tangkic and Anglo-Australian.

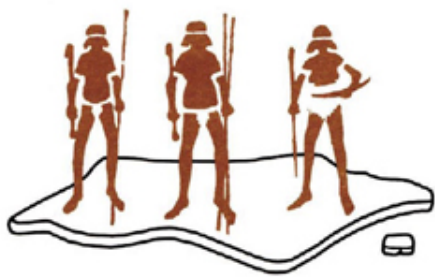


Fig. 4: The human ancestors of the Lardil and Yangkaal as portrayed on the letterhead of the Mornington Shire Council. From left: Divalldiwal, Maarnbil, Jirnjirn. [CLICK IMAGE TO ENLARGE]

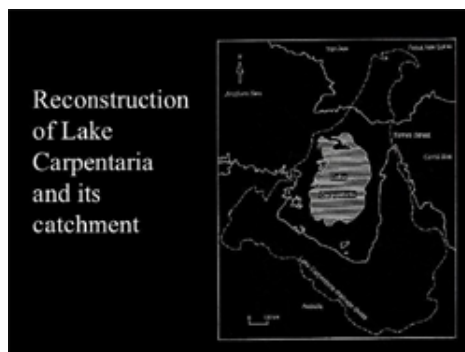


Fig. 5: Changing sea levels in the Gulf of Carpentaria from 18,000 years ago, when the sea-level was about 140 metres below today's sea level, and the rivers flowed into Lake Carpentaria. Between about 18 and 6 thousand years ago, mean sea-level rose at average rate of 1 cm a year; across

the gentle slopes of the Gulf the shoreline moved at 50 to 100 metres a year. Rising seas passed through today's level about 7,000 years ago, peaked about 5,300 B.P. and then fell some 1.7m between 4000 and 3,400 B.P. (Source: Dr Errol Stock, Griffith University.) [CLICK IMAGE TO ENLARGE]

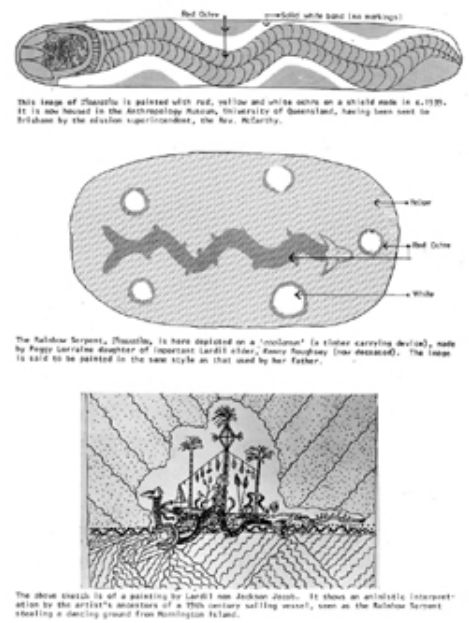


Fig. 6: Lardil paintings of the Rainbow Serpent. [CLICK IMAGE TO ENLARGE]

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