

FROM TAPU TO NOA – MĀORI CULTURAL VIEWS ON HUMAN BIOWASTE MANAGEMENT

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Abstract:

Tapu (forbidden or restricted) and noa (ordinary or free from restriction) are key Māori cultural concepts that continue to influence and inform present Māori praxis and thinking on all aspects of society, including biowaste management. Traditional management of human waste effluent was highly prescriptive. Processes and procedures were nested within cultural values and ethics that in turn were influenced by local context and circumstance. The tapu and noa constructs work in conjunction with other values to govern human behaviour and relationships with the environment at any point in time. However, tapu and noa are not fixed and can change through time as a result of a specific action or consequence; thus influencing the ability to interact or use an object or resource which create interesting management implications for human waste. This paper will discuss these factors, based on literature and previous research with Ngāi Tahu (Pauling & Ataria 2010) and hapū from the Taupō/Rotorua districts and suggest how these constructs might guide local practice and inform management frameworks for biowaste reuse.

Introduction

Tapu and noa are fundamental traditional constructs in Māori philosophy and spirituality that once governed the societal infrastructure and continue to have application and influence in contemporary Māori society. These terms are generally well known amongst New Zealanders, but there is a limited awareness of the extent to which the customs surrounding tapu and noa affected traditional Māori life and a general lack of appreciation and deeper understanding of how these concepts continue to guide Māori thinking, process and practice today (Mead 2003).

A concise definition of these concepts is difficult because; a) there are obvious difficulties in maintaining the integrity and meaning of complex philosophies and concepts when translating across cultural boundaries; b) there are a broad range of meanings and interpretations of tapu and noa that are dependent on the context in which they are being used, and the relationship with other traditional frameworks; c) Māori culture has spatial and place-based nuances – locally based

knowledge rather than national uniformity; and d) the manifestation of cultural concepts today is affected by multiple societal influences and experiences.

However, the following generic explanations provide a useful starting point for discussion.

Understanding Tapu and Noa

Tapu is a term that is often used to convey the meaning ‘sacred’. However, the words ‘prohibited’, ‘forbidden’, ‘special’, ‘not ordinary’ and ‘to be set apart’ convey a broader definition that encompasses the attributes of tapu (Mead 2003). All things are considered to possess tapu.

Early ethnographers and academics wrote extensively on tapu – albeit their interpretation through a Western cultural lens. Like many first principles in the Māori cultural values system, there is the conviction that tapu is descended from the realm of the Atua (deity) and therefore tapu encompasses all of the extraordinary powers to create and influence inherent to them (Barlow, 1991; Shirres 1982). This deeply religious connotation coupled with an unyielding commitment to and belief in the power of that spirituality is why tapu was such a powerful instrument in traditional society (Harrison in Benton et al., 2013:410) and continues today. This acknowledgement of tapu as being derived from the Atua meant that any deliberate neglect of the ‘laws of tapu’, even accidental or brought about by the act of another person, incites the anger of the deity, resulting in consequences to the transgressor and/or their kin group (Shortland, 1882) at the hands of the gods or otherwise at the hands of members of the tribe. A breach of ‘tapu’ was tantamount to committing a hara (violation) and carried with it severe penalties – including death, as was the case with the French explorer Marion du Fresne who fished in an area regarded as tapu (Kelly, 1951).

A pragmatic assessment of tapu was offered by Waddy in his Master of Law thesis in 1927 (in Benton et al., 2013:415) who said:

“Compared with some of our modern practices – legal, social and hygienic – it seems to have been constructed upon the keystone of common sense and expediency... there was always good reason underlying the tapu.”

Tapu can exist for a period of time, for example a rāhui (closure or ban) to temporarily restrict the people associating with a natural resource, e.g., a beach or collecting kai moana (sea food) from a specific area or location. This might be in respect of a recent accident or drowning, or to help manage overfishing or seasonal pressures on a resource. In this example, tapu provides a means of control over an activity or resource and can be understood as quite a practical and prescriptive response that can respectfully address spiritual dimensions in grieving or bereavement, and in practically managing scarce or fluctuating resources to protect environmental and human health.

Tapu can have temporal and fluxing dimensions, whereby time and timing are important determinants in governing or signalling a transition to unrestricted practice. Therefore, this also positions tapu as a transitional concept in supporting ritual and practice to help mediate between the unseen and spiritual world of Atua and the practical world of people and their relationships to the material environment.

Tapu can also have an intrinsic or material quality expressed as a more permanent exercise of tikanga or protocol. For example, a burial ground is always tapu and there is always a strict protocol for behaviour whereby eating is forbidden, and washing hands on exit from an urupā (cemetery) is required. A geyser for example, may be deemed in a more permanent state of tapu, with the effect of protecting human health and exposure to an unpredictable geological hazard of scalding mud or explosive water.

Despite the obvious pragmatic aspects tapu also exists as a spiritual power with mysterious and unknown dimensions, including the uncertainties, chance and complex causative relationships invoked within complex metaphysical domains. Notions of consequence, retribution and discretionary capacities for forgiveness may exist as aspects of these spiritual dimensions.

Shirres (1996) refers to the “extension of tapu” which is a consequence of all things possessing tapu, but that tapu is not equal in all things. This implies that the tapu of separate objects does not exist in isolation, and more importantly different aspects or levels of tapu will interact with each other resulting in outcomes that are either constructive or destructive in nature. Recognising this, Māori established a series of controls and processes that were often very prescriptive and designed for the sole purpose of achieving specific desired outcomes and avoiding what were often drastic consequences. Tapu provides something of a conduit for the material world to exercise some control and protection in managing intrinsic and unknown qualities, and complex interactions. The processes for deliberately making people or objects noa are an example of this.

Noa is the antithesis of tapu, describing the state of a place, resource or activity that is deemed ordinary or safe, and not subject to control. It is a stative verb and adverb denoting ‘freedom from restriction’ or ‘uncertainty’, ‘indefiniteness’, ‘randomness’ (Benton et al., 2013:266). That something deemed ‘ordinary and safe’ is also bestowed with ‘randomness’ and ‘uncertainty’ seems contradictory, hinting perhaps at the flux and tension between tapu and noa as permeable and entwined. This definition of noa makes clear the inescapable power of tapu as an ever-present intrinsic state. Similarly the strength of tapu as a practical material mechanism to control the randomness and uncertainty that is within noa, and the realities of living with chance, change and low level risk in everyday life.

Tapu and noa are specific cultural understandings built upon complex and intricate understandings of, and interrelated relationships between, people, flora, fauna, whenua and the wider spiritual and metaphysical environment. Other foundational concepts of Māoridom – such as mana, utu, mauri, whakapapa and manaaki inform the expression and understanding of tapu and noa under different contexts. The balancing and appraising of tapu and noa in relation to these important multifaceted concepts helps inform tikanga as protocol that guides appropriate or best practice (Figure 1). The complexity in understanding tapu and noa as inter-relational concepts strengthens our key message of the need for guidance from local mana whenua in determining the appropriate interpretation and application of these concepts.

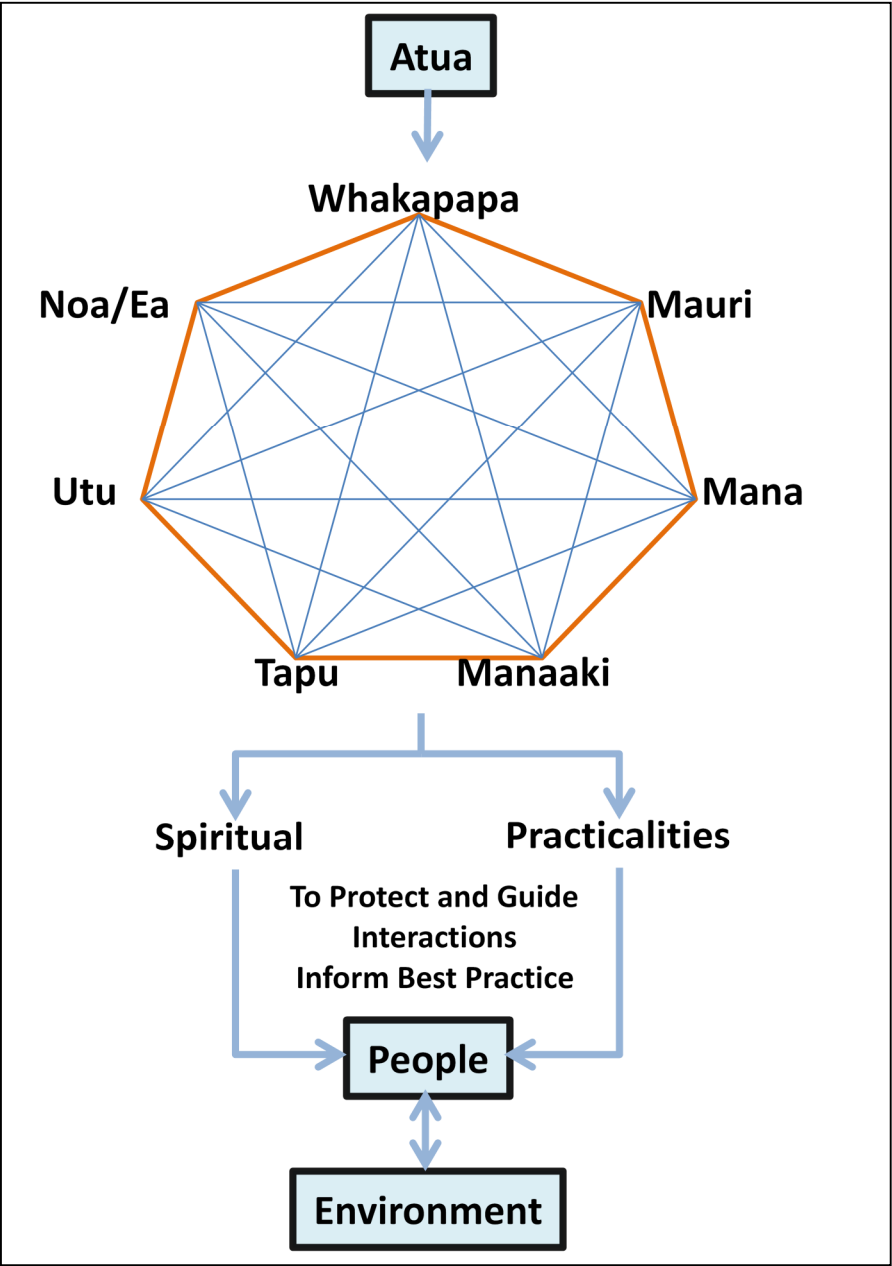


Figure 1. The inter-related values framework showing the complex interactions of Māori fundamental cultural concepts and how they manifest as a guide to inform best practice interactions between people-people and people-environment.

Tapu, Noa and Human Biowastes

The relationship of human biowaste, or biosolids, and the environment has traditionally been viewed by Māori through this inter-related values framework described above. The rationale for use of karakia and other customs associated with the separation of various types of human waste in the living arrangements of a traditional Maori village was passed from one generation to the next through archetypal stories of prominent ancestors such Hema, Tawhaki, Rata and Hina (Hineteiwaiwa). These ancestors feature in the tribal lore of many areas regarding the disposal of faeces (Hema), construction of paepae-hamuti or toilet facilities (Tawhaki), the use of toilet waste for certain ritual purposes (Rata) and protocols for handling menstrual fluids (Hina). These traditional narratives about other ancestors like Tamaiwaho, who helped bring knowledge of healing and medicinal plants to the world, also highlight the potential consequences for human health and wellbeing if tikanga is not followed when managing the various types of human waste.

Throughout the traditional discourse on waste management tapu has been a principal value that has informed and underpinned well-established Māori behaviour and practice. Shirres' (1996) commentary on tapu provides a helpful framework to derive one view about how tapu relates to this waste stream.

All humans possess tapu, the prestige/power that is inherited from the Atua, and are therefore very tapu. This spiritual tapu logically extends to human body parts and waste products that are produced and excreted by humans that are, by association, also very tapu. This elevated tapu state demands that prescriptive procedures and processes are implemented to avoid instances of extension/consequence where the tapu associated with biosolids creates a destructive outcome when it interacts with tapu from another entity/thing. Therefore, rituals and practices were established to mediate between the spiritual dimensions (world of the Atua) and the practical world of people and their relationships to the material environment for positive outcomes: protection of human and environmental tapu.

Traditionally human waste management practice was heavily influenced by local environment. Whilst there was variability across regions, Iwi and hapū, some generic practices have been cited and drawn from interviews.

Spatial separation and designation of areas specifically for waste (e.g., human waste like faeces, urine and menstrual waste etc. and other activities like bathing, food waste etc.) from significant places (e.g., food growing and harvesting, food preparation and the collection of drinking water), activities and people was key. Traditionally this has been done by the separation of toilet and kitchen or living zones within a marae settlement, being mindful of land slope and run off in locating latrines, or by demarcating different zones for bathing, kaimoana, water collection along a

river to minimise the effects within a catchment area. There have also typically been specific practices for dealing with death and illness that are based on separation as a means of control.

The notion of tapu and noa as being transitory, introduces the prospect that things deemed tapu could potentially change their spiritual state over time – assuming that the requirements of time, a detailed knowledge of the composition of the waste stream and the appropriate cultural and management process have all been satisfied. Although arguably not as mainstream as separation, there are some accounts of latrine sites, over time, becoming sites for productive gardens, or where human waste is applied to areas later used to grow kai. However, whether this was intentional change of land use for productive crop growth, or reflected a change in ownership is not clear in all cases.

Contemporary Expression and Manifestation of Tapu and Noa

Today there are different forces or trajectories that influence how tapu or noa, and other traditional cultural values, may be expressed in response to issue like biosolids management (Figure 2). The erosion of traditional constructs is widespread, resulting from the systematic undermining of Māori culture from multiple sources. The impacts of colonisation have marginalised Māori participation in decision-making relating to natural resource management processes – although this is changing rapidly with Treaty-based legislation and the changing power dynamics following Treaty settlement. Furthermore, it is highly likely that the place base; community demographic (rural or urban); the strength of traditional knowledge and power base; and the evolution of governance structures and resources following Treaty settlements are all factors that may influence the strength and range of views on the transition of tapu to noa and the exercise of cultural management frameworks for many natural resource issues. As such local government needs to be cognisant of these factors in determining appropriate modes of engagement with Māori.

Modern reticulated sewage and wastewater treatment also raise entirely new challenges of scale and the ability to exercise traditional controls of tapu and noa. Designed to facilitate effective and timely removal of hazardous waste away from built up areas, these systems commit communities to a specific model of treatment reliant on existing infrastructure. While these systems are effective, management of them could be improved to meet cultural concerns. For example, hospital, mortuary and menstrual waste (spiritual tapu associated with body parts or bodily functions) are substances entering the wastewater system that present considerable cultural challenges for some hapū in being assured that the municipal treatment processes can adequately perform a transition from tapu to noa. Discussion around these aspects will often highlight differences and tensions in traditional Māori values and Pakeha concepts of treatment and purity.

It is also important to contrast the key differences between traditional waste (including human waste) and contemporary waste streams when considering the application of tapu and noa to biosolid waste. The most striking differentiation relates to a clear knowledge of what constitutes the waste stream – and more importantly the ability to control what is put into this waste stream, i.e. maintain separation. Traditional Māori waste management processes ensured a high level of compliance around what was disposed of and when, thus creating confidence and commitment. For example there was an implicit knowledge of the constituent composition of waste streams to ensure inappropriate mixing and appropriate disposal processes were adhered to, e.g., middens, wood waste from carvings and menstrual waste. This is impossible to achieve with modern reticulated systems that process wastes from multiple sources. There is less ability to control and be certain of what goes into the system, treatment processes, more diverse cultural practices, increased volumes and an ability to transport waste to other locations. Another factor is the aging waste infrastructure whose capacity to deal with peak loads and maintain clear separation between different waste sources (stormwater, sewage and tradewastes) is questionable. A further distinction between traditional and contemporary waste streams lies in the prevalence and proliferation of chemicals that are in use in contemporary society. In a passage from a Ngā Kaihautū Tikanga Taiao (Māori Advisory Committee to the Board of the Environmental Protection Authority) report to an application under section 28 of the Hazardous Substances and New Organisms Act (1996) to import baits containing difethialone¹ the issue of tapu and noa is discussed in relation to chemical persistence:

“Many Māori consider that within the realms of Papatūānuku and Ranginui there exist a range of established processes and relationships that continuously cycle chemicals through the spiritual states of tapu (restricted state) and noa (relaxed or normalised state). In a scientific context these processes could be termed bio- and physico-chemical transformation which acts to breakdown and modify chemical compounds to basic building blocks for other uses or re-partitioning back into the environment. Compounds that have been synthesised with properties that convey resistance to these natural processes are often met with opposition – particularly if their intended use involves direct deployment into the environment or at some point during the life cycle of these products environmental exposure occurs.” (Ngā Kaihautū Tikanga Taiao, 2012).

¹ A hazardous substance that was proposed to be used as a vertebrate toxic agent.

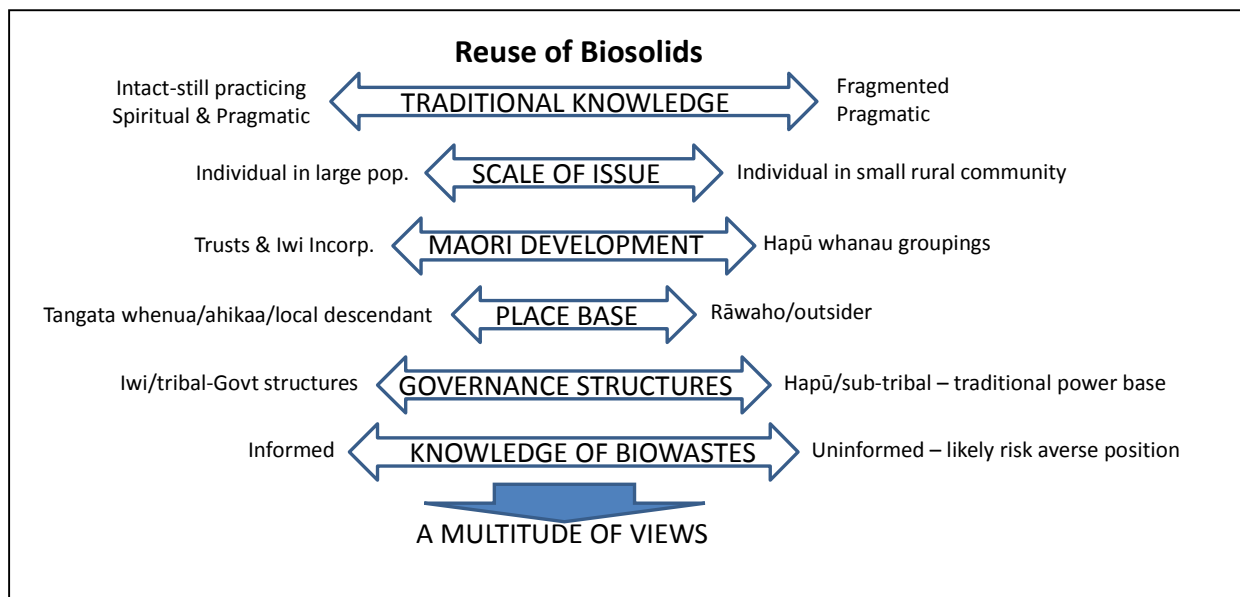


Figure 2. Contemporary influences and realities that inform the expression of Māori culture and practice.

Co-management to Reflect Traditional and Contemporary Insights

These contemporary realities were expressed in interviews with Māori business owners, kuia and kaumātua undertaken in previous research. These revealed that:

- Māori have a range of views about land application and beneficial reuse of wastewater and biosolids.
- Overall there was a strong sense of ownership of the problem and a view that good waste management was an integral part of exercising kaitiakitanga or stewardship of the environment.
- There are varying degrees of cultural/spiritual knowledge, but many are cautious about beneficial reuse within the food chain. Human health was mentioned as a concern, especially with new chemicals and pharmaceuticals. Some expressed ‘not feeling comfortable’ as a way of articulating how use in the food chain sat uneasily within the frameworks of cultural knowledge and practice. There are also concerns about mortuary and hospital waste, and some would be more open to beneficial reuse options if local government could divert these wastes. Menstrual waste was also a concern for some, but this input was recognised as more difficult to control in contemporary society. Keeping human waste and run off away from sacred places such as the urupā had continued importance. Some mentioned saying a quiet karakia in performing rituals at the urupā, for burying afterbirth, or in disposing of waste on the marae.

- There was a healthy tension and active reflection between traditional ‘separation’ of human waste from food, and being pragmatic and ‘moving with the times’. Some talked of ‘longdrop’ sites ‘being covered up and don’t go near it’ and ‘not used for anything else’ for 20 plus years. Others shared historical examples of gooseberry bushes for eating being grown on old latrine sites, and a koromiko tree planted on a re-dug latrine site with the leaves used for rongoa to cure stomach cramps. In more contemporary practice some spoke of Uncles that grew beautiful sweet potatoes, but not telling the Aunties that they were being grown in biosolids from the municipal plant.
- Small communities, marae and land trusts were interested in better utilisation of contaminated sites and in exploring how they could manage multiple waste streams (including septic tank waste) on site.
- Māori productive sector businesses, for example, were willing to explore biosolids reuse as ‘hypothetical’ in future planning for sustainable on-site waste management systems, but they were also concerned about how beneficial reuse might impact on export markets, branding and commercial sensitivities around their food production.
- Proximity was important and there was a localised aspect in thinking about waste and reuse. For example, people would consider reuse and be more inclined to eat foods grown in their own waste from a composting toilet, rather than municipal-scale waste.
- There were concerns about the unknown and knowledge gaps: ‘What is in it?’ was always the foremost question when the CIBR scientists asked communities about how they might consider pollutants vs. nutrients, and the risks and benefits of reuse.
- Protection of water was a common theme, with land application mostly being preferred as a first option.
- Methods of treatment that employed natural processes like composting and vermicomposting (earthworms) were considered favourably, but concerns remain about the ability of these techniques to treat chemical contaminants (recalcitrant and new and emerging contaminants) and what were appropriate reuse options for the composted product.

Iwi, land trustees, hapū and Māori business owners tend to be very keen to engage with local government on waste and biowaste management issues and reinforces our research data showing that Iwi do not adopt a ‘flush and forget’ approach that can be typical of ratepayer responses to this issue.

Overall there was a great deal of openness and willingness to carefully consider and weigh up options. Many valued the opportunity to access new scientific information and have constructive conversations about what tapu and noa mean, and importantly how these can inform contemporary practice.

Conclusion

Traditionally the ability for Māori to exercise local control over the separation and disposal of different biowastes was much easier. Today it is far more difficult to control what goes into the wastewater system and where it is treated and disposed of – especially where households are connected to a reticulated system. This is due to legislative and policy requirements and the complex ethnic composition of New Zealand communities. There is also greater scientific awareness of, and ability to study, complex mixtures of contaminants, such as household pharmaceuticals and emerging contaminants from industry or new consumer product ingredients for personal care and hygiene. Influencing household consumption or behaviours (and/or the formulation of consumer products) to reduce or eliminate the disposal of chemicals of this nature is a key challenge. Likewise an aim of diverting trade, hospital or mortuary biowaste may present interesting challenges and infrastructure costs for local government and rate payers.

Tapu and noa are Māori cultural concepts that operate alongside other concepts and values to inform traditional knowledge and resource management frameworks. There is a breadth of cultural knowledge on the topic of biowaste, biosolids and wastewater management, a willingness and openness to explore new forms of co-management, and an expectation of being involved in decision making. Where this is the case Māori view biowastes and biosolids as something that should be owned and responsibly managed, rather than forgotten about or left to the environment to cope with.

Biowaste management in New Zealand requires more sophisticated forms of governance, as well as genuine conversations about the limits of our knowledge, what ought to be the limits of our treatment, and how we can best continue to manage human impacts upon the environment.

It is a good time for local government to become more informed and have some meaningful conversations with Iwi, rūnanga and local Māori land owners about long-term planning and co-management of the environment, water and biowaste. How well local government embraces this will directly correlate to the degree that the Māori world view is incorporated into decision-making.

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