"The Coconut Tree and the Computer Tiger: Information Technology in Traditional Pacific Societies"

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Abstract

This review explores the extent to which Information Technology (IT) has affected the cultures of small traditional Pacific societies, with the South Pacific region as the point of focus. The assumption is that the educational systems of Pacific nations are in the developmental stage with the associated sophisticated technological applications. The thesis asks what if any, cultural challenges of adopting information technology have arisen? The review finds that traditional culture and information technology are in competition in the power stakes of human consideration, reflected in South Pacific indigenous academics seeking independence as researchers and acceptance in their own right. The realisation that culture and technology need to function together requires attaining academic freedom in the aftermath of post-colonial restrictions placed on the indigenous sociological and anthropological imagination. The first part examines the history of information technology generally, and the significance of work already done, providing a perspective of how the subject has developed and become established, assisting in the development and acquisition of the appropriate vocabulary. The review explains and describes the occurrence of information technology in the South Pacific, the effect of globalisation and shared knowledge through ethno-methodology, every day culture in action, describing the ways in which people make the sense they do and through the ways they communicate. In the second part the focus is on the detail of the commonsense character of everyday life and the practices by which they make their actions understandable by others. Scrutiny of how people do what they do provides an explanation of what those people do and why they do it in the way they do. Western form of governance is a reality, with nation building based on Western models of development. National independence and sovereignty with a wave of neo-colonialism and aid dependency led to economic globalisation, with resentment against value systems that erode

indigenous values, producing a wave of re-indigenisation facilitated by the revolution known as "information technology". There is a coherent body of Pacific thought, with a shared philosophy and ethic on the public agenda. In the material covered, elements standing out are the awareness among growing numbers of Pacific academics of the need for a genuine and far-reaching contextualisation, acknowledging the relevance and applicability of indigenous cultural values in contemporary settings. Second is the success of communities whose initiatives have followed familiar traditional ways they know and understand, reaping rewards. The region has development and governance failures in Papua New Guinea, Solomon Islands and Fiji to name a few; the national state of affairs in some countries is not encouraging. Where good development and governance are occurring, it is usually through the direct initiative of local communities using their knowledge base. The information upheaval is creating new opportunities in the lives of people from small traditional societies. Information Technology expands throughout the social structure of the Pacific in direct proportion to personal computer access literally at one's finger tips.

Acknowledgement

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Chapter 1.

General History of Information Technology

The extensive and growing literature on information technology is comprised mainly of government or official documents and academic studies and reports. The volume of this material is a reflection of the increasing importance of information technology as a feature of workplace and private life in the developed nations. On the one hand, the amount of material is so extensive that a review for a research project of this nature can do little more than address a relatively small selection from it. Many of the publications on information technology contain literature reviews of their own (e.g., Smith & Kollock, 1999) and these are often extensive in the chronological period they cover and the extent of their coverage, for example, across cultures and across nations. This facilitates the process of summarising and helps to avoid duplication and replication. As information technologies are mainly a phenomenon of developed nations, the majority of the published material concentrates on their impacts or effects in the industrialised nations, and further narrow the field of established knowledge.

Effect of Globalisation

The value of a knowledge networking approach to the effect on a culture is that it allows mediation; knowledge networking has been described as a rich and dynamic phenomenon in which knowledge is shared, developed and evolved. The concept involves access to information, because it probes the indefinite. It uses the rules and inferences of expert systems; it is about knowledge that is dynamic, person-to-person communication that develops new knowledge (Skyrme, 2007: 10), what Hakken called "preconscious/

conscious" divide in the study of culture. That is, anthropologists have long argued that much of culture works with a conscious awareness. Culture becomes what we do without sometimes being aware of it. Globalisation allows cultural sharing through rapid transport and electronic communication, multiple localities and multiple identities are possible with nation states forced to accept increasing mobility and complex social identities and the new "pluralist realities" or many layered discourses (Cohen & Kennedy, 2000: 353). The study of how we know through participant observation of the activities by which people justify what they believe to be true provides a look into this world of the preconscious (Hakken, 2001: 11). A transnational cultural group symbolises the way people are bypassing the nation state system. People continue to require a meaningful identity and a flexible attitude to new opportunities. Those residents outside their natal lands can act as intermediaries in business and administration as they tend to be bi-lingual, they readily identify missing links, cultural norms and social practices that threaten group survival in the societies where they visit or stay.

The many media domains portray diverse cultural expressions, with no distinction between television and printed media, popular culture and learned culture, entertainment and information, education and persuasion. Cultural expressions are presented in cyberspace with past, present, and future collections of the "communicative mind" (Castells, 2000: 403). Then there is a new symbolic environment making the virtual world our reality. Barthes (1978) and Baudrillard (1972) taught that all forms of communication, "are based on the production and consumption of signs" (in Castells, 2000: 403). Therefore, there is no separation between reality and symbolic representation. In all societies, humans have existed in and acted through a symbolic environment. Castells (2000: 403) says the new information technology system has gathered all modes of communication and created "real virtuality". Virtual, "having the effect but not the form of" (Collins, 2001: 601), and real, "existing in fact, actual" (Collins, 2001: 451).

The meaning of messages varies and with human interaction is the possibility of electronic media not being representative of a reality portraying the concept of a primal notion of real experience that never occurred. Reality is communicated through symbols in human interactive communication, irrespective of medium. If all symbols are displaced in relation to their assigned semantic meaning, then "all reality is virtually perceived" (Castells, 2000: 404). To generate a real virtuality, a system is required where people's material and symbolic existence is represented, absorbed in a virtual image setting. The images on the screen communicate an experience, and this becomes the reality. The medium encloses many and varied messages and is so comprehensive, "the whole of human experience, past, present, and future" can be represented (Castells, 2000: 404). "What characterises this new system of communication in the digitised, networked integration of multiple communication modes is its inclusiveness and comprehensiveness of all cultural expressions" (Castells, 2000: 405). Messages in this new society work in a binary mode: they are present for an unspecified time, then absent through deletion or modification. A message's presence allows onward transmission and socialisation of the message, other messages that come and go are "reduced to individual imagination or to increasingly marginalised face-to-face subcultures" (Castells, 2000: 405). Information technology is able to integrate all forms of expression, portraying the diversity of interests, values, and imaginations that produce social conflicts. Participation in the system requires adapting to the logic, the variation in availability of information, and the encoding and decoding. For independence, it is necessary to have an Internet system with a horizontal network, as opposed to a central dispatched multimedia system, like the video-on-demand configuration. Cultural control is with passwords governing access to information, "the outcome of which predetermines the fate of symbolically mediated conflicts to be fought in this new historical environment" (Castells, 2000: 405).

Pacific Islanders like others are in a system of domination and the process of censorship in the information society. Cultural expressions have consequences for social forms and practices. Any weakening of the symbolic power of traditional structures outside the system would reflect in the social habits such as religion, morality, authority, cultural values and political ideology. Social process requires communicating in ways that convey understandings; in cyberspace the capacities in which we relate to each other are less clear cut, social interaction involves negotiating and defining relationships with one another. When kinship relations and religious rituals produce and distribute resources they become integral to the economic system. Kinship promotes a system of social relations by regulating marriage and descent and producing the labour force. Religion conceptualises the universe promoting human productive effort. In Pacific tribal society, the low-lying islands and atolls, kinship is the system of production and distribution, they are without a class system and have little accumulated wealth, the focal point of their existence is "living human labour" (cited in Keesing & Strathern, 1998: 148-49). Religion in Hindu Fiji provides an organisation the caste system based on purity and pollution producing a structured means of acquiring resources with Untouchables performing the menial tasks polluting to higher caste members. Tonga has a more complex system of social classes with workers, warriors, artisans, priests and royalty, with royalty and their cohorts controlling the system of production

Social process requires communicating in ways that convey shared understandings, in cyberspace the capacities in which we relate to each other are less clear-cut, social interaction involves negotiating and defining relationships with one another. Cues and clues and understandings become cultural and personal matters of collective convention and private style, they cannot be studied or observed directly. If the cyber-culture is free of 'real world' constraints and seen as above and beyond the individuals who participate in it, there arises the risk of inventing a system that could not be learned and used by human beings. If cyber-culture is considered to be a

community of individuals, each with his or her private abstraction of the social world, and each enacting practices and inferring meanings on the basis of this private conceptualisation of reality, the social process of shared meanings being created and sustained by people is bypassed and replaced by a 'mentalistic' view of cyber-culture. Interwoven throughout the cyber-tribe are religious systems characterised by a oneness with nature. The cyber-world could be considered a human environment without a climate or a cycling of days and years, but the kinship with cyber-nature could be considered as compelling and sacred. If humans do not have technology that allows them to control nature philosophies develop to place them "within the processes and forces of nature, not on top of them" (Keesing & Strathern, 1998: 87). Neel (1970) describes the situation:

> The intellectual arrogance created by our small scientific successes must now be replaced by a profound humility based on the new knowledge of how complex is the system of which we are part.......In the most sophisticated way we can summon, we must return to the awe, and even fear, in which primitive man held the mysterious world about him, and like him we must strive to live in harmony with the biosphere (cited in Keesing & Strathern, 1998: 89).

To survive in original form, recoding must occur in the new system. The power is the electronic production of apparent spiritually transmitted customs: American electronic evangelists, with fundamentalist principles are a more efficient form of indoctrination in societies over "face-to-face transmission of distant, charismatic authority" (Castells, 2000: 406). Spiritual and social connections, allow new forms of spiritual exploration and religious observance. The virtual concept of a pilgrimage is possible when tracing web links and participating in online conversations on email lists. Pilgrimage is an ancient physical journey involving interaction with rituals, holy relics and sacred sites. Pilgrims are temporary travellers; leaving home to attend a sacred place for a spiritual encounter with a supreme being or presence in a holy setting not available contextually on a daily basis. This concept can be reproduced online; the devout pilgrim enters

cyberspace seeking meaning and connection in a post-modernist society of cyber-rituals, virtual artefacts and religious web sites without leaving the privacy of their own homes, but having contact with others of the same ilk (Campbell, 2001). The more democratic a society is in its institutions, the more the elites have to strive for their distinction, to avoid political interference. Social domination reinforced by social codes embedded in the social structure enables access to the power structure without barring access to the elite networks. The elites form their own society, actually and symbolically having secluded communities, shielded by the material barrier of property pricing, and the regulation of costs to purchase and maintain access equipment. The nodes (circuitry and computer systems all over the world) of the space of flows (a high level cultural conceptual abstraction of space, time, and their dynamic interaction with society in the digital age) (Castells, 2004: 146), are in residential and leisure orientated spaces, with a headquarters and ancillary services with the dominant functions in segregated spaces allowing access to the arts, culture and entertainment. Segregation is by location and security control allowing access only to the elites. The lower levels of management are able to emulate the symbols of power through the construction of secondary spatial communities that in turn isolate themselves from the remainder of society. As social tension increases, elites retreat to "gated communities" (Blakely & Snyder, 1997: 447). Cultural connectedness of the space between different nodes reflects in architectural uniformity of the directional centres in the places that constitute the nodes of each network spanning the globe. The enclosure of architecture into an historical abstraction is the "formal frontier of the space of flows" (Castells, 2000: 446). "The space of flows is the material organisation of time-sharing social practices that work through flows" (Castells, 2000: 442). Flows are interpreted as "purposeful, repetitive, programmable sequences of exchange and interaction between physically disjointed positions held by social actors in the economic, political and symbolic structures of society" (Castells, 2000: 443).

> There follows a structural schizophrenia between two spatial logics that threatens to break down communication channels in society. The dominant tendency is toward a horizon of networked, ahistorical space flows, aiming at imposing its logic over scattered, segmented places, increasingly unrelated to each other, less and less able to share cultural codes. Unless cultural, political, and physical bridges are deliberately built between these two forms of space, we may be heading toward life in parallel universes whose times cannot meet because they are warped into different dimensions of a social hyperspace (Castells, 2000: 459).

Castells (2000: 476) says network society breaks down the biological or social rhythms of the life-cycle, introducing an era of low birth rates in industrialised societies, making age and biological condition from reproduction and parenthood irrelevant. "A secular biological rhythm has been replaced by a moment of existential decision" (Castells, 2000: 476-481). Time in society and life is measured by death, the central theme of cultures from antiquity.

> It is a distinctive feature of our new culture, the attempt to exile death from our lives. Although the matrix of this attempt lies in the rationalist belief in almighty progress, it is the extraordinary breakthroughs in medical technology and biological research in the last two decades that provide a material basis for the oldest aspiration of human-kind: to live as if death did not exist, in spite of its being our only certainty. By doing so, the ultimate subversion of the life cycle is accomplished, and life becomes this flat landscape punctuated by high and low experiences, in the endless boutique of customised feelings. So when death does happen, it is simply an additional blip on the on the screen of distracted spectators (Castells, 2000: 481).

The cyberspace understanding of culture makes it more abstract, but it locates culture within the people who pass it along, through dynamic change, large and small, as they progress through life. There is change every few generations and so cultural identity is without any permanence, and without the people who transmit it, there can be no culture, where there are people there is always some form of culture. The social air people breathe is the glue that binds them to one another, the shared understandings that make it possible for them to communicate with one another and form ethnic groups.

To suggest people have lost their culture indicates a society devoid of any organised pattern of living. The organisational unity in a culture may be imprecise in a society during a time of rapid transition, but it is real. Previous anthropological perspectives (functionalist or structuralist) advocated thinking of culture as a tightly integrated whole, with each part related closely to other parts of the system. Postmodernism is seen as the rejection of these theories with flexible alternative approaches that allow reflexivity instilling a degree of doubt as explanations are reconceptualised with the air of a new beginning (Keesing & Strathern, 1998: xiii).

It is a convention in social anthropology to take knowledge practices in the plural and the discipline has a long history in the study of different cultural tensions. Twentieth century anthropology takes the contextualisation of knowledge as one of its epistemological foundations. Anthropology has used for heuristic purposes the investigation of the local distinctiveness of people's conceptions of themselves, those constructs about person or society that people often offer as the most general or global statement they can make about the human condition.

Shared Knowledge

Recent approaches (Hakken, 2001: 1) to anthropological knowledge stress many-layered discourses about knowledge increments caused by the spread of automated information technology and the social changes that occur. The discussion includes the idea of a technology-induced knowledge society and political economies, describing knowledge as that which produces changes in the character and the social functions of knowledge in cyberspace. Recently there has been fatigue in the management of knowledge in contemporary organisations and a rise of the free software and open source policy as a new form of knowledge networking. These events are within the knowledge gathering perspective of computer science, as well as attempts to integrate an ethnographic gaze into the discipline (Hakken, 2001: 2).

The Knowledge Question in Cyberspace

Hakken's interest in the many-layered discourses of anthropological knowledge follows from his efforts to answer the knowledge question in cyberspace. He has been trying to use ethnography to decide whether differences in the character and social functions of knowledge associated with computerisation do have transformative social implications. The quantitative case attributes transformative implications to the accelerated rate of production of new knowledge. Qualitative arguments see basic change in the way knowledge is produced with electronic means of scholarly communication (Hakken, 2001: 2).

Generally, the focus of knowledge technologies has shifted, from presuming knowledge to be content, a thing, to knowledge networking as a process; to produce knowledge networking recognises a social process. Producing knowledge is about supporting this social process. Knowledge involves communities of practice with technology responsive to implicit and explicit knowledge gained from groups, not in individual minds. Gaining knowledge supports a social networking process through which groups come to acknowledge something is known and built through collective activity. The system of multiple knowledge networking processes produces new knowledge in different circumstances, and shares existing knowledge. The wide variety of knowledge networkings in which humans and computers engage has to be accepted. Knowledge management in globalised organisations, operating in many nations and cultures needs technologies that prevent the suppression of cultural difference, that recognise, manage, and celebrate cultural difference (Hakken, 2001: 4-5). The reflexivity of anthropological knowledge is a demonstration of the on-going tension essential in the discipline. Some anthropologists agree with the idea that knowledge is among the most culturally relative phenomena, created, communicated, and reproduced locally and with a character heavily influenced by local practice. As characterised by Jack Boulton in *Knowledge*

Moves, "Knowledge comes from, and is drawn into, different organisational structures. At the same time, the notion that knowledge travels… invites one to reconstruct communities in its wake, tracing connections after the fact" (in Strathern, 2004: 15).

The computer programmer is an example of how one form of knowledge is transformed into something else. The programmer uses the computer to metamorphose his knowledge of programming into a piece of software which is used by another to transform their knowledge. This transformation or flow of knowledge is common in contemporary society. We are part of a culture that is obsessed with information, and knowledge changes meaning as it travels in cyber society (Boulton, 2006).

Strathern (2004) points out that knowledge moves by virtue of embodiment within the objects that it is used to create. The price of buying a computer includes not only the metal and plastic box that you look at, but also the price of the research and development that went into creating it and this is extended to the creation of knowledge in the scientific community. Embedded into any scientific paper is the knowledge that it purports to show, and the information basis contained in the papers used to produce the hypothesis. Reality as experienced has always been "virtual" because it is always perceived through symbols that frame practice with some meaning that escapes their strict semantic definition.

> It is the ability of all forms of language to encode ambiguity and to open up a diversity of interpretations that makes cultural expressions distinct from formal logical mathematical reasoning. It is through the polysemic character of our discourses that the complexity and even contradictory quality of messages of the human mind manifest themselves (Castells, 2000: 403).

Castells says societies become disenchanted and visualise all wonders as being on-line and combined into self-constructed image worlds where:

> The fundamental dimensions of human life, space and time have been transformed by the Internet. Localities become disembodied from their culture, historical, geographical meaning, and reintegrated into functional networks, or into image collages, inducing a space of flows that substitute for the space of places. Time is erased when past, present, and future are programmed to interact with each other in the same message. The space of flows and timeless time are the material foundations of a new culture that transcends and includes the diversity of historically transmitted systems of representation: the culture of real virtuality where make-believe is belief in the making (Castells, 2000: 406).

Castells (2000: 409) maintains the space of flows is becoming the dominant spatial concept of power and function in today's societies, leading to dispersal and decentralisation of advanced services to the periphery of metropolitan areas, to less developed regions, and to less developed countries (Castells, 1989: chapter 3). The global city is not a place, it is a process, a centre of "production and consumption of advanced services, and their ancillary local societies, are connected in a global network, while simultaneously downplaying the linkages with their hinterlands, on the basis of information flows" (Castells, 2000: 417). The demise of the city is predicted once the dissociation between spatial proximity and the conduct of life's functions - work, shopping, entertainment, healthcare, education, and public services, are complete (Castells, 2000: 424-5). The abstraction of the concept of the space of flows has three layers of material supports. The first layer is a circuit of electronic exchanges in spatial form – their logic and meaning become absorbed in the network. The second layer is nodes and hubs, based on an electronic network that links specific places with social, cultural, physical and functional characteristics. Nodes and hubs are hierarchically organised relative to their dynamic weight in the network and changes occur because of economic, social and physical deterioration. Nodes require a technological infrastructure, a system of firms providing a support structure, a specialised labour market, and a system of services required by the labourers. "Directional nodes, production sites, and communication hubs are defined along the network and explained in a common logic by

communication technologies and programmable, micro-electronic based flexible integrated manufacturing" (Castells, 2000: 443-4). The third layer is the spatial organisation of the dominant organisations like Google staffed by 'young computer geeks', directing the space with the hypothesis that societies are organised unevenly around the dominant interests specific to each social structure. The dominant players possess the power over the numerical majority. Castells says,

> .... elites are cosmopolitan, people are local. The space of power and wealth is projected throughout the world, while people's life and experience is rooted in places, in their culture, in their history. The more a social organisation is based upon ahistorical flows, superseding the logic of any specific place, the more the logic of global power escapes the socio-political control of historically specific local/national societies (2000: 446).

The eternity of cyberspace opposes human mortality, with media representation concerning the death of others, so our own passing is unexpected, and contextualised as the construction of eternity through the creation of a technological system supporting the belief (Castells, 2000: 484). Mourning can be sidelined and Castells (2000: 484) describes it as "the price to pay for accessing eternity in our lifetime through the denial of death". The creation of a technological system that promotes the separation of life from death facilitates a perception of eternity in our epoch and could last until the final moment of each individual.

Hakken's wish "is that concern over the status of anthropological knowledge foster new ethnography" (2001: 8). The goal of his intervention is to provoke more effective, direct, and self-aware ethnography of multiple forms of knowledge. He believes such a development would engender a more fruitful internal discourse, while providing an essential empirical dimension to current developments in the philosophy of knowledge (epistemology) as well as computer science and organisation studies. He suggests that to overcome these limitations, there must be more consistency in the approach to knowledge and networking, whilst not destroying disciplined knowledge,

but revitalising it as a tool in the battle to change power relations. Critique of disciplined knowledge is essential, when disciplined knowledge is subjected to reflexivity to be revitalised (Hakken, 2001: 8).

Speed - The Rise of Informational Society

The separated functions of communications and computer technologies are merging and individuals have trouble in mastering the new technology, giving rise to technophobes who are attempting to maintain a sense of self-worth by not acknowledging advances in technology (Cohen & Kennedy, 2000: 256). Castells claims, "Systems and networks augment human powers of organisation and integration they simultaneously subvert the traditional Western concept of a separate independent subject" (1996: 22). "As the machine-human interface progresses, with memory chips, virtual reality and artificial intelligence humans will begin to lose the primacy of their own sensory perceptions…. the conscious mind is emulated and may eventually be relegated to a marginal status" (Cohen & Kennedy, 2000: 256).

Small remote traditional societies are able to access stories and information about the world outside. Lerner (1958) found that isolated villages in the Lebanon developed fervour for radio ownership, and found "when connectivity increased, the power of the village patriarchs declined" (cited in Cohen & Kennedy, 2000: 257). There was a shift in power relations, when television portrayed Western women as different and Lebanese women changed their behaviour. "The recognition of other peoples' cultures may give rise to sentiments of common humanity or at least to recognition of cultural diversity" (Cohen & Kennedy, 2000: 258). The English language has become the "global medium of exchange" in international law, travel, business and diplomacy, with children seeing no point in learning the language of their historical ethnic group (Cohen & Kennedy, 2000: 259). In the past,

The arrival of unfamiliar goods, ideas or artistic forms generally enriches rather than narrows the local repertoire of cultural resources by extending the opportunities to express indigenous 'traditions' and lifestyles. In such situations people exercise selectivity and consciously mix the old with the new to create alternative and hybrid forms (Cohen & Kennedy, 2000: 363).

The Borderless World

The value of a nation's currency and the ability to set interest rates are important economic weapons. Banks have been de-regulated; there is a twenty-four hour currency market, which gives unmanageable money flows resulting in a reduction in economic management by governments; this is directly attributable to developments in communication technology. The borderless world is becoming a reality through the flow of information. The days of government subterfuge are still present as a form of political control; the flows of ideas, images and information technology have become outside influences able to undermine government policies. The always questioned belief in scientific and material advancement with the rise in post-modern attitudes is regarded as dangerous by traditional power elites, who are turning to religion to reinforce their power bases. All aspects of social and cultural life are assigned a money value; self-actualisation is the ultimate goal, achieved through the construction of new lifestyles and consumerism (Cohen & Kennedy, 2000: 89-90).

Camilleri and Falk (1992) assert there is an "interpretive crisis not only in social relations and culture but also in national politics" (cited in Cohen & Kennedy, 2000: 91). This produces confusing values and meanings promoting criticism and deconstruction of the meta-narratives of nationalism and democracy. There is encouragement to challenge and deconstruct the epic stories about the truth of human experience. The forces bearing down on our lives are causing 'anchoring' difficulties in locating particular societies in specific places or territories. The post-modern

influences causing the questioning of the meanings of nation and nationalism are instantaneous communication linking like-minded people through the Internet. Uniform exposure of the young to world sport, popular music, films and television programmes, multicultural societies with migrant settlements and foreign companies, provide employment with contracts at home or overseas (Cohen & Kennedy, 2000: 91).

Cohen and Kennedy (2000: 254) maintain, "The democratic possibilities of the Internet are, as yet, unknown and remain controversial". The structure of decentralised control has kept the media and business from domination of content. Global flows and links enhance decentralisation, computer-to-computer links by-pass a central switching station, but the media software companies and commercial enterprises are controlling access by developing software, browsers and commercial gateways. Information is purchased, stored, with access through purchasing the necessary access codes. Lateral links have progressed faster than their commercial counterparts have and much of the Internet has avoided regulation and commercialisation. "The anarchist spirit that underlies much of the communication on the Internet has also been heartening to those who have felt oppressed by the global power of the large media corporations" (Cohen & Kennedy, 2000: 255).

Control at the top is by Microsoft

Witten, Gori and Numerico (2007: xv) suggest the web contains "the sum total of human knowledge". Access to the web will determine the continued development of humanity, qualitatively and quantitatively. Information was previously sourced from libraries; now web bookstores present sample pages from published works. Online and print information is controlled by commercial and non-commercial information sources, with Microsoft the major commercial player with their Windows operating system. A new economic principle emerged in the late 1970's, "mutual cooperation in which

members share their content, rewarded by little more than positive reputation and social recognition" (Witten, Gori & Numerico, 2007: 19).

Control at the bottom is by the individual

The World Wide Web empowers the individual to generate and arrange individual information spaces and to literally communicate them to the rest of the world – no central computer controls the Web, no single network regulates protocols. The concept of the Web is not physical, there is no definition as to place; it is a space that permits the existence of information, freely accessible by all based on the creation of trails. The web has been created by people from communities and corporations, the contents are an archive of information from the creators' perceptive reflection of the world as they see it. From the reader's perspective it may appear as a biased view controlled by the various search engines that recognise lexical and statistical properties of text but without portraying the meaning. Unique answers are rarely received; a broad cross-section is obtained that usually contains useful and at times intriguing information (Witten, Gori & Numerico, 2007: 20-2).

Chapter 2.

Pacific Anthropology and Knowledge
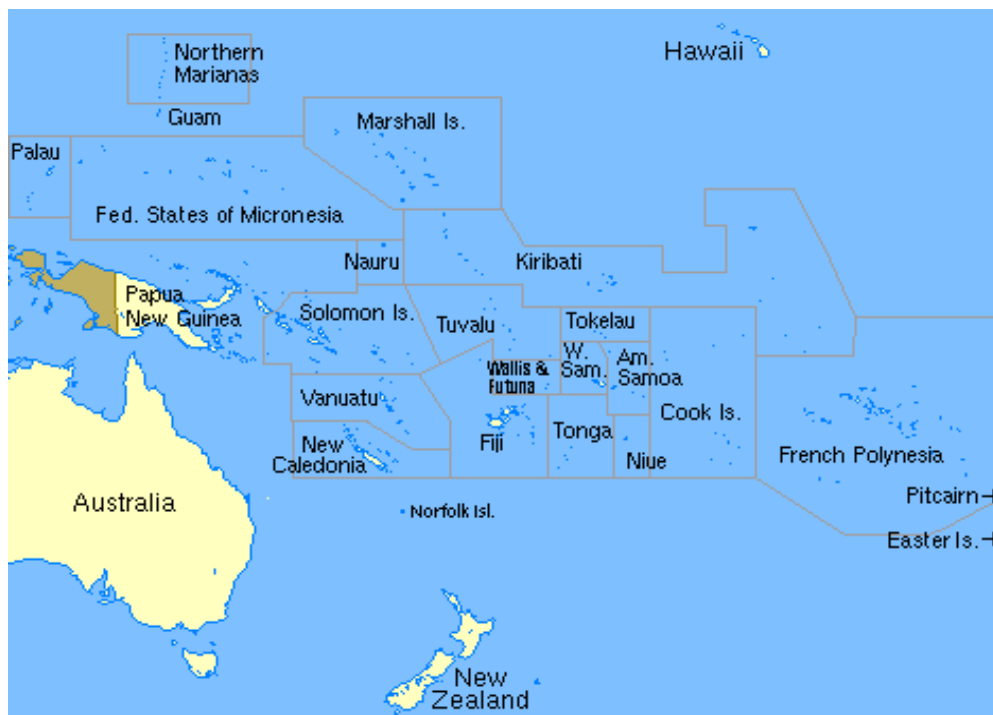
Map One: The Pacific Islands Region

Traditional Polynesia

Outside Sources

Malinowski's 1916 study of the Trobriand Islanders "used the tribal world as a laboratory for studying cultural variations" (Keesing & Strathern, 1998: 68), during an extended field study of a whole culture. Over the years, ethnographers have shifted away from descriptive studies toward those that are problem-oriented. There is the recognition that it is actually impossible, to study everything and they have learned ways to avoid the tendency of

earlier ethnographers to presume what needs to be established; this has not been done for fifty years. An example is the tendency to presume that the culture under study could be understood on its own terms in primitive isolation. The labels 'primitive' or 'tribal' do not enable an understanding of the complex social processes technologies promote. As Hakken (1999: 228) argued in *Cyborgs@Cyberspace?* "Our discourse over cyberspace cannot be a merely passive one – even more than the nation, cyberspace must be imagined actively".

The Meaning of Culture

In older anthropological records, culture was identified with the material items that a particular society produced, food, clothing and house styles, and the institutions, like village authority system, land inheritance patterns, beliefs, and concepts of the universe that people held. Values like the importance of sharing, or disdain for boasting, and guidelines for behaviour, such as fanning flies for a guest at a meal, or keeping the eyes lowered when speaking to someone of higher status were inculcated. These attributes translate into an observable pattern of behaviour. In the old definition, a culture was the sum total of all these things, the behaviour of people, along with everything that they produced while taking account of the intricate network of relationships between all these cultural products. In the newer model, culture is understood to mean not the observable cultural phenomena themselves, but the design or plan for living that is passed on from one generation to another. This design alters from one generation to the next as new influences bear on a society. Geertz, a pioneer of symbolic anthropology, viewed culture as, "a system of symbols by which man confers significance on his own experience" (1973: 250). He likened culture to the octopus, whose tentacles are in large part separately integrated, neurally quite poorly connected with one another, but managing to get around and preserve itself as a viable, if ungainly entity. A culture bombarded by change may be octopus-like in its loose unity, but like the octopus, it is still capable

of reproducing itself. The cultural pattern, however dislocated, "remains a pattern that provides continuity from one generation to the next" (Hezel, 2005: 4).

The Emergence of Pacific Theoretical Thought

> Community networks provide a sense of space in an essentially alienated society, using the freedom of cyberspace to create new kinds of participation in community life. Individuals from outside the geographic area rarely become registered users entitled to participate in public debates. Thus, while the communication takes place in cyberspace, it is at the same time highly localised. To describe such participation in terms of virtual space versus physical is to create an artificial construct (Michaelson, 1995: 7-8).

Articles written by native and indigenous anthropologists and sociologists appear in recent editions of *The Contemporary Pacific.* The voice of educators, led by the University of the South Pacific School of Education is marginal in terms of its impact on conventional education. The work of these Pacific scholars represents a foundation for the present nation of a body of Pacific thought, and like an open *fale* (meeting house), should not reject the world but invite it in on its own terms. This body of Pacific thought should contribute to the affirmation of a Pacific philosophy and ethic: a body of applicable concepts and values to guide interaction within the region and surrounds (Huffer & Qalo, 2004: 87).

Pacific thought is not dormant, although if academics are silent, no one notices it. When Pacific thought surfaces, the result is sometimes dismissal but persistence is forcing acknowledgement of existence. Huffer and Qalo in *Have We Been Thinking Upside-Down? The Contemporary Emergence of Pacific Theoretical Thought* used the term 'emergence' in the title of their article to signify that Pacific thought is gradually making its way into formal academic settings. Pacific thought has formed the basis of communal living in the region prior to colonisation, with philosophies transmitted orally in vernacular languages; institutions and actors in the colonial and post

colonial Pacific have ignored this. Researchers, educators, policymakers, donors, or others ignore it at their peril. The initial researchers were theologians: in Papua New Guinea they examined how fundamental concepts and philosophies linked to the gospel and to Christianity to make Christendom more relevant to their societies. Other cultures examined were Samoan, Kiribati, Tuvaluan, Fijian, and Tongan. The Melanesian Institute for Pastoral and Socio-Economic Service was established in 1968 by the Association of Clerical Religious Superiors of the Catholic Church in Papua New Guinea in order to help missionaries better understand the cultures they were evangelising. The institute's symbol is a snake wrapped around the cross; chosen as the snake frequently humanised, is a group representation of everlasting life in Melanesian cultures. The cross is the symbol of the fullness of Christian life, and the enclosure of the two figures within an unbroken circle expresses the hope and the goal that the traditional religious concepts proper to Melanesia will one day be truly synthesised with the message of Christ (Catalyst, 1991: 11; Huffer & Qalo, 2004: 87).

Theologians highlighted the historical intolerance of the Church; their intention was to indicate Christianity cannot survive without integrating existing fundamental values of local cultures. Paroi wrote:

> Christianity that was imparted to our ancestors . . . was wounded by evils of intolerance, curse, hatred and division. This historical baggage was handed to our ancestors. . . . They were taught to have nothing to do with other denominations; they were taught not to marry their men and women thus disrupting traditional values that linked clans and families through marriage (2001: 27).

Pacific educators at the University of the South Pacific, the University of Goroka in Papua New Guinea, and the Centre for Pacific Studies, University of Auckland, research Pacific educational philosophies; Victoria University, Wellington produces a course on indigenous research. Various Maori studies and education programs in Aotearoa offer courses with a focus on

indigenous thought, research, and related topics. The ultimate aim is to affirm the existence of uniquely Pacific ways of learning and distinctive understandings of the nature of knowledge, wisdom, and intelligence, and to ensure that these become part of formal educational curricula in the region (Huffer & Qalo, 2004: 87).

Recently, indigenous and "Native Pacific Islander" scholars have defied narrow disciplinary constraints to investigate Pacific epistemologies and ways of doing and being. In *The Contemporary Pacific* (Gegeo and Watson-Gegeo, 2001: 55): Gegeo describes himself as a "Native Pacific Islander". Their research documents interpret attempts by local communities they are associated with or part of, to validate and explore their own epistemologies and to renegotiate development on their own terms. The concern of Pacific scholars is to affirm indigenous epistemologies are flourishing, relevant and useful to the societies and people claiming ownership and they provide alternative ways of approaching economic and social development. Despite the research literature, ignorance or dismissal of Pacific thought is present in academia affecting policymaking in Pacific countries. This situation is in part the result of disciplinary biases and omissions, raised by Edward Said in his 1993 book, *Culture and Imperialism.* Anthropologists have looked at many aspects of Pacific societies from a variety of perspectives, but have been slow to examine Pacific thought or systems of thought as a distinct or stand-alone category of study. Research produced by the Melanesian Institute for Pastoral and Socio-Economic Service in Papua New Guinea was written by anthropologists or they used anthropological methods in efforts to understand Melanesian cultures and to reposition Christianity. Outsiders examined other cultures from their own theoretical constructs not from those of the societies observed (Huffer & Qalo, 2004: 88).

Political scientists focused on institutions, processes, political forces and events, marginalising political ideals, and the views of Pacific peoples and societies. Economists, promoted "development" and looked for avenues to

integrate Pacific societies into western economic rationalism, viewing Pacific attitudes as a barrier to their operation rather than a positive asset. Research exploring Pacific values and knowledge include the four-volume *Science of Pacific Island People,* published by the Institute of Pacific Studies (Morrison, Geraghty, & Crowl, 1994). This publication gathers papers from the first international conference on the Science of Pacific Island People, organised at the University of the South Pacific in July 1992. It is acknowledged that Pacific ways of doing, thinking and being have been "ignored or silenced" (Huffer & Qalo, 2004: 89), it was suggested "the voices have been mute because at present they are scattered and incoherent" (Tuimaleali'ifano, 2000 cited in Huffer & Qalo, 2004: 89).

Pacific thought contributes to the affirmation of a Pacific philosophy and ethic, a set of concepts and values to guide interaction within countries, within the region, and with the rest of the world. The ethic is to be acknowledged, understood and respected by those engaging with Pacific Island communities. In most Pacific societies land is part of the community and not perceived as a commodity and the selling of land is an ethical question rather than a matter of money. Regional academics are confronted with the argument that Pacific values, ways of existence and performance are obsolete: that they have not adapted to the demands of the contemporary world with its emphasis on the market economy and liberal democracy, and the voices of those living their values on a daily basis do not filter through the walls of academia. Failures in the market economy and liberal democracy within the region are reminders of the importance of Pacific ways and values: for example the coups in Fiji, the crisis in the Solomon Islands, and the corruption prevalent amongst the elite, those most accustomed to western paradigms and methods. The incapacity to regulate distribution and ensure equity of wealth and to provide basic health, education, employment and, at times, food security, raises questions about value systems that require addressing (Huffer & Qalo, 2004: 89).

Reflexivity of thought production at the international level has processed and assimilated modernity:

> All humans reflect on the consequences of their own and others' actions and perhaps alter their behaviour in response to new information. This quality of self-awareness, self-knowledge and contemplation is of great interest to sociologists as it speaks to the motives, understandings and intentions of social actors. In contemporary society's reflexivity is said to intensify as every aspect of social life becomes subject to endless revision in the face of constantly accumulating knowledge (Cohen & Kennedy, 2000: 36).

This is particularly the case in the Pacific, a region very small in terms of population, political and economic power, but one of the most culturally diverse per capita in the world. Christianity has had a strong impact and colonial and neo-colonial powers assumed local communities would assimilate the basic principles of the market economy and of liberal democracy, ignoring the de-structuring impacts of these precepts. The construction of Pacific thought requires Pacific Island students and researchers to conduct research in their communities, and persuade donors and academic institutions to fund such research. They should support local communities engaged in alternative economic development based on indigenous philosophies with an ethic of self-reliance. "Nongovernmental organisations and local leaders need to work with communities to establish frameworks and positions based on their value systems, from which they can negotiate with regional, provincial, state, and international actors" (Huffer & Qalo, 2004: 90).

Chapter 3.

Electronic Communication in the South Pacific

Building the Structure

Pacific philosophies based on relationships and interconnectedness, have a commonality with fundamental concepts covering a wide range of areas of life, beliefs, and ways of doing and being. In Fiji, there is the notion of *vakanomodi* (silence in the land) as in indigenous Kiribati education there is dignity in diligence, humility and virtue, with these qualities achieved through silence. The silence, in the Kiribati education context, speaks volumes and requires acknowledgement "It takes a trained and culturally sensitive ear to 'hear' and appreciate what this silence says or demonstrates" (Teaero, 2003: 108-09). The emphasis on hearing in Fiji and Kiribati is linked to the idea of social interdependence, all members of society are considered important and none is neglected, enhancing the ability to understand and memorise important societal information, ensuring reliable transmission. The ability to 'hear' permits communion with both the supernatural and the real worlds, allowing early perception of impending conflicts. "Those who enjoy the sound of their own voices are less likely to hear those of others" (Huffer & Qalo, 2004: 103). The Fijian concept of *yalomatua* (spiritual wisdom), has parallels with Samoan assessment of wisdom. The concept of wisdom in both societies is similar and supports beliefs of socially appropriate and desirable behaviour in governance, economics, or education. Pacific philosophy, as a body of thought, filters through every area of life and the afterlife defying disciplinary boundaries. Despite recognisable local and regional differences in concepts and terminology, the commonalities point to the potential for a coherent regional

philosophical construct. Producing the structure requires interdisciplinary research and attention to the regional practitioners of indigenous philosophies (Huffer & Qalo, 2004: 103). A form of hybridity will develop as suggested by Homi Bhaba:

> Hybridity refers principally to the creation of dynamic mixed cultures. Sociologists and anthropologists who use the expression 'syncretism' to refer to such phenomena have long observed the evolution of co-mingled cultures from two or more parent cultures. Using the literature and other cultural expressions of colonial peoples Bhaba (1986) introduced a new twist to the idea. He saw hybridity as a transgressive act challenging the colonisers' authority, values and representations and thereby constituting an act of self-empowerment and defiance (in Cohen & Kennedy, 2000: 363).

The focus of indigenous Pacific academic thought is the University of the South Pacific. As the population and the resources change, so does the social behaviour. The focus is how social behaviour is produced and constrained by resources and populations. The types of social groups possible depend upon the types of subsistence possible, and the types of subsistence depend upon the size and stratification of the social group. Population and resources are always interdependent and there is no structure without function and vice versa (Guerin, 2003: 14). Membership in groups gives individuals access to the resources needed to sustain life and provides the best solutions to resource conflicts. The illusion of independence and freedom from social constraints is possible through subsistence farming. More resources are gained through increased numbers of people and coalitions of trust help with resource allocation. What ties people together is exchange of resources as opposed to conflict over resources. In the Pacific, Westerners have few people with whom they are interdependent, and most enjoy the situation and visualise a willing imposition of obligations. Pacific Islanders and others are intimately interconnected with many others and perceive westerners as cold and lonely, but both cultures provide a function for a social system in a particular context (Guerin, 2003: 74-76). Having public rituals allows

monitoring of social compliance to generalised exchange groups, and is subtly changed according to social problems that develop within a group. Analysis of behaviour determines the function within the societal structure (Guerin, 2003: 83-84).

In the social order reputation, honour and trust are important but not easy to observe, a member of a group maintains a reputation that in turn perpetuates group trust in them, through ritual acts of self-promotion access to the group's generalised social exchanges is ensured. Analysis of social behaviours is difficult when the ritual acts are unrelated to what maintains them, and the purpose results in many and varied outcomes, not always beneficial to society in general (an example, ritual murders to maintain gang discipline). The inference is "to maintain the generalised social exchanges that are so important in life is identical to maintaining trust or reputation or face" (Guerin, 2003: 85). These terms (trust, reputation, and face) are convenient expressions used for "hard-to-see" resource exchanges. Having trust and intimacy commissions the possibility of the otherwise impossible. Goffman (1967) quoted in Guerin (2003: 85) defined face as, "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact". Guerin (2003: 86) says close or long-term relationships progress successfully through generalised exchanges rather than specific single exchanges. With generalised exchanges resource allocation conflicts are avoided but avenues for exploitation are possible through personal vulnerability with larger groups of people free riding is possible.

Overcoming the perception of nineteenth and twentieth century exploitation by colonists in the Pacific is difficult because of the generalised nature of the exchanges. To sanction their own actions colonists used features of the indigenous populations like cargo cults, racism and cannibalism to initiate reformation. The generalised exchange pattern of honour was something to be defended and maintained the whole community system providing all with

their resources and preserving the access paths. Guerin (2003: 87) says, "as soon as my honour is diminished in peoples' eyes or my reputation is blemished, my access to resources, or the whole network itself, is reduced". Social systems produce social behaviours that appear bizarre in today's world (e.g., Captain goes down with the sinking ship, Japanese kamikaze pilots of World War II.): people die rather than have their honour diminished. Establishing a social identity occurs when a group labels itself and of interest is what the group does with this social identity (Guerin, 2003: 87-88).

Half the world's population is under twenty five years of age, and eighty percent live in poverty. In the interests of the young, global inequalities are rectifiable with "entrepreneurship and innovation in the world's youth population" (Wilhelm, 2004:15). A new basic computer literacy is a requirement of citizenship to connect peoples and cultures to promote tolerance, understanding and co-operation, overcoming traditional borders of geography (Wilhelm, 2004:19). Traditions can be modernised using technology; some countries previously closed to the outside world are exposing their societies to influences via the Internet, a recognised means of progress. Others view the Internet as a luxury not necessary for survival (Wilhelm, 2004: 27). Reality is the world is interdependent and that "subsistence living in isolation from the community of nations and global civil society is quickly disappearing….when global environmental, health, and development challenges require real-time collective responses" (Wilhelm, 2004: 29). Modern chaos theory suggests that, "Activity in one part of the globe might easily affect the climate on the other side of the world, necessitating stronger transnational public communications and arenas for collective action" (Wilhelm, 2004: 29). Cultures and societies striving for independence from a dominant society are dependent on external forces. Threatened societies are looking to information and communications technologies to protect and preserve their heritage, and disseminate the language. Wilhelm (2004:1) claims: "Reducing conflict and

advancing democracy have been closely aligned with improvements in communications technologies; the Internet is the latest tool to augur more harmonious relations among peoples". Human dignity and the ability to progress depend on nations having access to resources and the tools to be self-governing: The United Nations Secretary General said "People lack many things: jobs, shelter, food, health care, and drinkable water. Today being cut off from basic telecommunications services is a hardship almost as acute as these other deprivations, and may indeed reduce the chances of finding remedies to them" (in Wilhelm, 2004: 12).

Transnationalism

Transnationalism is replacing nationalism, with the increasing emergence of social identities not contained by the context of a nation state. The established transnational identities are diasporas and religions, influencing key shifts in attitude and behaviour, by indicating a willingness "to recognise and accept cultural and religious diversity" (Cohen & Kennedy, 2000: 356). Knowledge and awareness of other cultures derives from a global media and travel, sometimes leading to tolerance and respect for difference. The Pacific has a "multiplicity of constituents" and knowledge is "about the interplay of the material and non-material dimensions of the Pacific's physical and socio-psychological environments" (Mahina, 2004: 187). Alternatively, Mahina continues, "in the Pacific, this physical, social and mental interconnectedness gives rise to competing forms of human activity, societal institutions and social groupings operating in the broader uncompromising relationships between culture and history". Science evolved in early Greece as an intellectual reaction against mythology and theology, the traditional powerful social institutions that shaped nature, mind and society. Democracy evolved as a protest against the Greek aristocratic order that used mythology and theology to control the people. The present social constructivist view of knowledge would appear to be a return to mythology

and theology at the expense of science - a Western movement (Mahina, 2004: 191-2).

It is important to consider time and space. This provides a constant check on history and avoids relativist and evolutionist tendencies allowing a critical understanding of the human situation, and the issues and challenges in Pacific societies. The distinct and related dimensions of time and space are the ontological, a common medium in which all things are, and the epistemological, "a form of social construct, dependent on the general and the specific, complementary and opposed relationships between people and their environment within and across cultures" (Mahina, 2004: 194-5). Pacific research, a technical operation, is part of Pacific education, and Mahina (2004: 197) says Pacific education is "consumer-led, rather than producer-led", with emphasises on the technical over the critical, utility before quality or practice before theory. To stop the "misinformed neo-liberal reforms" in the area Mahina (2004: 197) recommends, "Giving theory the lead over practice, given that theory sets important limits on practice and not vice versa".

Mahina (2004: 198) says, "There is, fundamentally, a need to theorise the problems in new ways, where time and space are integrated in the process, restoring our common humanity with a sense of history, harmony and beauty". Mahina and Nabobo-Baba (2004: 203) maintain, the short history of formal education in the Pacific, "coupled with the enormity and complexity of the academic tasks put before them, Pacific students and academics often find themselves in subordinate positions". Pacific culture was subjugated by colonialism, "the Pacific *modus operandi* has largely been integrated into the individualism, materialism, progressivism and rationalism characteristic of the Western way of life". Western science and technology reinforces specialist activity and pragmatism. The Western lineal arrangement of time and space places the future in front of people in the present, with the past behind them. The technological ordering of the Ages (stone, bronze, space,

and information), subverts the "ways of nature" by a transformation into "the ways of humans", with the individual elevated to a position of prominence in reality, without acknowledgment of the links between ecology, psychology and culture. The clash of cultures occurs in the accounting for time and space in lineal and technological terms by the West; ignoring the Oceanic circularity inherent in nature and the totality of culture. Pacific and Indigenous scholars prefer classicism (attention to traditional forms) and realism (embedded in social activity and technology as a paradigm of the "ways of nature") reflected in the cyclical organisation of time and space by Pacific cultures, as opposed to the West's progressivism and rationalism, "a culture of permanent criticism and constant opposition" (Mahina & Nabobo-Baba, 2004: 204).

The challenges for the future for Pacific cultures are therefore permanent, multifaceted and complex. The solutions to address such challenges ought to be the same. In the Pacific, people speak of walking forward into the *past* and walking backward into the *future,* where the past and the future are constantly fused and diffused in the ever-changing, conflicting *present* (Mahina & Nabobo-Baba, 2004: 204). In their social struggle Pacific students and academics in the present must build on the achievements of their predecessors by preserving "the aestheticism, classicism and realism of the past concepts and practices of Pacific cultures. This should include the attempts at 'decolonising' our epistemologies, pedagogies and methodologies" (Mahina & Nabobo-Baba, 2004: 204).

Decolonising Pacific Studies

Studies are loosely organised fields of inquiry based on literatures from disciplines in the social sciences and humanities. It exists as a regional emphasis within those areas and in interdisciplinary teaching or research programs at a number of universities in Hawai'i, Guam, Australia, New Zealand, North America, Europe, and Asia (Wesley-Smith, 1995; Crocombe,

1987). Anthropologist practitioners in the field meet regularly at conferences sponsored by Pacific studies centres, the Pacific History Association, the Association for Social Anthropology in Oceania, or the Pacific Islands Political Studies Association. They often publish their work in the journals: *Pacific Studies, the Journal of Pacific History*, and *The Contemporary Pacific*. Several important general characteristics are identified: origins of the field of Pacific Island studies are unable to be disenfranchised from their colonial history. The influential centres for Pacific Island studies are outside the region, in the United States, Australia, and New Zealand. The rationale for their establishment and financial support has been to generate information about and increase understanding of the Pacific Islands places which these regional powers have supported. The structure and emphasis of Pacific studies programs in Australia have reflected the Australian national interest in particular parts of the region in their vicinity, with issues of concern to policy makers in Canberra. The Centre for Pacific Islands Studies at the University of Hawai'i is associated with American involvement in Micronesia after World War II and with a need for the United States of America to be conversant with this part of the world (Wesley-Smith, 2003: 120).

Anthropological activity has little relevance for the daily needs and concerns of Pacific Island peoples. Maori educator Linda Tuhiwai Smith (1999: 42) maintains research embodies "a cultural orientation, a set of values, a different conceptualisation of such things as time, space, and subjectivity, different and competing theories of knowledge, highly specialized forms of language, and structures of power". Pacific lives and concerns are represented in texts in ways that Island readers find different from reality. Smith (1999: 35) argues "reading and interpretation present problems when we do not see portraits of ourselves in the text. There are problems, too, when we do see ourselves but can barely recognise ourselves through the representation". The need to decolonise Pacific Island studies is acknowledged, but there is divergence as to what that involves and how it

might be rectified. Participation of Pacific Island researchers, teachers, and administrators is changing aspects of participant observation and research literature. Pacific Islanders participate in Pacific-related academic conferences. These events tend to domination by what Robert Borofsky calls "outlanders" (Borofsky, 2000: 7). Pacific Islanders are represented in the journals *Pacific Studies* and *The Contemporary Pacific*, but the main articles are authored by non-Pacific Islanders. However, publishing ventures specifically devoted to island voices and perspectives have countered the dominance of expatriate authors to some extent. The Institute of Pacific Studies at the University of the South Pacific has had an extensive publishing program since the early 1970s (Wesley-Smith, 2003: 120-1).

Pacific Island studies discourse is part of an academic culture that is western in its origins and values. Smith (1999: 36) sees the danger western-trained Island academics will duplicate and strengthen research and depiction that are hostile to indigenous peoples and concerns. A Pacific pedagogy means moving away from a formal, discipline-based perspective, and entering the world of the Pacific and learning from the concepts, values and rituals that steer island societies. Systems of knowledge and beliefs and their practices must become embedded the university setting, as they are in society. Decolonising the field becomes a complex process of reclaiming a discourse controlled by outsiders, and rewriting it to reflect and empower Oceanic concepts, ways of knowing, and material interests. Hereniko (1995: 140) says, "Shunning the benefits of world systems is no longer an option; domesticating them is a much more attractive alternative".

Pacific Studies and Interactive Pedagogy

The cognitive movement in psychology, "portrays learners as active processors of information", and proposes that "what learners do to enrich information ... determines the level of understanding they ultimately achieve" (Bruning, 1995: 1). In this constructivist model of learning, students

are encouraged to explore topics for themselves, discover information, and reflect on what they produce. They construct rather than acquire knowledge, create rather than learn meaning, and exercise control over their own education (Hofstetter, 1996). Edward Said endorsed the approach when he urged students not to read texts as though they were sacred or to venerate their authority:

> What the reading of texts should leave you with is an appetite for asking more questions.... How did this come about? Where did that come from? What are the uses to which it can be put? ... As a teacher, I believe it is absolutely central that my role is not to tell students to become my disciples. On the contrary, I should say what I have to say and encourage students to question it (Said, 2000: 48).

Constructivist educators assign an important role to the knowledge, experience, and perspectives that students bring to the classroom, rather than rigidly adhering to the top- down "sage on a stage" model of teaching. Pacific Studies courses in Australia, New Zealand, and the United States, have students from Oceania with intimate ties of ancestry and cultural heritage, identify with the region and engage with the subject matter in ways that are much more personal. Pacific students are not comfortable with western academia's liking for detached and dispassionate teaching and learning styles, and the tendency to objectify other peoples and cultures, marginalising them in the "real world" of global politics and economics. Students are requiring that Pacific study programmes meet the expectations of Epeli Hau'ofa (1993: 160) when he said, "Oceania is us. We are the sea, we are the ocean, we must wake up to this ancient truth and together use it to overturn all hegemonic views that aim ultimately to confine us again". They expect their own knowledge of and familiarity with Oceania to be recognised and avowed as an important part of the educational experience (in Wesley-Smith, 2003: 124).

With Pacific studies as cultural renaissance, the focus could be on dance, song, chant, and representation as celebrations of culture and assertions of

cultural pride, with the context of Pacific studies as modernisation and development, the significance changes.

> When Morgan Tuimaleali'ifano, a USP lecturer in history, teaches the history of Fiji, Tonga, and Samoa, he chants Samoan *fa'alupega.* He would feel odd doing anything else. But he chants in the context of an argument that is distinctly critical about modern chieftainship, about the manipulation of tradition by chiefs for their own advantage, and about the way in which tradition is now blocking opportunities for commoners. The most important contemporary issue in the Pacific Islands would seem to be "the political uses of tradition" (Firth, 2003:140-1).

Pacific (USP) constructivist principles required changes in teaching and learning practices. The primary aim of the teacher was to transmit information; now the teacher encourages and facilitates an active process of "knowledge formation" in students (Bruning, 1995: 216). Emphasis is on discussion, debate, and less on lectures, students are encouraged to search out supplementary or alternative sources of information. Assignments allow choice of topic and the form or media in which the finished paper is presented. Students work in small groups on projects, and assessment includes an element of peer review. As students assume more responsibility for course content, lecturers lose some of the control they previously exercised. Communication technologies transcend the limits of time and space of the traditional classroom. The learner's location is irrelevant with the advent of computers, learning is continuous, rather than scheduled classes. Technologies promote constructivist approaches to teaching and learning. Distance education uses video or online technologies to reproduce traditional classroom practices. The electronic delivery of educational materials to remote sites provides valuable access to learners otherwise excluded. Constructivist approaches to education require a greater variety and frequency of interactions between students and teachers, between students and their peers, and between students and course materials, than conventional approaches. Communications technologies effectively have the

potential to improve the quality as well as the reach of education systems (Wesley-Smith, 2003: 123-4).

Claim to Outside Knowledge - Pacific Studies in Cyberspace

The transition to studies in Cyberspace requires shifts in approach as well as content. The challenge is to make the subject matter more islands-orientated, to create a learning environment in which indigenous perspectives, ontologies, and epistemologies are recognised and validated. The aim is to reduce the hegemony of western approaches and symbols with discourses anchored in the cultural scenery of Oceania. Starting at student level, the teaching of science and practice of education will promote decolonisation with open ended, flexible, and empowering forms of learning. Constructivist approaches to teaching and learning can use computer-based communication technologies, providing students with a convenient way to access course materials as well as to interact with each other and the lecturer beyond the confines of the classroom. The Oceania on the Move experiment demonstrated Internet and web-based technologies facilitate interactions between students in different parts of the region. Virtual exchanges are relatively cheap and can include a large number of participants. In theory, this model of interactive teaching and learning is flexible enough to link a number of courses and classrooms across the region and beyond. The approach depends for its success on a genuinely cooperative relationship between educational institutions that may have different resources, policies, practices, and priorities. All parties must be equally convinced of the value of the exercise and satisfied that their particular concerns and interests are addressed as the project develops. Confusion may arise, in cross-cultural settings, regarding who takes responsibility for differing aspects of the project. The Oceania on the Move collaboration worked relatively smoothly because few people were involved in the planning; communication remained consistent, and each institution was responsible for its resource needs. Major obstacles are negative student

evaluations for an interactive course; innovative ventures involve significant risk for faculty and students; risk-taking by the institution and the students who take the course may underestimate the "culture shock" experienced by students accustomed to structured learning environments (Wesley-Smith, 2003: 127-28). The Oceania on the Move experience does not shed much light on this issue, although at times the campus groups appeared to operate more like opposing debating teams than members of a common community. There are complex cultural issues involved here, but it seems safe to assume that the potential for intercampus polarization will increase in tandem with the cultural distance between the collaborating sites. Wesley-Smith suggests:

> A sense of community probably takes longer to emerge in cyberspace than in the face-to-face situation of the conventional classroom. Community building efforts might include posting short bios and photographs on the website, video conferencing and assignments designed to encourage informal email partnerships between participants on different campuses (2003: 128).

Indigenous voices and ways of knowing are of prime importance if Pacific Island studies conducted in cyberspace are to retain legitimacy and relevance in the post-colonial era (Wesley-Smith, 2003: 128). The landscape of the Net is difficult to see, there is no single concept for cyberspace, participation in cyberspace involves a tendency for the person to withdraw from the environment and to show an internal disintegration of thinking, feeling and behaviour, resulting in incongruity between the emotional state and thoughts and actions, a tendency to morbid projection. Like schizophrenia, the description of cybernetics involves withdrawal, a splitting with thought disorder, emotional disconnection, and conduct disconnection, paranoid disposition, and abnormalities of perception (Suler, 1996).

Gibson describes Cyberspace as:

> A consensual hallucination experienced daily by billions of legitimate operators, in every nation....A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the non-

space of the mind, clusters and constellations of data. Like city lights, receding (1984: 51).

Indigenous scholars are yet to define and examine the cultural effects of information technology in traditional Pacific societies. Cyberspace contains a culture that is under construction and ethnographers have an extra ethical responsibility to go beyond mere study and find ways to become active participants in its construction. Ethnography as a research methodology enables understanding of the complex social processes technologies promote. Ethnography becomes a creative writing, a body of illustrations, ethnographies of specific knowledge networkings, and the source for projects.

> That the form of ethnography best able to generate meaningful information about cyberspace is the reflexive, anthropological variant (which has, for example, the capacity to address questions empirically while at the same time retaining a critical stance in relation to the validity of the notions in which the questions are phrased) (Hakken, 1999: 4).

In this era of global competition, organisations look for ways of generating extra value from their assets. People and information are two critical resources being recognised as valuable. Knowledge networking is an effective way of combining individuals' wisdom and skills in the pursuit of personal and organisational objectives. Knowledge exchange is a rich and dynamic phenomenon in which knowledge is shared, developed and evolved. It is more than access to information, because it also explores the unknown. It is more than using the rules and inferences of expert systems, because it is about knowledge that is evolving, and is the computer amplification of person-to-person communications resulting in the development of new knowledge (Skyrme, 2007). All people irrespective of culture are now able to participate in debates occurring in distant places, giving access to new forms of knowledge without the aid of a teacher or having to assemble at a particular time in a formal setting. New descriptive terms arise, an example is "information poverty", that "may be suffered by

those who have minimal access to new information technologies" (McLennan, Ryan & Spoonley, 2000: 114). Sociologists argue that the use of technology evolves from within existing social divisions in the form of "technological determinism, a form of explanation based on the notion that changes in technology are an autonomous force which shape social and economic relationships and organisations" (McLennan et al. 2000: 114).

Pacific societies realised the information technology phenomenon in conjunction with other social structures shapes patterns of morbidity and mortality, and the medical way of seeing things is encroaching on previously non-medical facets of life. Health is a concept taken for granted until threatened through illness or disease. Health and illnesses are concepts inherent within particular cultures and social relations. The concept depends on social location; some areas have high infant mortality rates, others have high expectation of longevity. The Pacific cultural region could be considered to be accepting of the idea that disease is culturally formulated, but there is acceptance of a biological reality relative to cultural concepts and social order. The reduction in infant mortality and increase in life expectancy in the Pacific could be attributed to the acceptance of biomedicine, and the acceptance that culture "is based on a biological capacity (e.g., brain size, communicative abilities) but is socially transmitted (versus genetically inherited)" (Joralemon, 1999: 15). The Internet is being seen as more than a space for information. It is also a space that is encouraging research for knowledge and social connections, providing new forms of medical exploration and spiritual observance. The Internet allows individuals to pursue the hitherto sacred medical precincts by introducing them to cyberspace, virtual knowledge and medical web-sites in their own homes on isolated atolls. They are alone, but this search can bring them together with other seekers providing opportunities they would otherwise be separated from due to space-time limitations.

David Robie (New Zealand author, journalist and media educator) maintains, "Internet media developments have had a far-reaching impact on journalism education in the South Pacific, particularly in Papua New Guinea and Fiji" (Robie, 1999: 1). The University of Papua New Guinea pioneered use of the Internet as a news media resource in 1996 when it established its first online newspaper and archives website. Operations have moved to the University of Hawai'i East West Centre, with its Pacific Islands Report news site, and the University of the South Pacific's regional Pacific Journalism Online. All three of Papua New Guinea's English-language papers are now online (Robie, 1999: 1).

The IT industry is experiencing problems with information policy guidelines, national infrastructure and economic and political stability which must be addressed. Implementation of the latest technology is with little local expertise requiring expatriate experts, and universities are required to produce IT graduates with a curriculum appropriate for industry requirements. IT students are from different cultural backgrounds and encounter learning difficulties in class participation, language, and association with teachers. Kelagai & Middleton (2002) report, Papua New Guinea is in a transitional information technology stage but the true determining factor which indicates how well developed a nation is with respect to information technology, is up-time and cost of ownership per capita. This is not seen as a problem at present in Papua New Guinea, but a monopoly in the communication industry is inhibiting the over-all growth of information technology and its related technologies; there is the need to empower proper regulatory bodies to ensure that technology serves its primary purpose without any violation of fundamental morals that the country values.

Papua New Guinea has cultural norms that are different from other countries, the unstable political environment prohibits economic growth, and eighty-five per cent of the four and a half million population are rural

residents. Papua New Guinea may lead the world with more than eight hundred languages, with the possible exception of India. The official language is English with Pidgin and Hiri Motu as *lingua franca* to assist communication among people of diverse linguistic backgrounds. This can lead to IT professionals in industry and educators functioning with little reference to each other; each group having a different perspective of the workplace. Pham (1997) says employers maintain that university graduates possess general computing knowledge, but lack specific skills required by the industry. Educators offer learning that is limited by programs that lack fundamental and analytical knowledge, functioning at an abstract level, when skills and competency-based programs are preferred; educators are advocating for higher learning as opposed to vocational training. Education and learning is the key to the country's information economy. It is necessary for the government and private sector to cooperate so skills are taught through tertiary education and on the-job training to meet industry needs (Kelegai & Middleton, 2002).

Chapter 4.

Details of Information Technology in the Pacific

The settlement of the islands of the Pacific was completed by 200 BC. Melanesians (Black Islands); New Guinea, Solomon Islands, Vanuatu, New Caledonia and Fiji were regular traders. Micronesia (Small Islands); the atolls and small islands north and north east of New Guinea and Solomon Islands and have legends telling of their life before they got to the islands. The early Micronesians had no metals, so worked in stone and were ocean navigators with a rich oral history prior to European occupation. First contact between European and Pacific Islanders was in 1521 when a Spanish expedition led by Ferdinand Magellan met the Guamanians of Micronesia; from then on the islands were used as replenishment ports by expeditions on their way to the Spice Islands. Lack of tangible wealth ensured peace and tranquillity until 1817 when charting by British whalers was followed by American whalers; crews and islanders frequently harassed and killed each other. Whalers were followed by Protestant missionaries, with the imposition of Western clothing, language and laws in addition to religion. In 1899 Germany purchased Micronesia from the Spanish, planning to capitalise on copra production, encouraging the planting of coconuts. Some natives were forcibly abducted from their islands to the plantations, while communally held land was appropriated for private investors. Polynesian (Many Islands) bounded by Hawaii, Easter Island and New Zealand is the largest area; these partitions are by physical type and society patterns (Chiefs versus Big Men) (Womack, 2001).

Melanesia

The Federated States of Micronesia have been exploring different forms of generating revenue as they are reliant on United States support. Current sources of income are fishing fees, marketing the internet domain name (.fm), radio stations and Sakau (kava) crops. In 2003, their agreement with the United States was renegotiated for another twenty years in a deal worth three hundred and fifty million dollars (Cole, Logan, Farfor, Bennett, Chinula, Dillon, Hubbard, Miller, Oakley, O'Byrne, Owen, Talbot, & Wheeler, 2003).

In the islands of Melanesia since the 1970s, people's enthusiasm for economic development with the expectation of progressing to independence enabled their participation in the world marketplace. The possession of minerals, timber and fish established a source of development capital through equity agreements, taxes, and royalties. Development involved economic and political processes, with resource extraction the sphere of multinational corporations. "The distant, developed nations and their linked corporations" control economic activities (Macintyre & Foale, 2004: 149). The cultural forces are perceived to emanate from advanced industrial societies without regard to environmental destruction accompanying the development. The imagined entity or global civil society forms in cyberspace, made possible through electronic media, focuses on "reconstructing and imagining world politics, and covering such issues as the environment, human rights, and the rights of indigenous minorities" (Macintyre & Foale, 2004: 150). Suggesting an economic phenomenon (globalisation) that promotes consumerism and environmentalism is a cultural ideology, promising material wealth, improved services, with links to distant lands. The most advantageous benefit of globalisation is information technology, with the Internet cited as "the most conspicuous positive achievement of the globalisation phenomenon" (Macintyre & Foale, 2004: 151).

> Working where phones and e-mails are available, Melanesians embrace new technologies enthusiastically and would welcome the opportunities to be part of a smaller world, but at present the technology is to expensive....There is a dearth of qualified Melanesian people who can operate service, and manage computer systems and inadequate educational facilities to provide them. Most are trained in the context of employment by foreign companies, NGOs, and aid-funded training within government departments. Telecommunication in Melanesia remains the province of expatriates (Macintyre & Foale, 2004: 152).

The fantasising that the concept of computer technology and telecommunications are a democratising force in undeveloped countries depends on ignorance of the extent to which all current telecommunication facilities, training, and use are dependent on foreign funding (Macintyre & Foale, 2004: 152).

Papua New Guinea

Papua New Guinea has over six hundred islands and a population of six million (2005). Eighty-seven per cent of the population are rural dwellers and speak in approximately eight hundred languages; administration is from a national parliament to twenty provinces with provincial governors and three hundred local level governments within eighty-nine districts. About forty percent of the population live in poverty and are subsistence farmers, fishermen and hunters; families with illiterate or elderly patriarchs are over represented in the poverty statistics (World Health Organisation: Country Cooperation Strategy, 2006: 7-11). Recently the economy has declined to such an extent and with internal security problems including tribal warfare the government instituted a Structural Adjustment Programme to redirect the national economy and advance the effectiveness and accountability of the public service (WHO: CCS, 2006: 9).

Information systems (IS) applications are improving business process and increasing productivity in Papua New Guinea, because cognisance as to economic, social and political difficulties are considered. In 2004 Kelegai & Middleton found organisations were aware of the advantages of using information technology, but the Information Technology (IT) industry was small and slowly developing with overseas technological assistance; progress only being generated from within the IT industry, without planning or direction at the national level. They found the information technology society to be collectivist that is to "prefer tightly knit social framework where in-group ideals take precedent" (Kelegai & Middleton, 2004: 9). There is always political uncertainty in Papua New Guinea, as the constitution allows for a change of government at eighteen monthly intervals. There is a cycle of instability and social upheavals mean government services are unavailable to rural areas producing lawlessness; "most state owned enterprises are technically insolvent and this is largely attributed to political intervention and *wantokism*" (Kelegai & Middleton, 2004: 20). *Wantokism* is a concept where your kin or clan take precedent over others – a cultural practice within a collectivist culture.

Telecommunication services and the communications infrastructure in general are a major concern, vandalism of equipment and land compensation claims disrupt telecommunication services and hinder economic growth. As with new technology there was initial reluctance to engage with computers, and a cultural concern was lack of tolerance of the unknown may lead to avoidance behaviour to avoid public humiliation. Kelegai & Middleton concluded that external influences contribute to success in establishing an information system; therefore the government must play a more active role by developing policy and produce a national infrastructure in an atmosphere economic and political stability.

> As a result of the poor economic environment and budget constraints, IS investments in Papua New Guinea government organisations are minimal or in some instances nil. This has

cultivated a dependency syndrome among organisations, where they depend on external€ funding from donor agencies or international organisations such as United Nations Development Program for IS investment. A top-down approach to IS development in PNG is necessary, where the national government advocates IS as a driver and strategic tool for change, and provide an overarching framework and direction for IS development in the country. Organisations will then function within this framework to coordinate their efforts in IS investment (Kelegai & Middleton, 2004: 24).

Solomon Islands – Building a Nation

Solomon Islanders dwell in small villages with a subsistence lifestyle and until the 1930s were considered to be a violent and dangerous people, this reputation has returned following ethnic conflict in 1999 and 2000, with a major breakdown in law and order in Guadalcanal. In the 1860s slavers took over twenty-nine thousand Solomon Islanders to service the sugar cane plantations in Australia and Fiji. In 2003 the country was nearly bankrupt and only survived with foreign aid, but eighty-six percent of the population are rural coastal village dwellers, near fresh water springs, and the seas are rich in fish along with gardening and coconuts to sustain the population. Obligations to clan and village chiefs are eternal and enduring irrespective of location; with the *wantok* (one talk) system each individual has entitlement to land and food. In the Western political and government institutions this becomes nepotism and corruption destabilising democracy and retarding the country's development (Cole et al., 2003: 352-358).

The Solomon Islands Human Development Report (SIHDR) 2002 is the first of its kind written and produced by Solomon Islanders. The purpose of the Report is to contribute to discussion on the efforts of individuals, households, the private sector, government, civil society as well as development partners in providing opportunities for people in Solomon Islands to achieve satisfying lives. The report gives an overall view of the

human development status of the country, indicating issues and potential development paths and options; it provides information, ideas, guidance and possible solutions to improve people's livelihood.

In February 2002 a pilot for distance learning began in Sasamungga Community School, a Solomon Islands rural community high school. The project used an existing rural Internet connection through the rural development and peace information and communications technology initiative, the People First Network (PFnet), integrated with the existing facilities. The PFnet studies the impact of the email station on the wider community, focusing on particularly vulnerable groups such as women and young people, providing a valuable baseline data for the further expansion of PFnet to all rural areas of the country. Stakeholders in this project are the remote rural communities that suffer most from deficient transportation and communication networks. The project enables professional and commercial linkages, economic activities, society participation and government services. PFnet benefits organisations working in rural development, allowing them to improve their operations through better logistics and information exchange, while improving the living conditions of their staff in remote locations (Agassi, 2006).

The University of the South Pacific Distance Learning Programme was adapted and optimised for PFnet. The project used a participatory process throughout its implementation. Stakeholders were consulted through focus interviews, evaluations and workshops. Based on their input the project developed a practical model of how technology would benefit the education sector. The project results provided valuable baseline data on the impacts of the distance learning centre and the general impact of the email facility on the wider community. Education providers, such as the Solomon Islands College of Higher Education, PFnet and the University of the South Pacific, used the results to further develop the model and expand distance education at the national level. Nineteen students participated in the pilot and became

confident computer and email users. Thirteen of these students said they would like to study further. The project benefited the wider community providing easy and affordable communication to individuals, local businesses and organisations. The email station improved access to medical services for the people of Sasamunga by enhancing communication and coordination between the local hospital and other health providers. Local businesses actively use the email station to contact their suppliers, place orders, check prices and for basic banking. The PFnet centres improved communication between rural people and their relatives and friends within the country and abroad, demonstrating the rural are capable of successfully adopting new skills and technologies for education to improve themselves and their communities (Agassi, 2006).

The need for additional research aimed at reaching and improving the lives of the rural population was identified. For rural people in the Solomon Islands, access to funds to meet school fees is a common problem; during the pilot project, student fees were supported by the national parliament. A scholarship scheme was suggested, so students from rural areas could continue to study through distance learning programmes. A standardised approach with the distance education provider and PFnet relating to continued build up of technical capabilities and expanding the range of training areas for users and tutors is necessary. A national Distance Learning Centre project was designed and is being implemented for the Ministry of Education with funding from the European Union (http://www.schoolnet.net.sb). The results of the research also made it possible for a Very Small Aperture Terminal (VSAT) system to be set up in a community high school in each of nine provinces of Solomon Islands. The system allows schoolteachers, students and community members to have full Internet access for studies, research and distance learning. The research findings contributed to the development of a national information technology curriculum and the development of e-government in Honiara through the Ministry of Finance (Agassi, 2006).

Polynesia

Fiji's Special Role

Fascination with Fiji is with its diverse peoples who live in a plethora of natural beauty with over three hundred islands in the archipelago. The culture has evolved over thirty-five centuries from Polynesian, Melanesian and Micronesian peoples with cannibalism a feature. In the early nineteenth century European influence and the introduction of firearms produced violent tribal conflict, and in 1874 Fiji became a British crown colony, the justification being the existence of black birding (the trading of slaves). Independence was granted in 1970. A series of four coups began in 1987 and ended in December 2007, producing a period of general unrest, and only of benefit to ruling class Fijians. Many villagers live a subsistence lifestyle dependent on aid from Australia and New Zealand. Sugar trade and tourism are the major sources of income and overseas funds, both being affected by the coups; other exports are molasses, gold, timber, fish, copra and coconut oil. Education is organised by the churches so is unofficially segregated with a literacy rate of eighty-seven per cent overall (Cole et al., 2003: 108-114). Fiji Indian views originate in the 1920s with the paradigms of anti colonialism from India, the assimilation of Indian culture by Fiji's economy, and trade union ideology adopted from the United Kingdom, Australia, and New Zealand. Fijian political values and expectations have been conditioned by the persistence of collective and patriarchal values and relationships, strengthened by friction with Indians who by the 1940s had numerical superiority. The concern of the majority of Fijians is the maintenance of political and cultural strength to counter non-Fijian economic power (Norton, 2000: 104). The Fiji Indian sees the country as a manifestation of their labour, skill, and capital, liberating the Fijian from the barbarity of the bush. Fijian opinion is that Christianity transformed them from primitiveness and shaped modern Fiji, and this sets them above the Indians negating Indian supremacy in economy and education.

> Fijians often denigrate behaviour seen to be un-Fijian as "behaving like an Indian" *(vaka kai Idia)*—especially self-centred competitive and acquisitive behaviour neglectful of family and communal obligations. At the same time, in submissions to the Constitutional Review Commission, they sometimes justified their demand for special power and privilege on the grounds that in civilisation the Indians have a thousand years start on them. Indians in conversation with one another sometimes refer to Fijians as *jati* (caste, with the connotation of lower caste and backwardness) and also use certain other terms to characterise Fijians as inferiors (Norton, 2000: 114).

The University of the South Pacific (USP) is the premier provider of tertiary education in the Pacific region and an international centre of excellence for teaching, research and consulting on all aspects of Pacific life. USP comprises a vibrant and culturally diverse community of staff and students from its twelve member countries: Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu, as well as many other countries worldwide. The pressures of effectively integrating new technologies into learning environments were challenging, when distance, lack of student access and lack of resources are added to the equation, this integration task was daunting, but the perceived benefits of using technology produced creative solutions. In a distance education project, a team introduced technology into the development and delivery phases of an existing course by developing a multimedia component for a print-based economics statistics course. This project succeeded by separating the well-established technologies of development and delivery, and integrating the newest technologies into existing learning environments (Gold, Swann, & Yee Chief, 2002: 1-2)

An important reality to using technology at USP is the issue of student access, and those responsible for creating distance education materials have a very limited budget for new hardware and software, additional training or outside expertise. A final reality is the relative inexperience of the distance education staff with regard to technology. An independent review team doing research during the time of the economics statistics project found

"that very few of the ...[distance education] staff...are at present very familiar with web based course design or the pedagogic implications of sophisticated computer conferencing systems" (Lockwood, Smith & Yates, 2000: 107). This observation could include any computer-based course design because, since its foundation in 1971, distance education at USP has been exclusively print based. Technological progress in March 2000 produced the USPNet 2000, a private voice, data and video satellite transmission link between all twelve USP member nations. In February 2001, a pilot project involving the use of Web Course Tools (WebCT), a web based course management system, began for distance education students. During the period 2000–2001, USP Centres in all member nations received new computer equipment and technological training (Gold, Swann, & Yee Chief, 2002: 3).

The first decision was to separate the technologies of development and delivery, and to produce computer-based multimedia components using audio, video, and graphics. Restricted student access to computers in the region meant delivery was by videotape, and students without a home VCR invariably had one available to them somewhere in the community. Course material in digital format allowed flexibility in delivery, with CD-Rom as computer numbers increased, with delivery via Internet progressing. In education, Vermeer reports that digital resources, "can with varying degrees of difficulty, be transported, transcribed and sometimes transformed into an infinite variety of shapes or vessels (because) they are portable, reproducible and malleable in ways traditional printed texts or face-to-face lectures can never be" Vermeer (1999: 172). The economics statistics project is an example of the feasibility of Vermeer's practice. The multimedia component was Microsoft PowerPoint, to create sophisticated high-quality education materials, including the ability to import order and synchronize graphics and audio. Utilising PowerPoint transcended the technology used and provided flexibility that contributed to the project's success. In the cultural context of the University of the South Pacific, technological expertise improves through hands-on learning in real life situations, by gaining skills

and understanding in specific contexts, in a multicultural environment avoiding concentrating knowledge of specialised tools in the hands of a few (Gold, Swann, & Yee Chief, 2002: 4-7).

USPNet services provided to the 12 member countries are displayed in the diagram below.
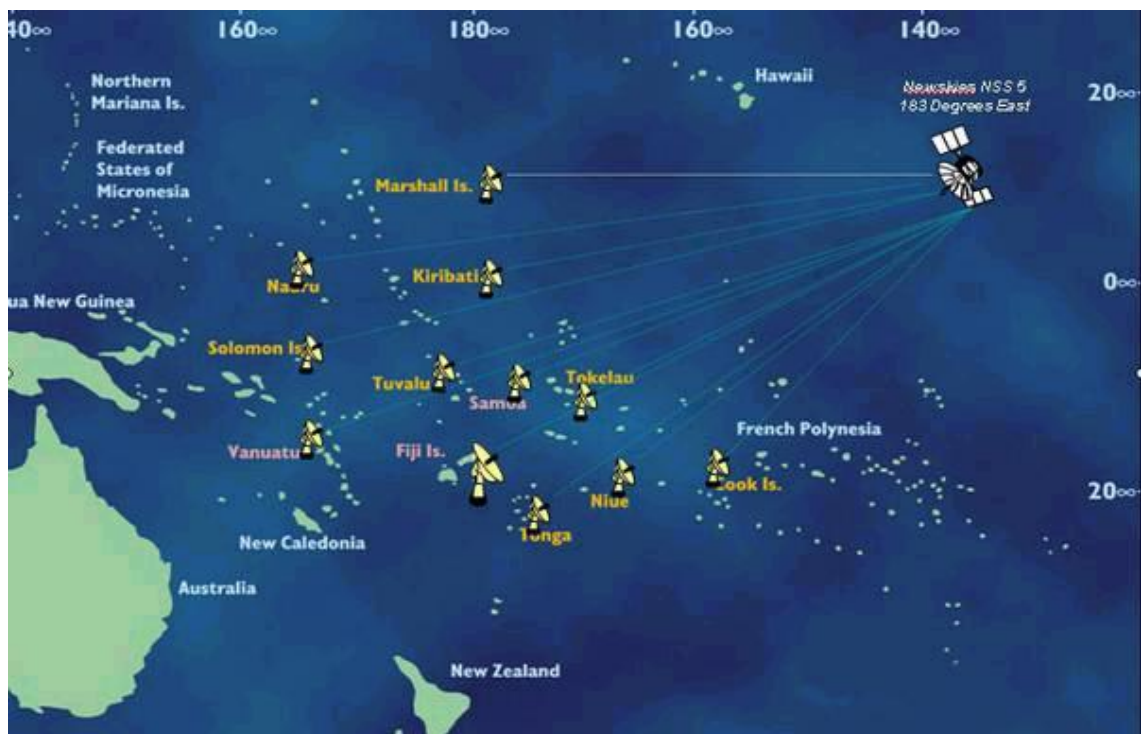
Diagram Two: **University of the South Pacific Net Coverage**

Information Technology Services (ITS Services), established in 1985 as Computer Services, provides a comprehensive range of facilities required for the establishment, maintenance and support of the computer systems of the University of the South Pacific. This covers the full range of functions: teaching, research, consultancy and administration. It also supports all the University's geographical locations around the region. As part of the Distance and Flexible learning initiative, the University has tried to extend its services to all the member countries. This involves audio broadcast and conferencing, video broadcast and conferencing, satellite data services

including course material, local online services and internet services. Scalability fulfils current and future satellite communications needs and allows USPNet to expand the system as need arises. Flexibility supports diverse features that the net may want to implement in the future; modular component design allows integration flexibility. The design allows distance and flexible learning, strengthening the regional integrity of all member countries with a common platform and capacity. In November 2006, The University of the South Pacific was awarded the Commonwealth of Learning (COL) Excellence in Distance Education Award for Institutional Achievement. COL is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning/distance education knowledge, resources and technologies (University of the South Pacific, 2006).

Samoa

Samoa consists of thirteen tropical islands created by volcanic activity. Eight islands to the west form the independent state of Samoa with Apia the capital and described by Cole et al. As "enchanting, if slightly ramshackle, port town, slowly adopting the trappings of the modern age but so far without losing its warmth and laid-back friendliness" (2003: 292). Human occupation can be traced to 500 BC, and the Samoans repulsed Tongan invasion around AD 950: European settlement in Apia was in the 1820s. In 1914 New Zealand seized power from Germany and administered Samoa until independence in 1962 (Cole et al., 2003: 293). Shore (2000) describes Samoa as a distributed network of historically linked artefacts, ideas, territories, people and institutions rather than a local entity. Geographically, Samoa is two politically distinct groups of islands in the South Pacific, one an independent country and the other five islands to the east a territory of the United States. Samoans can also be found in Grey Lynn, New Zealand, in

Compton, California, in Nanakuli, Hawaii, in Salt Lake City, Utah, and now it has taken its place in cyberspace, through internet sites such as Samoa Net, the Samoan Government web site, and Manu Samoa, web site of the national Rugby Team. The features are compilations of greetings from Samoans from all over the world, and numerous other internet locations bringing Samoa to the world. Archaically, Samoan culture is stored in the vaults of ethnographic museums in London, Berlin, New York and Washington, D.C., in addition to ethnographic accounts in scholarly books and films, all spatially bounded cultural units.

Shore (2000) determined Samoans have complex views on respect and obedience for chiefs and elders, with significant differences of opinion among individuals, the old and the young, between men and women, and between Westernised and traditional individuals. More complex are the layers of belief within an individual, pockets of ambivalence and multiple voicing that had alternative legitimate expressions that emerged in different contexts, and in different speech registers. The Samoan language has distinct formal and intimate speech styles that produce different responses from informants on key moral issues. The multiple layers of Samoan meaning are produced in predictable ways, with differences between chiefly and non-chiefly models, in formal versus intimate discourse, in public versus private discussions, and in the form of comedy skits where there is a public confrontation in a way not normally permitted. The same complexity and multiple voicing of culture is present in Samoan views of sexuality, gender relations, attitudes towards modernity and outsiders, issues of honour and aggression, and understandings of how children should be treated. These forms of complex multiple voicing may be lost or not possible with the advent of cyberspace.

To maintain this cultural complexity in cyberspace may require reformulation in the basic way the models of culture are used in the framework of life in culture-specific Samoa. The resolution of inter-cultural

conflict will require refocusing on intercultural difference, particularly with morally ambiguous matters that become contentious in the immigrant context, the actual complexity and heterogeneity of what goes on within a cultural community, disappears from sight, reduced in complexity and reproduced to 'cyberspacific' specifications, culture becomes culture anew (Shore, 2000).

Structural coherence is a source of unity in a cultural community; cultural unity is an experience an unconscious property of cultural models. Samoan institutions share a common abstract structure cantered on a human body-based schema of front and back, organising the institutions of kinship relations, the physical layout of villages, formal and intimate speech styles, styles of dance, and other cultural models. It takes an outsider to indicate these parallels to a Samoan. Shore (2000) labels these underlying structural models *foundational schemas* and has suggested that they account for much of the characteristic feel of a cultural community. Samoa and other Pacific nations may be subjected to forced coherence that is deliberate domination of the community by an autocratic individual or group. Totalitarian societies produce public images of forced coherence, and may use terror and violence to maintain the illusion of unity, as they impose oppositional (Westminster) style politics, as opposed to consensus (Pacific) style governance. Cultural communities are always linked by the sharing and the divergence of understandings. In the Pacific there are different manipulations of the tension between unity and divergence, with a constructed unity. These manipulations are best viewed as a function of communities in a specific set of circumstances (i.e., oppositional politics) rather than a defining essential feature of that community.

Samoa could be considered to have an organised framework for making sense of the world that exists in two basic forms: mental models in the mind, and instituted models in the world. The cultural community shares a series of conventional models of and for experience, with the models in many

forms, being distributed socially and personally in complex ways; not every member of a community has to share equally every model. Samoa is looking to the internet as a way of developing its economy, and in 2004 the United Nations Development Programme pledged to aid computer training and e-government projects. Samoa is the centre of tropical Polynesia with a population of one hundred and eighty thousand; thirty per cent have access to basic telephones and less than two percent have access to information technology. Concerns are the effect of pornography and exposure to philosophies and ways of life based on western values. Samoan culture is centred on a traditional family unit headed by a *matai* or chief, deep Christian principles, and high attendance rates at church services. There was a plan to develop a national filter, requiring Internet Service Providers (ISPs) to attempt to block pornographic websites. ISPs argued this was technically difficult and may have forced them to block legitimate websites, like those providing health information. As developed countries are struggling with this issue, the plan was discarded (Prosser, 2004).

 Samoa's telecom sector is partially liberalised with no independent regulator. Samoa Telecommunications was corporatised in 1999 and holds a ten-year exclusive licence to provide the main telecom services in Samoa. Telecom Samoa Cellular Ltd (TSCL) operates the country's only mobile network, which incorporates some digital services. The Internet market is served by three ISPs. During 2006 SamoaTel commenced deploying high-speed broadband for metropolitan customers. In September 2006 Telecom New Zealand sold its 90% shareholding in TSCL to Digicel Samoa Ltd, a subsidiary of the Digicel Group (Budde, 2006).

Niue

Niue has been inhabited for approximately one thousand years; the language has commonality with Samoan, Tongan and Cook Islands. New Zealand was administering power from 1901 until self-government in free association with New Zealand was achieved in 1974. In 1774 James Cook referred to Niue as "the Savage Island" following a visit and this deterred European settlement of the island where the main problem is out-migration of islanders seeking employment. The economy is dependent upon remittances from off-shore Niueans and New Zealand aid (Cole et al., 2003: 231-232). The Niue News of November 8, 2004 reported, "Public servants and the people of Niue are missing out on the use of "WiFi" (Wireless Fidelity) Internet services and on hundreds of thousands of dollars available for information technology in education and health". WiFi is a trademark for the certification of products that meet certain standards for transmitting data over wireless networks (http://www.answers.com/wifi&r=67). It is now a popular term for a high frequency wireless local area network, allowing home and office users to create wireless local networks which connect computers to each other with a faster internet link. The culprit allegedly is the Minister of Telecommunications Toke Talagi; this is causing unrest among public servants because he refuses to allow government departments to use the fast efficient "WiFi" system for the transfer of email and data. Government employees are silent for fear of victimisation in such a small place. The situation was a non-profit organisation building and maintaining modern information and communication systems for Niue at no charge to the government and a Minister refusing to allow people to use it. Attempts to erect aerials on disused government towers were thwarted. One village (Hakupu) in particular, had youth and women becoming computer literate, wanting access to the best technology. The Minister was denying access on the grounds the "WiFi" system was illegal and the Internet Users Society Niue (IUSN) should pay a license fee to operate it. The IUSN denied breaking

any of the country's laws and for almost two years had been running, developing and expanding WiFi networks for private sector users on Niue. There was also criticism from members of a previous government of a block put on funding informational technology development in schools and the health department. The IUSN has the ability to provide computers and maintain them free of charge, preferable to a donor agency giving equipment without provision for maintenance. Mr Coe (Opposition Member of Parliament) also drew attention to a "scandalous" situation where the IUSN paid for and erected a twenty-metre tower at Kaimiti as a WiFi access point when there were four thirty-metre towers within one hundred metres. Mr Coe claimed the government Information Technology Committee run by the Minister's family failed to improve telecommunications on the island since its inception. The situation had become "so ridiculous" that Mr Coe had called on the Premier Young Vivian to take the Telecommunications portfolio and let the private sector get on with developing national communication systems. A commission of enquiry was deemed as not beneficial to the people of Niue. The government was talking about "A New Beginning" after Cyclone Heta, but that did not seem to apply to information technology services on the island (Guest, 2004: 1).

Tokelau Internet Project

Eighteenth century wars united these three previously independent atolls: Fakaofo, the chiefly atoll, conquered Atafu and Nukunonu uniting them all under the god Tui Tokelau. The population was decimated from one thousand to two hundred by missionaries, slavers, and disease in the 1850s and 1860s and at Tokelauan request became a British Colony as part of the Gilbert & Ellice Islands Colony. New Zealand assumed responsibility for Tokelau in 1925 and this continues with Tokelau moving towards independence. Tokelau prefers the present free association with New

Zealand as it allows all the privileges of New Zealand citizenship, easy access to education and visa free entry to Australia (Cole et al., 2003: 473-74). The majority of Tokelau people are resident outside the group of home islands, in A Australia, Hawai'i, and New Zealand. The expatriate communities share higher standards of education and medical expertise, and to improve the quality of the homeland education and medical services to an equivalent standard, communication with the outside world is a necessity. The Internet Project Foundation Tokelau established in the Netherlands, sponsored by global Fortune 500 companies, provides a duplex Internet satellite link, with in-depth medical information from New Zealand hospitals, access to the education institutions of Pacific Island neighbours, and contact with overseas family members. In September 2003, Foundation Tokelau achieved a step in its goal by providing Fakaofo (http://www.fakaofo.tk) with a continuous service, and in 2005, connections were established at Atafu (http://www.atafu.tk) and Nukunonu (http://www.nukunonu.tk). Foundation Tokelau's advisory board members are members of the homeland community and anthropologists from the world of academia. Funds derive from large corporations claiming their Trademark.TK domain names (Tokelau Magic, 2006).

Tokelau is a small island community, of three atolls, 500 miles North of Samoa inhabited by about 1500 people, living in 17 square kilometres (12 square miles) accessible by boat. The traditional, peaceful and preserved culture is intact, with a daily ritual for dividing goods, known as *inati*. All goods are divided equally amongst the people, so all have the same chances, opportunities and the necessary food for subsistence and inequality in terms of material wealth is not part of the traditional culture. With the development of the Internet Tokelau has another commodity to give: a dot tk (.tk) web extension. Dot tk is giving these domains without charge, but some of the people in the online community own more than others, this is where the Fortune 500 Trademark Trade introduces a new dimension to the culture (Dot TK, 2006).

Dividing Domains Differently

Dot TK is a joint venture of the Government of Tokelau, the countries communication company Teletok and Taloha, Inc., a privately held company. The Government of Tokelau has appointed Taloha, Inc. as the exclusive registration entity. Taloha is privately funded and has offices in San Francisco, and Amsterdam. With its management team, an experienced staff, multi-redundant backbones in both countries and Domain Name System (DNS) root-servers located in every corner of the world, Taloha can handle millions of registrations. Taloha acknowledges Dot TK can have a big social impact on the lives of the people in Tokelau. The primary goal for both Teletok and Taloha is to increase the awareness of Tokelau in the world, establishing relationships with larger corporations who can provide communication, education and medical expertise to the region and directly fund the island of Tokelau with royalty fees paid over domain names sold, enabling the Government of Tokelau to progress towards being a more financially independent nation.

> The mission of the Dot Tk Registry is to create a network of individuals and companies that have an existing Internet presence and have these users register a Dot T K domain name to provide a free, short, easy and secure alternative name for their Internet identity; where the proceeds of the Dot TK Registry goes partly towards development projects on the Islands of Tokelau (About Dot Tk, 2006).

Dot TK have pre-selected a list of trademarks, currently owned by the Global Fortune 500 companies. Only holders of the legal rights to a trademark can obtain a domain name providing the company or individual sponsors pay a fee towards the Tokelau Internet Project. The fee for trademarks depends on the number the company or individual has registered. When sponsoring the Tokelau Internet Project the company or individual is listed on the website as a-great-island-chum (Dot TK, 2006). Tokelau constitutes a special case, with unique challenges and opportunities. The traditional issues of economic

vulnerability and geographical isolation are intensified in the digital era by lack of critical mass in terms of service provision and globalisation. They have the chance with a single-layer central administration to tap into wider virtual markets. Access to information and education through Information and Communication Technologies is potentially vast, relative to the national supply, and planned building of boundless information and technical infrastructure is easily achieved. This enables Tokelau advanced social and economic development into the digital age, given the political and managerial leadership and foresight:

> A nation is an 'imagined community' in four senses. It is imagined because the member of even the smallest nation will never know most of its members. The nation is imagined as limited because even the largest of nations has a finite boundary beyond which there are other nations. It is imagined as sovereign in that it displaces or undermines the legitimacy of organised religion or the monarchy. Finally it is imagined as community because regardless of actual inequality, the nation is conceived as a deep, horizontal comradeship (Anderson, 1983, cited in Cohen & Kennedy, 2000: 86).

Tonga

The date of initial settlement of Tonga has been established as about 1100 BC, they were not passive people and at times extended their empire to Fiji, Niue, Samoa, Tokelau, and to the Solomon Islands. In 1831 missionaries baptised Tu'i Tonga, the king, and Tonga became a constitutional monarchy by 1875, with all the associated baubles and the king with almost unlimited power (Cole et al., 2003: 481-83). With the global expansion of media, telecommunications, information technology, and the internet, people from different regions are exposed to the lifestyles and the cultural lenses of foreigners, with transformation of cultures and societies occurring rapidly, both global and local (Lockwood, 2004: 1). Resource-poor small Pacific Islands are turning to varying options to generate income. A Canadian

company has leased the Tuvalu Internet name "tv" for a fee of fifty million dollars, to be paid over ten years (Lockwood, 2004: 24). The Internet provides a procedure for transnational connections and is instrumental in the formation and the reconstruction cultural identity. Tongan based Internet sites provide younger overseas born nationals the opportunity to communicate and share experiences and opinions, engendering a heightened sense of identity. Internet connections within Tonga are increasing and two opinions as to the benefits are:

> Such ties can foster an ease of communication, may facilitate links between extended family members, may encourage participants from the diaspora to identify more strongly with Tonga, and may even make them more inclined to visit Tonga. On the other hand, it could also be argued that computer-mediated communication enables migrants to strengthen their ties with one another, creating a greater sense of being part of a migrant community, and distancing them even further from Tonga (Lee, 2004: 140).

Tongans have developed the transnational practice of fostering, the informal, temporary adoption of children by kin, usually grandparents and father's sisters. Parents may leave children in Tonga while they go overseas for work; also, it is a means of removing children from negative foreign influences, in particular being a "way of controlling rebellious teenagers wishing to be free of cultural constraints" (Lee, 2004: 140-1). To maintain identity it is necessary to preserve cultural heritage, by adopting western concepts of preservation through written policies, thereby introducing values not regarded as important in traditional Tongan society. Tongan customary praxis emphasises the "keeping and passing down of aspects of Tonga's cultural traditions and practices that are regarded as national treasures" (Mahina, 2004: 34-5).

Federated States of Micronesia

Hezel (2005: 1) reports for the past thirty years Micronesians have lamented they are losing their culture. Globalisation is changing the cultural landscape, in the schools, churches, retail outlets; this is inclusive of the household economy and political institutions. Most significantly, the heart of the family is realigning core beliefs and values. Public promotion of condom use is breaking taboos on the discussion of explicitly sexual topics. Carriers of change are evident, with fast foods on supermarket shelves and the satellite dishes bringing the Internet and contact with other countries. The less conspicuous influences are overseas educated Micronesians recommending changes in the laws on land policy to encourage foreign investment, and social scientists recommending cultural change in the interests of progress. Hezel says:

> In the minds of many, cultural extinction can occur either through the cumulative effect of culture change or through the debilitating effect key changes may have upon the basic institutions of their society. Either way, the eventual outcome of intensive culture change could be the demise of the culture (2005: 1).

Culture change is part of Pacific life, "like a tsunami advancing rapidly to the shore threatening to engulf whole populations, erasing them and all memory of what they once held dear" (Hezel, 2005: 1). The internal assumption is that a people can endure only so much change, and at some point, the impact of cultural change topples the culture. Hezel (2005) gives as an example; the Re Mataw, the sea people from the Central Carolines with their colourful and distinctive way of life, generally regarded as symbolic of all that is special about Micronesia. They cook with iron pots and blend some store-bought goods into their local diet. Shots of vodka are passed around the drinking circle with *tuba*, the local brew. Traditional clothing is the norm, but should lavalavas and loincloths disappear, traditional navigational methods are discarded, and sailing canoes are no longer crafted, cultural distinctiveness will submerge to the pressure of the dominant culture arriving with the

provision of information technology; the original culture would be extinct. An alternative representation portrays cultural change as a virus; social change from a cash economy contaminates the system; there is a radical reorganisation of the basic family, affecting other base systems. Ultimately, the culture dies a victim of the fatal virus that initially appeared harmless. Knowledge is perceived as a threat overturning the status and authority system in their society and contaminating other parts as the causal chain progresses. If the foreign cultural phagocyte permeates deeply enough into the system, it can have the same fatal results as a virus. Hezel (2005: 2) warns, "That cultures, like bodies, can contract deadly illness. Once this happens, little can be done but wait until the end comes".

For cultural preservation, it is necessary to identify that which may imperil the culture, eradicating that which threatens to stifle cultural forms or customs, using measures similar to those for preserving wildlife. Cultural change in Micronesia has been occurring for centuries, but the intensity has increased during the past fifty years, accelerated in this era of globalisation, with the expectation of more of the same in the years ahead. Previous models could be described as "models for cultural extinction" (Hezel, 2005: 2), and using them would appear to foretell the demise of the Micronesian culture. In the Western world social norms and the tools of trade are changing for everyone, computers have replaced typewriters, divorce and open same-sex relationships are accepted. Hezel (2005: 3) defines everyone as those of European descent. The reality today is that Western society has accommodated Jews, Afro-Americans, Asian and Hispanic sub-cultures, and ethnic minorities are incorporated into the general culture, retaining the paraphernalia of their own sub-cultures, shops stock culturally appropriate food, and traditional languages are preserved. American culture seems flexible enough to embrace groups, representing a plethora of different cultures, into its broad cultural network. The United States of America has experienced cultural change over the past century; the changes that transformed the social organisation of the family have not produced other

malfunctions and the cultural system has not collapsed, and the dramatic changes that seemed destructive were absorbed by the culture. In East Asia, Africa, Latin America, and the Middle East, cultures appear to have survived for centuries despite sweeping changes (Hezel, 2005: 3). In Micronesia to be Re Mataw is to be raised by the people who call themselves Re Mataw and to have adopted the pattern of living that they call their own at a particular time. The norm of a culture is always the way people live today, not the way they might have lived fifty or a hundred years ago.

> This new understanding of culture may make it a little more abstract, but it locates culture where it belongs: within the people who pass it along–and who change it, in big ways and small, as they are forever doing. Customs, which are sometimes mistakenly regarded as synonymous with culture, are far more colourful and evocative than an abstract "design for living", but they change every few generations and so could not serve as the polar star for a cultural identity with any permanence (Hezel, 2005: 3).

The Continuity of Culture

Cultures manage to survive for hundreds of years despite the many mutations they have undergone. Not all these features are articulated, not all of them are even discernible, and not all are found in each individual from that culture. There is an impression of how life is meant to be lived passed down from one generation to the next, through the social environment with its many personal interactions, each exemplifying how people ought to conduct themselves. The identity of any culture rests on much more than the similarity between the lifestyle of a people and their descendants three hundred years later. It lies in the continuity of the pattern of life transmitted from one generation to another, ingrained in the people the design for living serves. The sense of continuity over the centuries, encouraged by a remembrance of their past, provides a people with the sense of cultural identity, and a distinctive language promotes the sense of identity (Hezel, 2005: 4).

The point of focus should be the pattern of life, the design for community living, found in a real people, as they exist today. If these people survive, their culture is alive and well. Encouraging adaptation as a means of survival will enable humans to survive only to the extent that they are prepared to accommodate to changes in environment.

> This does not mean indiscriminate rejection of all that has served so well in the past; it simply means altering what must be changed to guarantee survival, biological and societal, today.... with the confidence that as long as the social group remains intact, the culture will live on in its people (Hezel, 1978: 4).

A genuine sense of dynamism and a readiness to adapt to a changing world, with strategies for economic development that necessitate change, are seen as ways of promoting material and cultural survival, Hezel (2005: 4) says, "Some changes are necessary, even inevitable. We should not be afraid to adopt and adapt".

Risks

For people perceiving themselves as belonging to a non-dominant society, the act of accommodation can be envisioned as cultural subjugation. Guam, ruled by colonial powers for over 300 years, has been accommodating to outside influences, some compulsory and others freely chosen. The island has hosted a large United States military force since World War II, with a tourist industry developing over the past thirty years. Those born in Guam have become a minority on their own island as various alien ethnic groups have arrived. Television has caused a decline in the use of the Chamorro language within the local population. Hezel (2005: 5) says, "Guamanians seem generally pleased with the advances the island economy has made and the conveniences that modernisation has brought, but many rue the loss of so much of the style of island life they themselves remember from their childhood". Appearances can deceive and Hezel (2005: 5) observes, "you find something distinctively Micronesian about the people of Guam. The

government, over which local Guamanians have maintained strong control throughout all the changes, has an island flavour to it". Church life is preserved, with fiestas and village life offering opportunities to spend time with family and neighbours. Hezel's (2005) judgment is the local culture is alive and well on Guam, irrespective of the accommodations it has made over the years. The island culture has not succumbed to three hundred years of foreign domination and the past fifty years of intensive modernisation. European Union has not affected the individuality of each of the member states (Lewellen, 2002: 9). The shared view that globalisation will change cultures so that peoples will be blended into the same cultural mould is not empirically supported. When deconstructed "traditional" emerged as a derogatory term with the implication of being primitive, or backward, but in reality, such communities are seen as progressive and dynamic (Lewellen, 2002: 100). Hezel reports, "In Micronesia, the nose flute has given way to the guitar and lately to the keyboard, but the music today still reflects a distinctive island sound. The cultural genius of a people will not be denied" (2005: 5).

For cultures to be lost, societies must cease to exist. As Hezel says, the Pacific Islands are not places of entertainment for outsiders, reinforcing that the world still has paradises with warm, friendly populations; the homes of thousands of people facing the future, just as the people of all nations must. Outsiders frame the Micronesian situation in false dichotomies: the choice, between economic development and retention of their culture; or between education for life in the global village or in the island village. American and European citizens are not concerned by decisions they have to make about globalisation in the knowledge that water levels are rising, so why should Micronesians. The culture has proven it is able to cope with both natural and man induced catastrophes (Hezel, 2005: 5).

Micronesian cultures are changing, as are the anthropological researchers. Researchers possess a stronger moral responsibility to address directly to

the problems of the people among whom they work. The exotic cultures of the world are no longer paramount; study should result in an improved quality of human life for the people. Previous anthropologists have expressed concern for Micronesians and actively campaigned on behalf of the colonised people "they had studied and come to respect" (Hezel, 1978: 1). Today's anthropologists in the field address changes related to social problems that confuse Micronesians and relate directly to their lives', of secondary importance are areas identified as problems to researchers. As humans anthropologists feel obliged to grasp and improve the world, but they enter the field as strangers, trying to grasp the living and working conditions, finding the links binding people together, in union with their fears and aspirations. Micronesians are helped if the complex socio-cultural elements that give rise to current problems in their societies are clearly explored and recognised (Hezel, 1978: 2). A critical problem is the alienation of youth:

> Rapid socio-cultural change, years of formal education in American-patterned schools, the opportunity to attend college abroad that has become available for greater numbers of young Micronesians in recent years, and the considerable influence of their peer groups have all been important contributing causes of the development of this youth sub-culture (Hezel, 1978: 3).

Adults see the young as attempting to subvert the traditional values and customs, but the adults promote the advance in education thereby contributing to the problem. Adults are reluctant to accept the value changes and other effects of modernisation on the young. Traditional roles change with education, cooperation with intolerant uneducated adults diminishes, personal tension increases with value conflict. Hezel's (1978) interpretation was that communities learned to surrender too much responsibility to the higher levels of government, thereby reducing initiatives within communities, producing a sense of powerlessness to direct their destiny, and a weakening of community cohesiveness as opportunities to actively cooperate on projects diminished. Hezel stated alcohol consumption is of

cultural significance; on being declared drunk the Micronesian is excused from observing normal codes of conduct. The suggested cultural solution is for society to require the drunken person to accept responsibility for their actions whilst under the influence, and the judiciary to reinforce society by refusing to accept intoxication as mitigation for criminal acts (Hezel, 1978: 4).

Micronesians understand that there are things that remain unexpressed even when the subject is public knowledge. Western societies are protective of their right to knowledge, and high value is placed on the right of access to public information and the duty of the press to transmit this information to others in an open forum. Outsiders soon become aware that discussion with Micronesians can cause cultural clashes. The issue was recognised in 1975 at the Constitutional Convention that framed the present Federated States of Micronesia Constitution. The option of including freedom of expression in the Bill of Rights caused vigorous debate. Delegates acknowledged freedom of expression was one of the most basic rights and that without this freedom there could not be a free society. It was acknowledged there were limits imposed on this right in traditional island societies. Customary restraint in expressing negative judgments and the importance of respect were at odds with freedom of expression, as is the Western concept. Freedom of expression was included in the Bill of Rights, with a compromise article to protect Micronesian culture and traditional practice. Custom would prevail, in the event of conflict between freedom of expression and custom (Micronesian Seminar Monthly Discussion Topic #14, 1995: 1).

The debate continues in panel presentations with two contrasting voices. One highlights the changes in Micronesian life and the differences between the needs of a traditional society and the needs in the Federated States of Micronesia today. People want information today, reiterated in any local newspaper as the readers thirst for knowledge. Public records and the conduct of public officials are monitored to enable the public to exercise

political choices. The second voice reinforces the attitude that Micronesia will never be the United States and that American-style free exchange is inappropriate. Culture takes precedence and public issues are resolved without open confrontation (MSMDT # 14, 1995: 1). In traditional times, yams and pigs were things of value and concealment was difficult in a small community. Public opinion held sway as an effective means of social control, stealing resulted in alienation from family and disapproval from neighbours. The culture was not concerned with theft or misappropriation of money, so new safeguards were required, and the power of the press was readily available, "and not always gentle in its methods" (MSMDT # 14, 1995: 1-2). A new age brings new problems that demand new solutions, irrespective of the regard for tradition. Democracy is an integral part of the modern world, as are the means necessary to protect it, along with the readiness to make real changes in mentality needed to accommodate an active press. When the freedom of information act came into effect, some of the early newspaper articles provoked outcries and resulted in lawsuits, people of Guam adapted to the press's direct approach; the consequences of a strong press are that aid donors have confidence in the system thereby benefiting Micronesia. A press sensitive to Micronesian culture cannot afford the bluntness of its Western complement; the critical element in culturally sensitive press coverage is respect. The press must respect all persons, even corrupt public officials who appear to abuse their authority and the resources entrusted to them (MSMDT # 14, 1995: 2). The difference between Micronesian and American cultures is, "No one forfeits respect in the island cultures, no matter how great and numerous his misdeeds" (MSMDT # 14, 1995: 2). Mutual respect is what bonds Micronesian societies, preventing violence. The suggestion that, "refusal to hand over information is due to personal loyalty, another traditional value in island society". Is not supported by a journalist who maintains, "If he doesn't get it on the first day, he will eventually get it on the fifth day" (MSMDT # 14, 1995: 3). It was suggested the press should not isolate itself from the cultural environment. "The press

may be an indispensable form of communication in a modern nation, but it must still pay its cultural dues" (MSMDT # 14, 1995: 3).

Chapter 5.

Implications

Pacific Professionals Explore Freedom of Expression in Cyberspace

Exploring freedom of expression in Cyberspace was the focus of an internship of media and information professionals in Wellington, New Zealand on May 25, 2005. The plan was sponsored by the United Nations Educational Scientific and Cultural Organisation's (UNESCO) Regional Office in New Delhi, India and organised by the New Zealand National Commission for UNESCO. The meeting included five media and information professionals from Fiji, the Cook Islands and the Solomon Islands; they examined freedom of expression and freedom of information issues in the digital world as relating to Pacific Islands. UNESCO has committed to assisting with the development of the Internet in the Pacific. There are challenges in connecting villages and homes in Pacific countries to the Internet and progression involves content issues. The concept of *freedom of expression* and the issues around it are obscured when applied to the Internet, and literacy for journalists in the Pacific was identified as a critical issue, with a shortage of training for those with a special focus on the role of the Internet. In Oceania, Internet users operate within a political economy of access over which they have little control. Only a relatively small number of residents are connected, and Pacific-related websites are hosted by institutions located in Australia, New Zealand, or the United States of America (Ogden, 1995; 1998). Most Pacific Internet traffic takes place either between people residing outside the region, or between those in urban centres in the region and the outside world. The discourse is often about the Pacific Islands rather

than for Pacific Islanders, and the most active Islander participants are resident overseas. The sea of islands exist in splendid isolation both in reality and virtuality, and Island people have diminutive control over the way their societies are imagined in the electronic world of cyberspace. Cyberspace is being developed for educational purposes in the region, and the major distance-learning initiatives in the region are centred on the University of the South Pacific with USPNet-2000, a Japanese funded project. A problem already identified is virtual products may be delivered by educational institutions in Australia, New Zealand, or the United States, without local content and without observing local customs and traditions. In 1993, Thaman argued there would be setbacks for educators who strived to enhance the local relevance of regional educational systems in the postcolonial era. Positivists see the Internet as being used to enhance the quality of teaching and learning in Pacific Island's studies, as promoted in the University of Hawaii's School of Hawaiian, Asian, and Pacific Studies called Moving Cultures: Remaking Asia-Pacific Studies, funded by the Ford Foundation as part of a larger effort to rethink area studies in the United States. Interactive technology can facilitate new and more effective ways of learning in and about the region. Computer-mediated and other interactive pedagogies may assist to redress some of the power imbalances and accelerate the process of decolonisation that has been underway for some years (Wesley-Smith, 2003: 118-9).

Pacific Values and Theology

Initial research by Huffer and Qalo (2004: 90-1) when developing a course on Pacific thought, found theses written by theology students and lecturers at the Pacific Theological College in Fiji, suggested churches in the Pacific had integrated cultural realities to increase acceptance of Christianity. They found theologians have been active in promoting the acknowledgement of Pacific values, and institutions such as the Pacific Theological College and the Melanesian Institute for Pastoral and Socio-Economic Service in Goroka,

Papua New Guinea have been prominent with research into the contextualising of theology. Huffer and Qalo observed that,

> The push has not generally come from the national or local churches or in country theological colleges: it has been much more of a top-down, academic initiative than a grassroots, practical one. Local churches and national theological colleges have, for the most part, been reluctant to rock the boat by stressing values they do not see as conforming to those of the gospel. The efforts of innovative theologians so far have generally had little impact either on the ground or in a wider "universal" or cross-cultural dialogue (Huffer & Qalo, 2004: 91).

The expression *universal dialogue* is from Pothin Wete, lecturer at the Pacific Theological College. The advantage of such theses is "they have the merit of existing" (Huffer & Qalo, 2004: 91), indicating that theologians faced the task of contextualising the Church in 1969. The need to integrate western theology and Pacific values is proclaimed regularly, particularly at the regional level. "Theology in the Pacific in the past has been dominated and controlled by Western theological priorities. This has hindered the development of authentic Pacific theologies and created a 'theological dependence' on Western theology" (in Kadiba 1987: 140). Pacific Island voices are still in the minority with non-Pacific voices continuing the debate in politics and economics. Selected theses and articles indicate firstly the path for the affirmation of contemporary indigenous concepts and the building of a Pacific philosophy, and secondly areas of adjustment or possible discourse between foreign influences and local values. The foreign values in the Pacific are western values; the growing influence of the Asian countries in the region may result in new Asian philosophical, religious, and political ideals affecting the region (Huffer & Qalo, 2004: 92). The values become part of contextualised codes of conduct ethics, and laws, because they are relevant to Pacific societies as indigenous concepts people understand that have been part of their culture and language for many years. Using concepts understood by society makes leaders more accountable. The terms good governance, the rule of law, democracy, human rights,

development, are seen as foreign impositions not easily adopted, whereas traditional local concepts embody ideals of social justice, welfare service for the people, and other values that empower isolated societies (Huffer & Qalo, 2004: 94).

A 2002 International Policy Studies publication, an edited version of Tuwere's doctoral thesis, entitled "Making Sense of Vanua (Land) in the Fijian Context: A Theological Interpretation" (Melbourne College of Divinity, 1992), asserts understanding the concept of *vanua* is crucial for the Church and all institutions, decision makers, and citizens of Fiji, and for all those who interact with Fiji. Tuwere's work examines key components of the *vanua*: the *matanivanua* (herald; the eye or face of the land), *mana* (power), *vakanomodi* (silence), and *vakarorogo* or *veirogorogoci* (listening to each other). Tuwere (1992) explains the role of the *matanivanua* is more complex than simple spokesperson. The herald is mediator who activates the principle of relationship or relatedness, he speaks and listens, represents, reconciles, mends broken relationships, negotiates, introduces, announces. *Matanivanua* requires superior knowledge of *vanua*. *Matanivanua* are confined to a particular area, the role is not national; *matanivanua* is a traditional institution not designed to cope with modern Fiji. As a concept, transformation, enhancement, and reapplication to a context that has evolved bringing new tensions and conflicts in its wake, is possible. One of the main reasons the idea of the *matanivanua* is not incorporated because it is yet to be part of mainstream discourse in Fiji. The non-Fijian population, have little knowledge of the concept of *matanivanua*, outsiders view it as being advantageous that *matanivanua* not become part of a national dialogue because it could erode the advantages they presently enjoy (Huffer & Qalo, 2004: 95).

The Future

Examination of theses demonstrates values or elements of local philosophies that are relevant in contextualising theology and understanding contemporary society. These concepts remain embedded in the cultures, always available to enter the arena of universal dialogue. The implication is that using the tools of literacy and modern scholarship enables progress beyond the Western consensus that determines policy throughout the world. Getting ideas circulated requires publication in forms that are accessible to local communities engaging in them, and the wider significant audience (Huffer & Qalo, 2004: 97-8). Integration of a body of thought by negotiation is the method of raising the profile of Pacific customs and traditions that are appealing or beneficial to contemporary society. Those that fit in with Pacific peoples' contemporary notions of well-being, health, and security are promoted, for the practical purposes of avoiding civil conflict and its associated costs. It is wasteful for international and regional organizations, bilateral and multilateral funding sources, nongovernmental organisations, and national government to spend money resurrecting shattered societies after the fact, when common sense dictates allowing those societies the time and opportunity to articulate their own approaches to the world. The *Pacific Way* takes time, reports issued by United Nations agencies, the Asian Development Bank, the World Bank, and regional organisations indicate hurried development results in broken states. The silent voices of yesteryear are able to "enter into a prolonged dialogue with them (not as representatives of the Church but as contemporary thinkers), as should the donors and others who influence the Pacific" (Huffer & Qalo, 2004: 98). Imaginative Pacific theologians equate to philosophers in secular societies. The media have asked Tuwere's (2002, 1992) opinion on public events in Fiji, not as a theological philosopher, but in his institutional role as president of the Methodist Church. As a senior church representative, Tuwere is restricted by institutional constraints; as a theologian, Tuwere's discourse is

probing and enlightening, at times at variance with the church hierarchy, hence little value is placed on consulting Pacific theologians (Huffer & Qalo, 2004: 98). It is suggested many theologians are considered "dissidents in the sense that they critique the role of the Church and other philosophers in the region who have spent time reflecting on their cultures' values and ways of being and doing" (Huffer & Qalo 2004: 99).

Public debates in the region are superficial, public space is rarely available for philosophical and ethical discussion. The exceptions are a column in the Fijian language weekly *Volasiga* with Ropate Qalo discussing Fijian rationality and related issues; the debate in Papua New Guinea on the *Melanesian Way* (dialectic between modern and traditional) and Bernard Narokobi's (1983) influence in politics and law; the role played by Aiono Fana'afi (1992) in Samoa. Policy has not been debated at a public level, local television programs are propaganda tools, without stimulating public discussion on local issues in which local and national philosophies and views are revealed and investigated. The ways of the land and the experiences and knowledge of rural and urban communities are rarely subject to in-depth media examination (beyond the shallow weekly columns such as *Countrywide* in the *Fiji Times*). Inexperienced, urbanised journalists describe their limited experience of village life. Innovative theologians with media exposure would become part of the national debate and contribute to alternative ways of dealing with issues (Huffer & Qalo, 2004: 99).

Pacific Values and Education

Pacific students and academics often feel disadvantaged, because of their short history of formal education in conjunction with the sheer size of the academic endeavour required in research tasks. The result of historical, political and socio-economic forces since colonisation has continued with the impact of "capitalist democracy and technological culture of the West....the Pacific modus operandi has largely been integrated into the individualism,

materialism, progressivism and rationalism characteristic of the Western way of life" (Mahina & Nabobo-Baba, 2004: 203). The English language produces complications with the lineal arrangement of time and space, the future is placed in front of people in the present, with the past placed behind them. The technological ordering of the Ages (stone, bronze, space and information) causes confusion, alongside the familiar ways of nature that are marginalised. Transformation produces the ways of the humans, and the individual occupies a unique position in reality. There is no recognition of the link between ecology, psychology and the social order. There is a cultural clash in thinking - the West with progress always uppermost in the collective mind and the rationalism of a society in permanent criticism and constant opposition; the Oceanic clinging to traditional ways and realism reflected in the cyclical organisation of time and space. Mahina and Nabobo (2004: 204) suggest the solution to marginalisation of Pacific scholars is "for an inclusive schooling or university environment where indigenous methodologies, pedagogies and epistemologies can be embraced, celebrated and recognised as valid and legitimate fields of study".

With the publication of Tree of Opportunity: Re-thinking Pacific Education, the result of a colloquium held at the University of the South Pacific in April 2001, the need to transform education to integrate Pacific values, ways of learning, and attitudes to knowledge was acknowledged. In her contribution, Unaisi Nabobo suggested that Pacific educators must "redefine paradigms of thoughts and explore Pacific worldviews and then take cognisance of these in formal education" (Institute of Education, 2002: 45). She concluded, "The coconut tree must be allowed to live with the computer tiger". "That is, the knowledge symbolised by the coconut tree with its multitude of uses, which considerably enrich the community, must not be discarded in favour of technological, economics-driven, and individualized or commodified knowledge" (Huffer & Qalo, 2004: 99).

Readings in an edited collection for a second-year University of the South Pacific course on Theories and Ideas in Education examined indigenous educational concepts and theories of knowledge and wisdom (Thaman, 2003). In Tonga, Fiji, Kiribati, there are sophisticated theoretical indigenous constructs about learning and education. The contributions by Thaman, Nabobo, and Teaero (2003) describe the highest and most virtuous form of knowledge in their respective countries. All three agree this form of intelligence, translated loosely into wisdom, is accumulated knowledge reflecting the importance of the spiritual, moral, physical, and economic enhancement of oneself and others (Nabobo, 2003). The concept of *wanawana* (the highest level of knowledge) in Kiribati reflects the importance of using that learnt in a judicious way for the rest of society. The readings also highlight that though these concepts of wisdom remain core values in Pacific societies, they are marginalised in the education system, and Pacific scholars have accepted a view of education that is "diametrically opposed to our traditional notions…." (Thaman, 1995: 731). Huffer and Qalo assert,

> One can say the same for all Pacific Island countries where formal curricula at best ignore and at worst denigrate fundamental principles and notions of indigenous education. That these principles have only begun to be explored in the past thirty years or so points to the weight of the coloniser in education as in other areas of public life (2004: 100-1).

According to Teaero (1999), the search for relevance in educational programmes in the Pacific started in the 1970s, emphasising self-reliance. Fiji has had four coups since 1987 prompting the notion that the failure in leadership is due to a lack of understanding of Fijian concepts and values related to indigenous leadership. Sanga (2000: 7) says, "Leadership is likely to be one of the main issues Pacific Island countries will continue to deal with in the years ahead". Sanga's view is that the indigenous methods of choosing leaders are discussed when teaching the theory of modern state elections. The incorporation of indigenous concepts of governance in the

curricula may aid understanding the reconceptualising of leadership, reflecting indigenous culture and the actual world. Leadership boundaries are blurred, as are expectations of leaders. Indigenous codes of conduct are marginalised in favour of foreign expectations lacking applicability in indigenous national and local politics. Teachers, theologians and philosophers, are an intellectually privileged minority, who have a duty to promote Pacific thought and values by assuming a public role in line with their status and their social responsibility (Huffer & Qalo, 2004: 102).

Uses for the Information Society

Pacific Philosophy in action

Pacific communities have been active in promoting low profile indigenous philosophies. An initiative is the *TuVanuatu* (Institute), a national movement established to combat Vanuatu's constitutional emphasis on British and French values and institutions, and the inability to promote self-sustaining socioeconomic development, following self-rule. Movement activities are a bank, started in 1986, dealing in pigs, mats, kava, shell money or national currency allowing people to save and borrow (Huffer & Qalo, 2004: 104). In 1997 the indigenous nation, established the Melanesian Institute of Philosophy and Technology, a co-ordinating centre for indigenous education and relationships to indigenous systems of living. The general aim of *TuVanuatu* is to preserve, teach and promote Melanesian indigenous values. This society is the result of 20 years of analytical researching and piloting which supported the view that an indigenous education system is most appropriate for Vanuatu because it safeguards respect, human values, leadership qualities and economic empowerment enabling self-reliance (Lini, 2000: 4). The Institute is responsible for the indigenous education

system, a lifetime process that begins at conception and ends with death. Education is in the natural environment by parents, older peers, clan members, and community chiefs, talented members of the society, and wise men and women of the older generation. Indigenous education concerns and imparts practical skills for roles in society and assuming the responsibilities at different stages of human development. The individual acquires life skills to be socially secure and economically self-supporting. Progression is through six levels, children of up to six years are the responsibility of parents at home where their sense of security is of prime importance and parental relationships prosper. Children of six to twelve years have household duties and learn subsistence farming. Their education is the responsibility of clan members, chief of the *nakamal* (administration centre) and the community. This period involves the individual's public responsibilities, self-esteem, respect for others and their property in order to preserve a peaceful existence. The third stage involves children of twelve years and over and it takes place at the *nasara* (village arena for political and business activities). This stage is the implementation of practical business skills in economics, credit, borrowing, trade and marketing. Individuals start to acquire grades, ranks and decorations, receiving tuition from qualified chiefs with acquired status. The Institute formally teaches third, fourth, fifth and sixth levels of the indigenous education, the age for entry is twelve years and over. The fourth level concentrates on leadership, building social, economic and political relationships with others. The fifth level teaches specialised areas chosen by students. The sixth and final level is on balancing social, economic and political power as the bases of unity and quality leadership of the highest standard, offering lessons in philosophy, specialised wisdom and technology. Course outlines and curriculum for all the six stages of the education system is written in the indigenous *Raga* script, preserving the language of the ancestors. English and French are level four subjects, with adults accepted as students after learning the script writing prior to entry. The Institute encourages students from other language communities to

develop their own school curriculum in their own vernaculars using indigenous script writing and to start their own community schools. Thirty-five subjects covering all areas of human, social, political and economic developments are offered at the Institute (Lini, 2000: 5). The aim of the bank and the Institute is to strengthen the community at all levels: family, village, district, area, and nation by giving people a sense of purpose based on values they understand and respect. The goals are increased self-esteem, initiative, social stability, security, and the ability to set goals. Community groups are seen as marginal in the context of national politics and policymaking, but they provide an alternative to the critical situations some of the countries of the region are facing at the national level (Huffer & Qalo, 2004: 104-05), for example the Fiji coup of 5 December 2006.

The Re-colonisation of Indigenous Oceania

Himona (2000: 1) asserts new technologies are used to re-colonise the indigenous peoples of Melanesia, Micronesia and Polynesia, re-imposing "the newer colonial geographies upon the ancient sovereign geographies, despite the ongoing process of political decolonisation". Prior to colonisation there was a single oceanic region, inhabited by island-dwelling ocean-going peoples, the oceans and islands being part of the same landscape, the ocean provides food and an infrastructure of pathways. The Western concept of peoples owning oceans is at variance with the island concept of seventeen thousand years where the seas are homelands as are the relatively tiny landforms. The Western world confines people to insignificancy in individual island nations, rather than as "sovereign inhabitants of an enormous and ancient oceanic kin-based nation of nations" (Himona, 2000: 1). The Maori of New Zealand and indigenous Hawaiians are minorities in their homelands. Other nations; Fiji, Papua New Guinea, Solomon Islands, Vanuatu, and Samoa have regained their independence from the colonising powers. American Samoa and French Polynesia are governed by colonial powers; these disparities indicate the region is negotiating a long decolonisation process.

The region is politically dominated by the United States of America, France, Australia, New Zealand, and the European Union, with Chile assisting Rapanui or Easter Island. New communications technologies implant political objectives and the foreign values that accompany such aid packages (Himona, 2000: 1-2).

Prior to the introduction of the Internet to the island nations, communications and information were dominated by expatriate interests, with most print and broadcast media owned and operated by non-indigenous people, and the telecommunications infrastructure often operated by foreign interests. The stories and news of the indigenous majority presented to the world through a non-indigenous distorting filter suppressing news and views based on indigenous concepts and values. When newsworthy events unfold, journalists invade the region with their instant media technologies; impose their instant interpretations on events, and present distorted interpretations to the world. The coverage of the coups in Fiji, 1987 to 2000, and the Solomon Islands has shown the Pacific Internet tends to serve the ends of foreign intrusion excluding the indigenous peoples. Himona (2000: 2), reported the Maori of New Zealand had struggled to gain a Maori owned and operated media presence, there were a few regional Maori newspapers, two national coverage magazines, a network of state funded tribal and regional radio stations, and negotiation for a Maori Television station that became a reality in March 2004. In 1995, there were virtually no Maori voices in Cyberspace, there were a large number of non-Maori commentators telling the world their version of Maori stories and perceptions. Himona and others decided to rectify the situation, and built Maori orientated websites, challenging the non-Maori voices in Cyberspace. An active Maori voice has re-appropriated an increasingly active Maori presence, with the Maori Internet Society leading the way with initiatives aimed at staking a claim to the Maori slice of Cyberspace, helping facilitate computing and online needs. At "flax roots" level there are approximately six hundred Maori language nests at pre-school level with

Internet access. Each of these organisations is the centre of a small family-based learning community, located countrywide. Maori medium schools and schools within concentrations of Maori population, and health providers are connecting to the Internet and to a video-conferencing network. Maori are developing the Internet to manage and disseminate indigenous political activism, at home and offshore (Himona, 2000: 3). Himona acknowledges Hawaiians were probably the first indigenous Pacific Islanders "to adopt the new technology, and the new media. Their sovereignty movement has been very active and they have a number of quality websites and online publications" (Himona, 2000: 3). Hawaiians have been to the forefront in networking the indigenous peoples of the Pacific, and beyond. Australian indigenous Aboriginal people have an active and growing presence on the Net, but remain far behind mainstream Australia (Himona, 2000: 3).

Throughout the remaining Pacific island nations, until 2000, the Internet had made minimal impact on the lives of indigenous peoples, and the Digital Divide was wide. When available in the larger towns and cities it was prohibitively expensive for most people, as connections are reliant on expensive satellite communications. Inspection of the Pacific Island Countries and Territories web directory at New Zealand's National Library (2007) indicates that most sites about indigenous Oceania are non-indigenous, in a region where the indigenous peoples are the majority. The coups in Fiji (1987) and Solomon Islands (June, 2000), had spectacular results immediately, the coup masters controlled the State, dictated the Townsville peace terms in the Solomons and benefited from compensation claims and other methods to enrich themselves quickly and easily. In Fiji, there was no indigenous Fijian presence on the Web, with few or no indigenous media outlets. Australian and New Zealand politicians and media dominated regional debate, and the voices of Indo-Fijians prevailed over the voices of indigenous Fijians throughout. Debate was one-sided, until Himona (2000: 4) developed a website (http://maorinews.com/karere/fiji) Fiji Coup Supplement to present an indigenous viewpoint, and for three or four

months it was virtually the only alternative Internet information source worldwide, but in discussion groups and chatrooms, the Indo-Fijian voice drowned out the indigenous Fijian voice. During the coup in the Solomon Islands communication was difficult, the only indigenous voices were from the Solomon Islands Broadcasting Corporation, prompting from Himona (2000: 4) and their twice daily bulletins were posted to the Web (http://maorinews.com/karere/solomons), by a public servant who had access to the Net (Himona, 2000: 4). Himona wrote,

> That whilst the new technology can and should be a liberating influence in the hands of the indigenous peoples of the region, it can and is being used to reinforce the old hegemonies of the old colonial powers, and their cultures, concepts and values. My dream is a project to link all the indigenous peoples of the region via affordable broadband connections, to provide for their voices to be heard above those of the non-indigenous interpreters of voice, opinion, and culture. Agencies such as the World Bank and UNESCO will be involved, as will commercial providers, but it will be designed by indigenous people, and driven by indigenous needs (2000: 5).

"CYBERSPACE is buzzing with relative hyperactivity in the South Pacific", noted Robie (1996: 1), then a lecturer in journalism at the University of Papua New Guinea attached to the Australian Centre for Independent Journalism on a media research program. By mid-October 1996 there developed daily newspapers with regular Web links, news magazines, weekly newspapers, a biannual media journal and a daily news services. Pacific media websites of note are Tahiti Pacifique Magazine (http://www.tahiti-pacifique.com), a professional monthly news magazine founded in 1991, celebrating its first fifteen years in April 2006. Scoop Independent News (Monday, 10 April 2006) reported, "Over the last decade and a half, publisher Alex du Prel has produced an outspoken blend of hard-hitting investigative journalism and outright buffoonery". Du Prel replied, "I had a reputation as an opposition newspaper, which is understandable, as I

was for some years the only one to publish what the rest of the press refused".

Robie (1996: 2) claims, "The most newsy of the Pacific websites is Papua New Guinea's *The National*" (http://www.thenational.com.pg). The company has Malaysian owners, and is popular with Papua New Guineans abroad for news of the turbulent social and political situations, and sporting activities. The rival *Post-Courier* (http://postcourier.com.pg) has Australia News Limited as parent company (Robie 1996: 2). Robie reports, "Both Port Moresby paper websites are not produced by journalists, but by commercial website providers in Australia" (1996: 3). Robie continues, "Journalists need to reclaim some Pacific websites so that there is real content" (1996: 3). In Samoa, the *Polynesian Café* sources news from the *Samoa Observer*. Tonga has the weekly newspaper *Tonga Chronicle* and monthly online news journal *Matangi Tonga* (http://matangitonga.to). *Uni Tavur* (University of PNG, School of Journalism, student newspaper) claims to be the first Pacific newspaper online, without intervention by commercial providers (Robie, 1996: 3-4). Although this paper's pioneering role in cyberspace has been with cooperation and support from the Australian Centre for Independent Journalism and the *Pactok* (Pacific Tele-centre Online Community) communications network. *Pactok* was set up in 1991 as a low-cost electronic mail network to serve non-governmental operations in the Asia-Pacific region, and since April 1991 *Pactok* provides a Papua New Guinea news service or *Niuswire* (http://pactok.net.au/docs/nius). Robie initiated the service, claiming it was in response to requests from Papua New Guinean expatriates, mainly academics and students wanting to stay in touch with what was happening in the area. The *Niuswire* carries stories from a variety of local sources, including the *Post-Courier*, as well as reports from the Association of Progressive Communication (http://apc.org) and *InterPress Manila* (http://www.idp.ph) sources, usually cover socio-economic, political, environmental and media issues (Fogg, 1996).

Pacific Developments

The Foundation for Development Co-operation (http://www.fdc.org.au), a non-profit organisation resident in Brisbane, is Australia's only international development think tank, and is unique in purpose and focus with an independent regional identity; it integrates action research and policy development. The long-term aims being to: mobilise support for development cooperation, ensure sustainable development policies and practices in the Asia Pacific region, promote individual, community and private sector initiative, and reduce poverty and disadvantage. The Foundation is active with the establishment of telecentres, shared access points providing a practical means of delivering basic Information Communication Technology services to Pacific Island communities, their diaspora communities and the wider world, a telecentre is a "community-based facility equipped with Information Communication Technology tools" (Mathison, 2005: 1). They range from community radio initiatives to low-bandwidth e-mail centres and networks, to high-bandwidth Very Small Aperture Terminal Satellite Systems (VSAT) installations with networked computers and to a combination of these. Whatever the technical configuration may be, telecentres are globally directed to build communities, by facilitating increased access to empowering information and more effective and timely communication. They are located in dedicated premises, community centres, schools, community development organisations, or cooperative businesses. Initiatives in Papua New Guinea, Vanuatu and Fiji, focus on transmission of important public-education messages in the field of HIV/AIDS. The People First Net in Honiara, Solomon Islands has seventeen e-mail stations linked to an Internet café hub (Mathison, 2005: 1-2). Schools in Niue have a network of digital libraries. The Pacific Open Learning Health Network (http://www.polhn.com) is an association of telecentres in the major hospitals of eleven Pacific Island Countries (Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Marshall Islands, Samoa,

Solomon Islands, Tonga, Tuvalu and Vanuatu), dedicated to the on-going education of health professionals. Samoa has two major projects underway, schools online and a network of community telecentres. Fiji has a telecentre projects programme, and Tonga, the home of Information Technology entrepreneurship in the Pacific has individuals implementing Internet-based businesses and activities (Mathison, 2005: 2).

The diversity in the Pacific prevents commonality, with technology and allied infrastructure; different Pacific Island Countries are at different stages of development. Papua New Guinea a heterogeneous country has several thousand separate communities, most with only a few hundred people; the local languages illustrate the diversity of these communities. There are more than seven hundred indigenous languages and fifty to sixty-four per cent of these are related, the remainder are unrelated. Villages are scattered and have no telecommunications services; literally, jungle drums are telecommunication tools. Some communities have a single HF-radio phone, with population centres having fixed telephone services, and some with mobile services, and elite groups have access to satellite technology. Wewak, the capital of the East Sepik province, hosts a non-governmental organisation, HELP Resources that established a telecentre in 2001. HELP needed telecommunications to support its own operations, and the telecentre has become an important tool in community development work. HELP extended the telecommunications facility to the community it serves. The local catch phrase is "It might not look much from the outside, but when you go inside the world is at your fingertips" (Mathison, 2005: 2). Telecentre initiatives in remote, sparsely populated communities in the Pacific face challenges different from those in high population centres. It is not advantageous that much of the shared-learning is coming from the more populous parts of the world. The established countries have pledged to build a support network, an online community, through which telecentre initiatives can share ideas and information, resources and skills from within

the region. The proposed network was dubbed *Pactok*, the Pacific Telecentre Online Community (Mathison, 2005: 3).

Co-operation within Diversity

The diversity of the Pacific with small populations spread over a wide area requires teamwork at regional level and the present situation does not attain Western standards of communications integration. The Council of Regional Organisations in the Pacific (CROP); an inter-organisational consultative process, aims to prevent replication in the programmes of its members. The heads of organisations meet annually, with prior consultative work done by sectoral working groups for various regional projects and policy initiatives. The Information Communications Technology Working Group has guided the Pacific Islands ICT Policy and Strategic Plan (PIIPP), assisted by the regional outposts of various United Nation agencies. Other organisations and networks influential in ICT innovation are the Pacific Islands Chapter of the Internet Society (PICISOC), the Oceania regional network of the Global Knowledge Partnership (GKP-Oceania), and the Pacific-World Summit on the Information Society (WSIS) group. The non-governmental organisation Sasakawa Pacific Island Nations Fund (SPINF) also operates at regional level (Mathison, 2005: 3-4).

Pacific Telecentre Online Community

The Pacific Telecentre Online Community (*Pactok*) initiative gives a voice to grassroots telecentre projects, so they can share experience and expertise with each other and the world. The International Development Research Centre (IDRC) (a Canadian Crown Corporation), which has been involved in telecentre initiatives all over the world for many years, recognised the need for regional support for isolated Pacific telecentres. IDRC established a programme called telecentre.org, a collaborative social investment programme, with funding from IDRC, Swiss Agency for Development and

Cooperation (SAC) and Microsoft Corporation (USA). The aim of telecentre.org is aligned exactly with *Pactok*, and the Global Knowledge Partnership (GKP) recognised *Pactoc* as a prospective client of the telecentre.org project, and with IDRC as a cohort the formal connection was made at the 2005 GKP annual meeting in Cairo. Pacific telecentre stakeholders are now able to petition IDRC's online-community development efforts and reduce the cost of developing *Pactok*, the major obstacle to its development (Mathison, 2005: 4). Improvements in telecommunications services and ICT provide increasing opportunities for Pacific Island Countries to overcome the barriers of distance, remoteness and diversity. Community telecentres are helping to connect island communities with each other, with their diaspora communities and with the wider world. Without some form of ongoing coordination and support, present initiatives will continue to struggle as isolated entities. *Pactok*, founded on the willingness of Pacific Islanders to cooperate and support community across the oceans, will be vital to telecentre survival throughout the region (Mathison, 2005: 5).

Saskawa Peace Foundation

More than 10,000 islands dot the vast Pacific, separated by ocean expanses and mountain barriers, the communities of each region have, down from antiquity, preserved their dynamic cultures. It is seen as an earthly paradise, where time is spent basking leisurely in the shade of coconut palms, or on sandy white beaches looking out over coral reefs awash in an emerald green sea. It is easy for advanced nations to envision island life in these idyllic terms; for the native peoples, actuality is not that simple. The tropical breezes turn into devastating typhoons, and calm seas become raging waves of destruction. Island communities are attempting to modernise, at the risk of exposing their traditional social systems and natural environment to harmful influences. Remoteness makes it difficult to participate in the wider international society, limiting development. Independence from colonial

powers has not lessened the requirement for foreign aid. Japanese aid has increased, but the programmes have insufficient exchanges of information regarding the region's traditions and social systems. In 1988 in recognition of the fact the countries of Oceania, are Japan's neighbours sharing historical and cultural ties, the Sasakawa Peace Foundation hosted the Pacific Island Nations Conference in Tokyo. Subtitled Friendship across Oceans, Peace across Borders, it established a Pacific Island Nations Fund within the Sasakawa Peace Foundation to conduct specific regional projects (Pacific Island Nations Conference, 1988).

Changes – Courtesy of Information Technology

In their 2002 book, *Origins of Cyberspace: A Library on the History of Computing, Networking, and Telecommunications*, Hook, Norman and Williams illustrate how the computer has come to play a central role in communications as well as computation, literature relating to telegraphy and information theory is included. Historians might prefer to have single articles or issues of scientific journals singled out in a bibliography rather than separated in a private collection, but that is not the collector's focus. *Origins of Cyberspace* suggests how fragile much of the fundamental literature of computing and communications is. Rather than the bound books and manuscript letters on fine paper of the seventeenth and eighteenth centuries, one has carbon copies, mimeographs, and publications printed on highly acidic paper. At the same time, Hook, Norman and Williams suggest the difficulty of maintaining an international perspective on the history of computing and telecommunications. To understand cyberspace as an international phenomenon requires more than present sources provide. They argue that, with science and technology that emerged after 1940, it is

difficult to gauge how much material remains hidden under the cover of national security.

Mass schooling grew out of the process of industrialisation and urbanisation, and the present era of major revolutionary development with new information technologies, is changing the way we communicate with each other and how we transmit knowledge. There is the suggestion that these developments are of the same magnitude as the shift from feudal to industrial society. Martin (1995) (cited in McLennan, Ryan & Spoonley, 2000: 111) suggests it is a new form of post-industrial society, naming it a "global information society". The new information technologies are changing the sphere of work, by creating new jobs, making others redundant, and changing the structure of some occupations – this challenges the notion that conventional forms of schooling are preparing children for the world of work. As technologies change, so do the skills necessary to use the technologies. Post-industrial societies are expanding the post-compulsory education sphere with increased attendance at polytechnics and universities. Internet-connected personal computers are replacing the textbook. Classrooms without walls may replace traditional forms of classroom education. Access to information does not mean an increase in knowledge, information is data – knowledge is "a cognitive process of *understanding* that information". A huge amount of information is available on health remedies, but without a process allowing judgement as to the appropriateness of the options, information technologies are unlikely to replace the pedagogical model of interaction between student and teacher (McLennan, Ryan & Spoonley, 2000: 111-14).

Arendt offers the concept of natality where:

> Life is characterised by the constant and often surprising appearance of the new in it. So whether we contrive it or not, or want it or not, something new is always happening, often imperceptibly, in our everyday lives. At the end of the day, something transpired that we didn't anticipate at the beginning of

the day. The same in life. This notion of newness, or natality, means of course that the new is always attended by death or a loss: something's falling away at the centre at the same time as something's being born (2006: 33).

Applying the concept of natality in small traditional Pacific societies, as new information technologies introduce new medical knowledge, life expectancy increases, already meagre resources are stretched beyond established limits, resulting in enforced migration or increased overseas aid. The dynamics being to grow and develop there must be upheavals and uprootings. It is this displacement that the anthropologist wants to understand, as Jackson says, "anthropology in a sense shouldn't pretend to know the other; the anthropologist may claim to know himself or herself a bit better", his vision of anthropology is, "as a way of looking at what all human beings have in common and breaking down these discursive categories that separate us from other people" (Jackson, 2006: 34). The commonality of all peoples is the way in which they approach the questions and problems of existence: "how people address the questions of making a viable life for themselves" (Jackson, 2006: 34-5).

Jackson (2006: 35) asserts, "The life of every Sierra Leonean is as complicated, as peculiar, as purposeful and as rich as the lives of New Zealanders and North Americans". Misconception is rife in the West, fuelled by the media; the biography of peoples may indicate no commonality, their actions defying explanation in the ways of normality. The craving for recognition in situations of desperation, leads to abnormal acts giving people a sense of being alive. Claiming to understand these acts does not condone them:

> You can't examine human subjects or human subjectivity by assuming that the person is a bounded entity who has a personality or an essence or an identity. Because identity, if one wants to use that word, is emerging in the course of interactions and conversations... I'm sure we all have the sense that we're roughly the same person we were 20, 30, 40 years ago, but at the same time we're variations on a theme, a theme that is very loose; and every

encounter, every event, every situation produces a different reaction
of that theme (Jackson, 2006: 35).

Huffer (2005: 118(23)) has addressed the problem of governance and ethics in the Pacific. Mismanagement is referred to using the World Bank's euphemism *governance agenda* that is a failing inadequate political environment is the underlying cause for lack of developmental successes. In the Pacific, donors and international agencies are concerned about the region's slow growth, the rising political instability, and mismanagement in some countries with an upsurge in the ideology of traditionalism. The proposed solution is to promote liberal democracy and the rule of law, reduce government bureaucracy, and encourage more open markets. Huffer indicates a major flaw in the governance agenda is that:

> Proponents of the agenda fail to sufficiently question how liberal democracies actually function today. This is particularly so with respect to the subservience of present-day democracies to market forces, which has led to widening social inequalities, a general deficit of political participation, and an increasing role of wealth in determining electoral outcomes (2005: 119).

Promotion of thought about what political values and systems would best serve modern Pacific societies, rather than pandering to *native* institutions, and entrenched elites with their roots traceable to colonial days is essential. Complacency, a lack of political participation at national level; growing socio-economic disparities, and a sense of cultural vulnerability to globalisation and other influences, promotes a climate in which mal-governance prevails. Promotion of Pacific political ethics is an alternative when dealing with mismanagement, after research into Pacific political values, by indigenous political scientists. Huffer claims:

> Our limited understanding of Pacific cultures and languages has kept us from even beginning to understand indigenous political conceptualisation. It has always been easier to look at institutions, events, happenings, systems, and so on. One disincentive (applicable

to native and non-native scholars alike) has been the complexity and sensitivity of the subject matter itself. In addition, native scholars who could have done this kind of work have shied away from it for various reasons, including pressure from non-native professors to focus on problems and issues from a western prospective. Until recently Pacific scholars may also have felt there was little value or reward in studying their own cultures in the area of political theory (2005: 119-20).

Identity

The basic building block of social interaction is a consideration of identity. All of our interactions, even those with strangers, are shaped by our sense of with whom we are interacting. In face-to-face and telephone interactions, there are a wealth of cues of varying reliability to indicate our identity and our intentions. Our clothes, voices, bodies, and gestures signal messages about status, power, and group membership. We rely on our ability to recognise fellow group members in order to know whom we can turn to and what we can expect. Our ability to identify others also allows us to hold individuals accountable for their actions (McLennan, Ryan & Spoonley, 2000: 5, 42). "We live in a network of hyper-reality: where images collide, liaise and feed upon one another, whether in the realm of work or consumption or politics or information" (McLennan, Ryan & Spoonley, 2000: 290). In the post-modernity of today:

> Unlike the early era of modernity, our lives are now said to be less and less determined by family, class, community and national loyalties or by social expectations linked to such things as gender or race. Instead, these structures, along with the moral and political certainties about the nature of truth, reality and destiny with which they were associated, have largely disintegrated. Accordingly, we are free to forge our own identities – although this may cause some anxiety. In doing so we choose from an increasingly diverse, pluralistic and sometimes confusing cultural repertoire – one that emanates from the all-pervasive mass media (Cohen & Kennedy, 2000: 67).

No particular social identification or discourse can be visualised as more real than others can, and alternately may be chosen or imposed, with society rejecting the social sameness from the period of late modernity,

> The date of Columbus's voyage to the Americas, 1492, can be taken as a convenient symbolic marker opening the modern era. However, the orientations towards modernity only began to crystallise in the seventeenth century. They involved the growth of a questing spirit, a powerful leaning towards rationality – the search for valid verifiable knowledge – and a belief in the possibility of transforming the material world in the pursuit of social 'progress'. The project of modernity eventually boosted science culminating in industrialisation and urbanisation (Cohen & Kennedy, 2000: 36).

This was in preference to social and cultural difference in an unreal society – "A society, indeed, where there is no such thing as 'society' at all" (McLennan, Ryan & Spoonley, 2000: 290). Online interaction strips away many of the cues and signs that are part of face-to-face interaction. This poverty of signals is both a limitation and a resource, making certain kinds of interaction more difficult but also providing room to play with one's identity. The resulting ambiguity over identity has been a source of inspiration to many who believe that because people's physical appearance is not manifest online (yet), individuals will be judged by the merit of their ideas, rather than by their gender, race, class, or age. However, others argue that traditional status hierarchies and inequalities are reproduced in online interaction and perhaps are even magnified. Examining how identity is established online as well as the durability of the institutions of race and gender in online interaction, research into identity and indigineity has shown it is of particular importance to those who have moved away from their homelands (Macpherson, Spoonley & Anae, 2002). There are attempts to maintain language, culture and religion confirmed by the research. Baba (2004: 97) says "We are entering a period where indigenous groups are no longer silent about their rights; they are concerned about their identities, languages, cultures and the need to reclaim their knowledge systems and processes". Baba also offers the thought that globalisation may advantage

indigenous groups by their sharing in the knowledge economy, with research determining the resources, skills and knowledge required, and the distribution of the knowledge acquired (Baba, 2004: 98). To understand one's environment it is necessary to establish a knowledge base. It is acknowledged that research is not neutral or objective, and mirrors power relations in society. Those with the money own the research; establish the focus and guidelines of the research and the results. The recipients have not been involved in these critical processes of determination, but are considered to have "been truly well researched, supposedly for their benefit, as it was thought at the time" (Baba, 2004: 98).

Communication technology's influence on the construction of a common global identity is located in the late 1960s. The proliferation of television receivers and satellite technology enabled access by millions to the images of planet earth. The moon landing in June of 1969 described as "the fundamental turning point in human experience" (Cohen & Kennedy, 2000: 301). Earth's beauty was revealed and the need to preserve our precious asset became heightened. The same occurred in the mid-1980s when computer enhanced images indicated the depletion of the ozone layer (a band of gas encircling the planet between twenty and fifty kilometres above Earth's surface), resulting in holes over the Polar Regions. To attract world attention and rally support, personal computers allow the production and circulation of literature whilst establishing databanks used to challenge the claims and validity of states and powerful institutions. The Internet facilitates instantaneous dissemination of messages and information, theoretically enabling the people to correspond with a Head of State. Groups and individuals separated by continents share information that becomes a "rapid cumulative learning experience" (Cohen & Kennedy, 2000: 302).

Regional Learning Communities

The Internet was used to enhance the quality of teaching and learning in Pacific Island studies. An experimental web-based interactive module that linked classes at the University of Hawai'i and Canterbury University in 2000 was part of a project, *Moving Cultures: Remaking Asia-Pacific Studies*. The project at the University of Hawai'i developed a pedagogical model designed to address imbalances of power in Pacific Island studies and other area-based educational programs. The model uses interactive technologies creating dynamic links between places where area studies are taught and the places being studied. Institutions develop a shared curriculum, with student-orientated forms of teaching and learning in multi-sited classrooms, forming regional learning communities. The Moving Cultures model discourages the '*us* studying *them*' Western dichotomy. The University of Hawai'i has established partnerships with educational institutions in the Asia-Pacific region to form the multi-sited classroom. There is collaboration with the University of the South Pacific in Fiji, Canterbury and Victoria Universities in New Zealand, Ateneo de Zamboanga University in Mindanao in the Philippines, the National University of Singapore, and Ritsumeikan Asia Pacific University in Japan. The co-owned courses run simultaneously at the University of Hawai'i and on the partner campuses, using email, websites, and video-conferencing to link participants at each site. The courses explore the nature and local implications of the global flows of capital, people, and ideas that affect each of these sites in profound ways. Modules examine topics like migration and multiculturalism; tourism, representation and identity; globalization and popular culture. The topics are of immediate relevance to people in each of the regional sites, including Hawai'i, "which as quintessential Asia-Pacific border zone exhibits all of the tensions and contradictions inherent in the contemporary study of place and culture" (Wesley-Smith, 2003: 124). This science and practice of education gives students an active role in shaping and exploring the topics in collaboration

with foreign counterparts, whilst evoking personal experiences and perspectives. "Materials and assignments are posted on class websites, which also host asynchronous discussions as well as real-time "chat" between participants. The websites record the results of these collaborative, participatory, and inductive experiments in knowledge production" (Wesley-Smith, 2003: 124). Inserting interactive modules into existing courses bypasses the bureaucratic and other difficulties associated with establishing new courses and avoids the potential problem of recruiting students for courses that are not part of the regular offerings. Limiting the period of intercampus interactivity avoids some of the planning and management difficulties associated with the fact that regional campuses often follow different academic calendars. The interactive modules are scheduled to occur during overlap periods when both campuses are in session (Wesley-Smith, 2003: 124).

Oceania on the Move

During the autumn semester of 2000, Centre of Pacific Islands Studies (CPIS), University of Hawai'i, Manoa, students worked with counterparts at Canterbury University in Aotearoa/New Zealand in a unique experiment in collaborative teaching and learning. The four-week interactive module on migration, called *Oceania on the Move*, used e-mail and web-based technology to link University of Hawai'i students in PACS 491 the Contemporary Pacific, with students in a Pacific history course (HIST 363) at Canterbury. The module was developed as part of the Ford Foundation sponsored, Moving Cultures project. The 2000 coup in Fiji forced the postponement of the course; it was decided to proceed with a modified, two-campus version of the venture. The result was a four-week interactive model on migration taught simultaneously as part of a Pacific history course at Canterbury and a Pacific Islands studies course at University of Hawai'i (Wesley-Smith, 2003: 125).

The lecturers followed a common syllabus and used scheduled classes for summary lectures, to discuss issues, to provide advice on student assignments, and reflect on the growing contents of the *Oceania on the Move* website. The interactive component of the course was on this website, operated by the University of Hawaii's Manoa Advanced Interactive Learning Environment (MAILE) system, accessible to participants at Canterbury. Participants could access materials; the course syllabus and information about assignments, read each other's work, participate in threaded discussions of course-related issues, or engage in informal, real-time chat. Assignments were designed to elicit critical responses to course materials and encourage discussion from personal experiences and perspectives. Students researched assignments in small inter-campus groups, with other students of their own campus. At times, individual responses were required. The initial assignment required students to enquire into each other's histories of movement. The design was to use life experiences to explore the reasons people move between places, and allowed participants to become familiar with each other through informal email exchanges. In two assignments, some groups had to construct answers to open-ended questions posed by the lecturers, while other groups commented on those responses. For the final assignment, all students participated on the website in an open discussion of key issues (Wesley-Smith, 2003: 125).

The Oceania on the Move module required considerable planning and management, and the results of the experiment exceeded expectations. The experience was memorable "for the place and culture-based knowledge that participants brought to the conversation. The dialogue was significantly richer when it was informed by familiarity with the societies featured in the module and by personal experience with the issues discussed" (Wesley-Smith, 2003: 126). The important factor in the dynamics of the exchange was the participants came from Fiji, Guam, Hawai'i, Marshall Islands, Okinawa, Papua New Guinea, Samoa, Tonga, and those of Caucasian ancestry. This added intensity to the discussion, with students able to reflect on their

backgrounds for issues arising from course materials, the University of Hawai'i group was significantly more diverse than that at Canterbury. Canterbury staff noted their students' postings tended to be more scholarly than those from Hawai'i.

> They were also more formal and detached in style, prompting one student (attired in surf shorts and t-shirt) to remark that his Canterbury counterparts "must all wear suits". As a Canterbury participant reflected apologetically in her final posting, "It was pretty hard getting into the swing of things and I personally felt it hard to communicate on that informal basis which I think was being encouraged by you guys, but I think that was just because I kept thinking of everything strictly as an academic task or whatever. [Yawn]. Sorry" (Wesley-Smith, 2003: 126).

This project indicated that interactive pedagogies could be used to redress some of the power imbalances apparent in the field of study and help accelerate an ongoing process of decolonisation (Wesley-Smith, 2003).

Conclusion

The landscape of the Net is difficult to see; there is no single concept for cyberspace, like the term schizophrenia, characterised from the outset by fundamental disturbances in personality, thinking, emotional life, behaviour, interests and relationships with other people. Participation in cyberspace involves a tendency for the person to withdraw from the environment and to show an internal disintegration of thinking, feeling and behaviour, resulting in incongruity between the emotional state and thoughts and actions, a tendency to morbid projection. Like schizophrenia, the description of cybernetics involves withdrawal, splitting (thought disorder, emotional disconnection, and conduct disconnection), paranoid disposition, and abnormalities of perception.

The Pacific is the home of diverse living cultures and peoples who are spiritually linked to their indigenous Gods, belief systems and land. There are an estimated two thousand indigenous languages and cultures, which represents two thousand creation stories that establish values to supervise cultural obligations, conduct and relationships. These cultural practices are guided by natural laws of society and protocols as foundations for peaceful co-existence. Any disturbance to peace is compensated for and peace is restored according to the laws of society. In the indigenous world, spirituality is an important component of the human inner development because it directs all mental and physical activities. Human technology in indigenous communities is a collective obligation requiring proper nurturing and guidance from parents and communities. Human technology began with the first human life based on the cultural environment and the land linked to creation stories, belief systems, spirituality, natural laws of society and the mode of production the communities depended on for social, economic and political security. Changes in the Pacific over the centuries are due to ideological invasion, colonialism, domination by western civilisation, human displacements and cultural supremacy by other cultures. The indigenous world and spirituality have never been colonised, Christianised or modernised in the highlands of Papua, Papua New Guinea and Vanuatu. Others in the Pacific community are continuing the search for self-actualisation and national progress based on Christian *spirituality*, Western values and modernisation taught in Western educational institutions. In addressing the issues of poverty, prosperity and progress in the twenty-first century, one recalls Pacific history and the significance of these terms in the Pacific community. While one can attribute self-blame for development crises occurring during the years of political independence, one must remember not to forget the waves of invasion and power play that shaped the Pacific community over centuries to the present. First came European contact with its land acquisition and colonialism, allowing access by Asian merchants and trade, then Christianity introduced the Western system of

education as part of the civilising process. The slave trade, employment and the monetary system of exchange preceded a wave of militarisation and nuclearisation, resulting in Pacific nationalism and land rights issues surfacing. Constitutional democracies and the Western form of governance became a reality, with nation building based on Western models of development. National independence and sovereignty, with a wave of neo-colonialism and aid dependency, led to economic globalisation, with resentment against value systems that erode indigenous values producing the wave of re-indigenisation facilitated by the revolution known as *information technology*.

Constructing a coherent body of Pacific thought does not imply standardising or reducing Pacific concepts but bringing them together to find common traits. Huffer and Qalo (2004) indicate that many similarities exist. By demonstrating that there is a shared and coherent philosophy and ethic, forces it onto the public agenda. In the material covered, elements standing out are the awareness among growing numbers of Pacific academics of the need for a genuine and far-reaching contextualisation, acknowledging the relevance and applicability of indigenous cultural values in contemporary settings. Then there is the success of communities whose initiatives have followed familiar traditional ways they know and understand, reaping rewards. The region is littered with development and governance failures, Papua New Guinea, Solomon Islands and Fiji to name a few. The national state of affairs in some countries is not encouraging. Where good development and governance are occurring, it is usually through the direct initiative of local communities using their knowledge base. These indigenous knowledge bases must be better understood and made nationally accessible so that more can benefit. To achieve this requires a great deal more theoretical and action research into Pacific values and worldviews. Ultimately, it means listening to the communities at a local level and giving them the opportunity to express their understandings of the world.

 The holistic approach is traditional in Pacific society. Health, from a Pacific perspective, has always acknowledged the unity of the soul, the mind, the body and the family. Western medicine emphasises bodily health, marginalising functions not explained by the law of physics. Pacific theories minimise mechanistic forces in favour of the strong influences of mental attitudes and supernatural powers. There are differing realities and notions bound by culture and time. Different times develop different norms, as different cultures interpret similar phenomena in different ways. Consideration of Pacific perspectives must acknowledge unique cultural heritages, and the onslaught of the twenty-first century. To consider only a traditional interpretation of the effects of information technology would be to deny the impact of time, and to disregard the importance of traditional culture in favour of Western concepts would be to deny the reality in which Pacific peoples live. The child in Pacific society is progressing into a world unfamiliar to its parents and grandparents; there is no hesitation in embracing the world of technology, recognising the positive aspects of Western culture and the advantages to the wellbeing of the individual and the people. Participation in the technological world is essential to achieve growth, whilst drawing strength, meaning and dignity from the attitudes and teachings of the ancestors; the spiritual world is acknowledged by recognising the limitations of the corporeal world and the need to nourish the soul. These three phases of living, the present the past and the spiritual world are accommodated, to produce a total identity, by addressing the conflicts between the technological, scientific attitude, tribal traditions and spiritual experiences. The goal of Pacific peoples, including Maori, is to survive in these three worlds.

Achievement of this goal is through education and technology, tribal association and spiritual experience, but the requirement is for it to make sense to students, allowing incorporation in their world and lifestyle, not merely an interesting, foreign field of endeavour. For Pacific youth, Western education, learning and technology must have relevance to their background

and for the young Pacific Islander raised only in Western culture; the *falepa* must have relevance in the new emerging culture. Pacific people are able to excel at Western pursuits, usually at the expense of their basic identity and cultural affiliations that may be lost to future generations. Western educational and vocational systems are slow to present a culturally acceptable programme; Pacific people are hesitant initiating innovation and change. Western research tends to fragmentation as opposed to developing the whole person by accentuating cultural strengths alongside technical skills. In Western culture there has been pre-occupation with the independence of the individual, the separation of generational ties, and good mental health. The *Pacific way* promotes interdependence, where personal ambition is secondary to family ambition for the future generation, and consensus preferable to verbal confrontation, whilst developing a spiritual awareness acknowledging human limitation and mental illness. Western culture has improved the health standards of all Pacific nations, but some local customs have been categorised as undesirable and discouraged to the detriment of the society. Uprooted families encouraged to seek the advantages of the Western consumer society, lost self-esteem, confidence, status and became alienated from their kin. Health and the environment are integrated, self-esteem is difficult to maintain when a family moves to Mangere or Otara from a tropical paradise like Aitutaki. Cultural pollution occurs with a society denied the right to use their language; language is now considered as a basic unit of health with the introduction of *Kohanga Reo* (Maori language kindergartens). An integration of technology, traditional Pacific culture and spirituality is ambitious and attainable with determined Pacific leadership, and critical research to help us understand why people acquiesce to conditions of oppression.

Improvements in telecommunications services and Information Communications Technology now provide increasing opportunities for Pacific Island communities to overcome the barriers of distance, remoteness and diversity. Community telecentres are helping to connect island

communities with each other, with their diaspora communities and with the wider world. However, without some form of ongoing coordination and support, these initiatives are likely to continue to struggle as isolated entities. Pacific Telecentre online community (*PacToc*), founded on the willingness of Pacific Islanders to cooperate and to support community across the oceans, will be a vital support tool for telecentre initiatives throughout the region. The interplay between online communities and the *real* world has been used as an effective tool for social protest, but many of the same features that make the Net effective for coordination and communication also encourage the spread of inaccurate information and force out dissenting voices. Online networks are used to link dispersed rural communities, but the effort also brings up complex issues about the adoption of new technology. The Internet is used as a tool for change in a disadvantaged community, demonstrating a way around unconcerned government agencies to find people with information and expertise that are willing to share. The ability to take these lessons to other disadvantaged communities may be limited by the lack of equipment and the information to make it work. The double-edge of online interaction, avoids the extremes of utopian and dystopian visions to examine the details and at times conflicting processes within online communities. Assessing the meaning and impact of new technology is always a challenge. Many predictions about the ways new technologies will transform society fade quickly; the telegraph, radio, movies, and television did create revolutions, but not as expected. Hence, it is important to turn from opinions and predictions to the serious analysis and description of online information technology. The coconut tree with its multitude of uses that enriches any community, and the technological economics-driven computer tiger with its individualised or commodified knowledge, must learn to exist in harmony.

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