ALIVE:

CULTURE, SUSTAINABILITY AND INTERGENERATIONAL DEMOCRACY

KIRSTEN DAVIES

kirstyd@tpg.com.au

KEYWORDS

Sustainable Future, Non-Renewable Energy, Global, Unsustainable Consumption, Environmental Sustainability, Population Growth, Technology, Intergenerational Democracy

ABSTRACT

Today, there are complex barriers to a sustainable future, resulting in the exploitative consumption of natural resources. Across the world, people of vastly different heritage are now living together, disconnected from the localities of their ancestors where their identity and culture were inseparable from the land and its natural systems. Rebuilding human relationships with their environments is critical to addressing the unsustainability of the planet. To assist the process of reconstruction a new public planning model, Intergenerational Democracy, has been developed. Its aim is to implement intergenerational equity, a primary objective of sustainability. Through the formalised age-based system of community consultation and capacity building, barriers such as: gender, ethnicity, religion and socio economics are minimised, with age becoming the equaliser. I.D embraces the movement towards participatory democracy and active citizenship, engaging whole communities from children to the elderly (9-99 years) in planning and managing their futures. It recognises that there are many quieter but equally legitimate voices that are rarely heard in government policy and planning forums. Developed and trialled in Australia (2006- 2008) the study involved 271 residents of a municipality in Sydney, Australia. The findings revealed the distinctive, multi-dimensional threads that are 'alive' and constitute a locality and its community, recognising that culture is a key connector. This model aspires to embed processes of regeneration, develop a renewed sense of belonging and promote sustainable environmental behaviour 'on the ground'. As expressed through the voice of a 25-year-old project participant who said, "I can't change the world but I can change my backyard."

Today I drove to work in my Japanese-made car dressed in a suit manufactured in India. Sitting in an airconditioned office, I emailed a friend in London on my computer which was built in Korea, to plan my next European holiday, as I sipped coffee from Brazil with a touch of milk from New Zealand and thought it was a perfectly 'normal' day. I probably would not have considered that 50 years ago it would have been a very 'abnormal' day with technology such as personal computers unimaginable. I would not have contemplated the food miles travelled, non-renewable energy expended, natural resources depleted and carbon emitted to support my everyday life.

The global world brings wondrous, new and exciting frontiers and relationships. Conversely it disconnects people from the localities of their ancestors where social and environmental knowledge has been passed through generations. These relationships have been irretrievably altered. For example, if we were dependant on catching local fish to feed our community and could see that stocks were becoming depleted we would act to conserve the remaining fish so we could survive. Today, I have no idea about the number of fish in the local Lane Cove River as I go to the supermarket and buy salmon flown in from Tasmania. This does not indicate that we need to return to subsistence living but illustrates where imbalances are based, demonstrating that most individuals are out of touch with the local environment due to the constructs of modern life. A manifestation of this is the unsustainable consumption of natural resources, which will impact on the survival of future generations of humans, as well as flora and fauna – both locally and across the planet (Zimmerer 2006).

The biosphere is approximately three and a half billion years old but humans have been part of this evolutionary process for less than a million years (Norgaard 1994). Throughout most of these years of human habitation, communities had defined boundaries with their distinctive cultures, shaped by the people and territories in which they lived (Inda and Rosalo 2002). Human survival depended upon these places for food, water, fibre, fuel, minerals and medicines, forming deep locality based environmental relationships (Shennan 2002). Population growth, industrialisation, technology, politics, war, religions, legal systems and globalisation over the past two hundred years have dramatically interrupted these co-evolutionary processes (Diamond 2005). Within the developed world, territorial boundaries and the relationships and balances between human and natural systems have been altered to a position of human dominance (Shiva 2006).

Big questions are being asked across the world as to how we can urgently restore earth's life- supporting systems, which have become threatened and toxic – the most immediate problem being climate change. Reports such as the Stern Review-the Economics of Climate Change have been pivotal in the recent raising of global awareness of the urgent need to address environmental sustainability issues. Stern (2006) predicted that the basic elements of life are now threatened by climate change and "hundreds of millions of people could suffer hunger, water shortages and coastal flooding as the world warms" (Stern 2006 p.vi).

Population growth and technology in today's industrialised world are significant contributors to the earth's unsustainability and many solutions lie in addressing these challenges. The thesis of this paper proposes that the relationship between most humans and the environment has been severed, and urgent restorative measures are now required. Noted scientists (Diamond 2005, Gallopin 2005, Flannery 2005) concur that the global environmental crisis is human induced and humanity's fate relies upon future decisions and behaviour.

Few disagree that human environmental behaviour requires a paradigm shift (Hawkins 2006, Shiva 2006) in the movement towards a sustainable world, or 'sustainability', which is concerned with protecting the lives of future generations, their environments and natural resources (Brundtland 1987). Deep connections between indigenous

people and the land can provide an understanding of the principles of sustainability encapsulated in the relationships Australian Aboriginals have with the natural environment through creation mythology or 'the dreaming'. Laws are laid down concerning the use of natural resources, which relate directly to social obligations, structures, kinship and the individuals respect and knowledge of the territory and its conservation for future generations (Bayet-Charlton 2003). In the discussions surrounding why immediate action is required, the case for 'intergenerational equity' is frequently presented as the primary objective of sustainability planning.

Sustainability planning models focus on three sectors: economic, social and environmental. These are also referred to as 'pillars' or 'the triple bottom line' (TBL) (Elkington 1980). Most government authorities are currently researching and implementing sustainability plans using the TBL framework (ICLEI 2003). Generally sustainability planning excludes cultural factors or the "patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups" (Knuttila 1996, p.95) despite culture's pivotal role in shaping environmental perceptions and behaviour (Stoddart 2002). There are exceptions such as New Zealand, Canada and the United Kingdom where cultural sustainability has been embedded in planning processes. Culture is based in, and emerging from history, its ever-changing nature poses difficulties in designing sustainability frameworks that can accommodate its organic nature and idiosyncrasies (Ong 1987). Cultures are "varying packages, each with integrity of its own, and distinctive to different human collectivities, mostly belonging to particular territories" (Hannerz 2001, p. 58).

The global diaspora has effectively created hybrid social spaces as settlement develops in new places. We live in an age where information and travel is accessible and community boundaries less readily defined. It is a world alive with "movement and mixture, contact and linkages, and persistent cultural interaction and exchange" (Inda and Rosaldo 2002 p.2) .The dramatic increase in trade and human migration has separated humans from their formative environments, where "globalisation has radically pulled culture apart from place" (Inda and Rosalo 2002 p. 11). Migrants from across the earth bring their diverse previous experiences, values, beliefs and knowledge in interpreting environmental information and practices to their new land.

Cultural changes can be seen in a variety of forms such as food or clothing to more significant aspects such as the individual's value system, which is "more resistant to change than are peripheral and visible behaviours" (Leung 2002 p.5). Examining underlying human values is important when addressing environmental sustainability, particularly as diverse value orientations can lead to different attitudes (Stern and Dietz 1994). Herein lie the deeper concerns of sustainability, the global diaspora and diversity of first, second and subsequent generations and their subjective previous experiences in interpreting environmental information and relationships with the land.

Examining the complexities of human social and environmental relationships is especially applicable in Australia where 43% (DIC 2007) of citizens or their parents were born overseas and come from over 100 countries of origin (ABS 2006). Alarmingly, "Australians emit more CO ₂ per capita than any nation on earth" (Flannery 2005 p.109) and despite extensive environmental education programmes recent research shows that citizens of all ages are exhibiting deteriorating behaviours that contribute to the worsening conditions. (ABS 2006, DEC 2006). All levels of government play critical roles in addressing environmental unsustainability. Global and national approaches require coupling with local strategies. This research explores a model designed to restore the intimate relationships of humans to their environments at the local level. Local communities are the hubs of everyday life where the implementation of sustainability occurs in all its forms 'on the ground'. They are the places where relationships can be restored and renewed directly with the land. Workable solutions to some of the

challenges generated by globalisation must come from some of the smallest societal units as "...every place is unique and there is no guarantee that what works in one setting will work in another. Solutions must grow from their own communities..." (DCMS 2004). Pro-environmental attitudes are conceived as place-based phenomena and therefore studied directly through local places (Bonaiuto et al. 2002). Cultivating positive environmental attachments and behaviours requires a "long-term and continuous commitment" with a local 'ecosystem' view of defining place as a foundation (Williams 2004).

Communities can be empowered to determine their own priorities, facilitated by local government authorities where democracy is practiced in its most direct form (Held, 2006). It could be argued that democracies, capitalism and individualist societies are the root cause of global unsustainability (Shiva 2006). This paper does not differ from this view but proposes that democracies can hold the key to reconstructing the bonds between humans and the natural world. Within democratic societies, it is at the local government level that citizens have the most opportunity to participate directly in decision-making processes embracing the movement towards participatory democracy (Sisk 2001) and active citizenship (Barber 2001).

The dilemma lies in how to activate rapid attitudinal and behavioural changes within communities accommodating the complex living, changing, social, cultural, political, economic and biophysical variables. Legislation, education, incentives and deterrents all form part of the suite of approaches required. However, the need for a flexible system of sustainability planning that includes culture has become apparent.

CASE FOR INTERGENERATIONAL DEMOCRACY (I.D)

Intergenerational Democracy (I.D) was developed in response to the challenge of designing an 'all inclusive' local sustainability planning approach. Conceived in 2006 as a component of a University of Sydney PhD research project, the concept was explored through a pilot study when participants were asked to identify their environmental attachments to a special place. The researcher noted that participants often responded differently according to their age. For example, a 20 year old described a beach location where she met her friends, a 30 year old nominated the local park where he played with his children and a 60 year old chose a tranquil river. Other age-based findings from the pilot study included views on: multi culturalism, consumerism, technology, communications and relationships. These led the researcher to the conclusion that as citizens move through life phases their perspectives, priorities and motivations change. She felt that an age-based method of sustainability planning and programming could be advantageous as a foundation to activate attitudinal and behavioural change towards a sustainable world.

This approach is supported by Erikson (1964) who described the theory of psychosocial human development suggesting an 8-stage lifecycle from childhood through to old age. His research referred to 'mutuality' and 'generativity' or the interaction of generations. 'Mutuality' reflects the effect of generations on each other, especially among families, and particularly between parents, children and grandchildren. 'Generativity' represents a stage during adulthood concerned with care in 'establishing and guiding the next generation' (Erikson 1950 p. 267, cited in Slater 2003) and productively contributing to society as an individual (Harder 2002). Extensive additional research supports the positive and negative correlations of age with environmental protection and the significance of an individual's life stages (Mackay 1997, Huntley 2006, Carson et.al. 2000).

In 2007, the age-based model was developed comprising three consecutive phases (see Figure 1). Intergenerational Democracy is defined as a method of social engagement and capacity building, requiring the inclusion of citizens representing all age groups within a specific community. It aims to assist the reconstruction of generational and environmental relationships by engaging whole communities, from children to the elderly, in planning and managing their futures. I.D recognises that there are many quieter but equally legitimate voices which are rarely heard in government policy and planning forums. This method cuts through educational, socio-economic, gender, special needs as well as cultural and ethnic barriers of inequity through a formalised age-based grouping system.



Model for Intergenerational Democracy (Davies 2007)

I.D can be implemented in three phases. A resolution to make an ethical commitment to intergenerational equity is the first phase, which may be reflected in a vision statement, principles, values and policies. The practical application of the age-based approach occurs at step 2 where communities are divided into age groups for consultation purposes. This approach could vary from qualitative to quantitative and mixed methods dependant on the project's aim. The third phase involves implementing programs across generations or with age specific groups.

THE RESEARCH COMMUNITY- KU-RING-GAI

The model was trialled in Ku-ring-gai (Sydney, Australia) as the basis of its sustainability vision to underpin longterm planning from 2008- 2033. Ku-ring-gai Local Government Area is located in Sydney's northern suburbs, 16km north of the city centre. It comprises nine suburbs, covering 84 square kilometres. The locality is predominantly residential with 95 per cent of the area low-density housing. There are significant areas of park and bushland with very little commercial and no industrial land use (KMC 2007).

Ku-ring-gai, with an estimated residential population of 106, 029 (ABS 2006) has high levels of education, employment and financial security (ABS 2001). The dominant demographic groups include a significant ageing population and families with school age children. More than 32 percent of Ku-ring-gai's population were born overseas, mainly in the United Kingdom, South Africa, Hong Kong, New Zealand and China, while 0.1 percent is Indigenous (ABS 2006).

Ku-ring-gai has extensive natural areas and waterways covering approximately 1,100 hectares (KMC 2004). There is a large variety of native flora and fauna including the critically endangered Blue Gum High Forest. Kuring-gai Council is the local government authority for this area and has a history of leadership in its commitment to environmental sustainability; of particular note are its volunteer programs such as Bushcare and Streetcare. Recent state government legislation requires Ku-ring-gai to accommodate additional medium density dwellings as part of the Sydney Metropolitan Strategy (DIP 2005) which was designed to plan for the rapid population growth of the Sydney Region. As a consequence of this legislation one of the key planning issues this Council faces is the impact of future population growth, which is predicted to increase by 43 percent to 143, 340 by 2031 (KMC 2007). The environmental and social impacts of this growth requires careful planning considerations for the future of Ku-ring-gai and its broader Sydney context.

METHODOLOGY

The purpose of this research was to develop a 25 year vision for Ku-ring-gai's sustainable future. The qualitative study was funded by the Council through its Environmental Levy with additional financial assistance from the New South Wales Government through the Department of Environment, Conservation and Climate Change. The project commenced in 2006 and was completed in 2008. It included: a literature review, pilot study, face to face individual interviews, focus groups, intergenerational forums (see Table 1), demographic and data analysis, validation of findings and report writing. Commencing the community conversation phase with face to face individual interviews was inconsistent with the more common practice of commencing with focus groups to gain a

broad-brush understanding of a range of issues (Sarantakos 1998). This was a deliberate strategy designed to gain community support for the project and to capture age differentials, which were the further expanded upon in the focus group and forum phases.

Participants were recruited through the Council's web site, community groups (such as sporting, religious, environmental, business, historical and cultural), local schools and a media campaign. They were selected to represent the social profile of Ku-ring-gai by purposeful selection and snowballing. Each participant was provided with a project outline, demographic and authority forms. They were assured of their anonymity and encouraged to frankly express their views.

| Total number of participants participatory approach | as per | |
|---|--------|--|
| Pilot study participants | 37 | |
| Interview participants | 67 | |
| Focus group participants | 51 | |
| Forum participants* | 104 | |
| Councillors | 5 | |
| Observers^ | 7 | |
| Total | 271 | |
| *An estimated 32 people did not provide personal details. | | |

^Observers were non-residents of Ku-ring-gai.

Table 1. Total number of participants at each of the community conversation phases

271 residents participated in the project comprising 110 females and 122 males (39 people did not provide their personal details) that were relatively evenly distributed across all age groups (see Table 2). 85 participants were born overseas with the dominant countries represented being the United Kingdom (30), New Zealand (11), South Africa (11) and China (7). The diversity of countries of origin for second-generation participants was notable, with 41 countries represented.

| Participants grouped by gender and age | | |
|--|------|--------|
| Age | Male | Female |
| 9-11 | 14 | 15 |
| 12-17 | 11 | 15 |
| 18-24 | 13 | 10 |
| 25-39 | 15 | 21 |
| 40-59 | 28 | 36 |
| 60-79 | 18 | 16 |
| 80+ | 11 | 9 |
| Total | 110 | 122 |
| Details not provided | 39* | |
| Combined total | 271 | |

Table 2. Gender and age of participants

A secondary strategy of data collection was adopted where residents were invited to submit written responses during the research period through hard copy and digital submissions, a total of 8 were received. All community conversation stages were audio recorded and transcribed and the data coded and depersonalised. A (12 minute) DVD documenting the process and capturing citizen's views was produced as an educational tool for the Council.

In the case of child participants (under 18 years of age), parental authority was gained prior to their involvement. All young participants were accessed through 8 local schools (4 primary and 4 secondary) of which half were private and half were public schools. As a value-adding component, primary school students were requested to visually portray the future of Ku-ring-gai through drawings, many of which were included in the final report.



A further project enhancement was achieved through a partnership with Macquarie University's Master of Environmental Science Program. 2 students undertook a research project which examined sustainability issues for West Pymble, a suburb of Ku-ring-gai. The student's conducted a desktop review, resident's survey. They drew information from the face to face transcripts from West Pymble residents who had participated in the larger study and attended many of the community focus group discussions. The students report assisted the Council with a prototype for the planned suburban sustainability approach which will accompany the town centre developments.

At the interview stage, 72 local residents participated with approximately 10 people in each of the seven age groups. Participants across all ages were asked the identical set of open-ended questions surrounding belonging, attachment and their vision for the sustainable future of Ku-ring-gai. This enabled the collection of comparable age-based data.



Image 1: Roseville College students participating in focus group discussions (Photo: D. Wilks, 2007)

A total of fifty one citizens participated in the seven age-based focus groups. They were provided with prereading material which included a summary of the interview findings to assist their discussions with the aim of building upon key themes. The two under 18 age groups required special supervision. Council's youth workers and teachers were present to ensure all processes complied with child protection legislation.

In June 2007, the visioning process culminated in two intergenerational forums, one was held in the daytime to suit young people and the elderly, the other in the evening to attract business people and parents of small children. Attendees were recruited through a media campaign, community email networks and personal written invitations sent to past participants. Pre-reading materials was sent to all participants comprising a summary of the research findings to date. Additionally this material was communicated through a PowerPoint presentation at the commencement of each discussion session and hard copies were available on the day.



Image 2: Resident's one of the intergenerational forums (Photo: D. Wilks, 2007)

104 residents, spanning all age groups, came together to discuss their collective visions at the forums. Given the scope of issues and time constraints, a café style approach was adopted where participants chose tables that were organised in one of the seven main themes of: community, culture, natural environment, built environment, economy and business, transport access and traffic and technology. The Mayor of Ku-ring-gai chaired the forums while the researcher facilitated discussions. Upon arrival at the Council Chambers residents were welcomed and assisted by a council staff member who had been previously briefed on protocols and procedures. Attendees were encouraged to sit at tables with a mixture of ages. Individual group discussions responded to a set of pre prepared broad questions. Each group appointed a spokesperson who presented their views at the culmination of the forum. Following table presentations the forum was opened for general discussion on each theme, providing opportunities for residents to speak on all topics. The table participants provided written notes that were collected and used, together with the audio recorded transcriptions, in developing the final report and the vision.

During each research phase participants were provided with substantial refreshments (either lunch or dinner) at the Council's expense. Children and elderly residents were transported to the focus groups and forums by a Council community bus. Participants were thanked through individual letters of appreciation and kept informed throughout the progress of the research. They were sent a copy of the draft report for comment and the final report.

DATA ANALYSIS

A manual analysis approach was adopted which required collating the data collected from the interviews, focus groups, written submissions and intergenerational forums. The projects aim was to identify a vision statement and the key challenges for Ku-ring-gai's sustainable future through the knowledge and aspirations of residents representing all ages. To achieve this, the data was regressively analysed and refined through a dual strategy by theme and age. Topics arising from the questions were tallied for each of the 7 age groups and within the specific thematic context they were discussed. Examining responses by age allowed for cross-generational comparisons to glean similarities and differences between age categories for each question and the relative weight of

knowledge, awareness and concerns for sustainability. Following the aged-based analysis, the data was further examined by gender.

Thematic responses were divided into the Quadruple Bottom Line (QBL) areas of society (including culture), governance, environment and economy. This approach enabled future streamlining of the research findings and recommendations into the Council's management plan, which was designed using a QBL framework.

Quantitative data from the 2006 Australian Bureau of Statistics Census (ABS) was matched with key findings as a method of validation. For example participants spoke of the lack of crime and feeling of safety within Ku-ringgai. This finding was compared with the ABS data, which revealed the crime rates in this area were one of the lowest in Australia. The relevant ABS data was included in the final report and positioned together with the research findings to assist the process of drawing and supporting conclusions.

AGE-BASED FINDINGS

I.D aims to capture all significant aspects of a local society and place rather than isolate specific sectors such as the local economy, culture etc. However, due to the focus of this paper, a summary of findings relating to culture and the environment are included to demonstrate the differing perspectives according to age. More comprehensive analysis across a range of sectors both by age and theme can be viewed within the report (KMC 2008).

The research found that 9-12 year olds were particularly concerned about their lack of decision making power and wanted to have a say in planning their futures. 80 percent raised the issue of climate change and felt they were inheriting a world that was doomed, saying they were powerless to make a difference in reversing this trend. This was expressed through the words of a young interviewee who said, "I believe in 10 years if it isn't fixed and we can't find a way to stop global warming there will be no chance of stopping it. And in say 50 years... maybe we won't be here" (KMC unpublished data extracted from interview transcript).

Children (in Sydney) are being raised in multicultural classrooms and neighbourhoods. They spoke of their acceptance and interest in cultural and ethnic differences with little evidence of racism. The exceptions were two Australia-born female residents of Asian heritage who described experiencing some racial torment with other children yelling at them "Asian invasion".

15 to 17 year olds discussed the importance of integrating local sustainability within their school curriculum saying that they currently learnt about global environmental issues but highlighted a lack of knowledge at a local level. They were tired of the negative hype surrounding sustainability, especially climate change, and wanted more accessible, positive actions designed for young people. Increased global relationships and access to knowledge were identified as positive aspects of technology. Young residents outlined the gap between their knowledge of environmental conservation and contradictory behaviours in regard to consumerism. Many participants said they had social and environmental consciences but their consumerism was part of their normal lives and difficult to change.

Young people were accepting of multiculturalism although some expressed fear of gangs sparking racial tension, particularly in areas of Southern and Western Sydney. They described the inaccessibility of information on Indigenous culture saying "we don't get taught anything at high school about Aboriginal people... unless you elect to do Aboriginal studies" (KMC 2008 p. 25)

As with the previous group the 18 to 24-year olds focussed their discussions on local education, especially the conservation and protection of bushland and wildlife and the promotion of sustainability. One participant said, "I have really learned that you can't conserve what you don't understand, or you can't love what you don't understand" (KMC 2008, p. 27). They described their reactions towards climate change as progressive responses from being overwhelmed to a position of acceptance and understanding how they can assist with solutions. These young participants had a positive outlook for the future, believing that answers would be found to ensure the sustainability of the planet. Generally they were more optimistic and less overwhelmed than the two younger groups concerning the future. This group embraced the multi- cultural composition of Sydney, citing the diverse range of cuisine as one example of the many positive contributions of migrants.

The 25 to 39-year-old age group were equally positive in their outlook for sustainability within Ku-ring-gai. Many of these participants had young families and were focussed on protecting their children's futures. They agreed on the importance of local action when one participant said, "I can't change the world but I can change my backyard" (KMC unpublished data extracted from focus-group transcript). This group was accepting of multiculturalism but identified the lack of cultural expression in Ku-ring-gai, such as Chinese New Year celebrations. They felt that despite its cultural diversity residents suppressed their cultural differences aspiring to conservative Christian values historically associated with this region. They observed that socialisation usually occurs within residents' homes rather than in the public domain, detracting from a collective community spirit. The term an 'inward looking' community was used to describe this phenomena.

As with the previous age group one of the key issues for 40 to 59-year-old residents was sustainability in terms of community participation and neighbourliness. They suggested the need to break down barriers between cultural groups recognising that small actions can result in big impacts. The majority appeared to accept cultural differences however, a focus group participant said if "a big Muslim mosque (was built in Ku-ring-gai) which would have a call to prayer... how would we deal with that? We want them to have religious freedom ... but it's not fair on others" (KMC 2008 p.31). The researcher noted that the group did not further pursue discussions around this subject indicating its sensitivity.

The 60 to 79-year-old age group identified the need to involve new residents and those of differing ethnic backgrounds to strengthen neighbourhoods and work towards common goals, stating the importance of community events. Lack of knowledge of Ku-ring-gai's heritage was seen as a critical area to address. Most participants were volunteers involved in community programmes such as Bushcare. In terms of securing a sustainable future they stated that, "changing individual behaviour is what will fix things" (KMC 2008 p.33).

Many of the participants of the 80 plus age group had lived in Ku-ring-gai for over 60 years and witnessed substantial changes particularly regarding land use, technology and multiculturalism. They remembered a time of market gardens and orchards within Ku-ring-gai's semi-rural environment. They had lived through World War II, and memories of wartime still impacted upon their acceptance of multiculturalism within Australia and Ku-ring-gai especially in regard to Asian migration. They described living through The Depression and experiencing a time when consumption of resources was reduced. Based on these first hand experiences they were optimistic that

younger generations could change their consumption behaviours to conserve a sustainable world. Most participants of this age were either sceptical or not concerned about climate change.

The age-based analysis was further examined to include the influence of gender. This revealed significant gender differences through each age phase with the exception of 18-24 year olds who were equally career focussed. Pro-environmental attitudes were found in all ages and genders; however, differing mechanisms to change behaviours were identified according to age and gender. For example the 9-12 year old boys described their love of building cubby houses and riding their BMX bikes through the bushland and wanted the bushland preserved for their children to enjoy. The girls in this age group spoke more about the protection of native fauna and their concerns regarding the impact of population growth. 15-17-year-old females were more receptive to environmental conservation than males, however both genders stressed the importance of designing programs that would engage their peers and create social opportunities. 25 to 59 year olds had different priorities and were committed to securing the future for their young families. Females were focused on care-based initiatives, while males outlined the importance of governance and technology.

The data was analysed to identify commonalities between specific ages and then across all groups. To the researchers' surprise, similarities were found between the 25-39 year olds and the 80 plus group. These included – positive outlooks regarding a sustainable future, embracing medium density in terms of affordable housing choices, and associating their sense of belonging with place based childhood memories.

Across all ages concerns were focused on the current consumer culture, preserving local flora and fauna and the impacts of accelerated population growth in the region. The need to understand Ku-ring-gai's cultural heritage and value its natural environment and promote localised action toward environmental sustainability was continually expressed by all groups.

CULTURE AND ETHNICITY

The data was refined and analysed according to key emergent themes. In response to the interview question asking residents what made them feel as though they belonged to Ku-ring-gai, "83% of respondents said their community, social lifestyle and culture created a sense of belonging while 17% identified their connection with the area through the environment alone" (KMC 2008 p. 50). In relation to culture a lack of local knowledge was apparent. Participants generally had little understanding of Ku-ring-gai's natural or social heritage, particularly Aboriginal culture. As examples of their lack of knowledge they cited not being able to translate the Aboriginal names of their suburbs into English and could not identify local cultural sites. A phenomenon of cultural suppression was identified, where Ku-ring-gai citizens aspired to similar values and goals despite their ethnic heritage. Residents wanted to see increasing cultural expression and community interaction. They described the current lack of community infrastructure such as museums and galleries and acknowledged the importance of local libraries. They requested the improvement of community facilities and support of festivals and events which will cultivate a stronger collective spirit.

The results of applying the Intergenerational Democracy method mapped attitudinal change to multicultural communities over age groups. Older residents were found to be less accepting of ethnic differences, through to children who experienced multiculturalism as their norm. Multiculturalism was debated in terms of its pros and cons and the undeniable role it played in changing the definition of what it means to be an Australian. A focus group participated said Australians have "a responsibility to not destroy the culture that is here and not suppress

the new cultures" (KMC 2007 unpublished data extracted from focus group transcript). Increased understandings of different worldviews and values together with rich cultural practices were described as positive attributes. Secularism was seen as a negative by migrant participants who highlighted the need to integrate but maintain their ethnic heritage. They cited a preference for the ethnicity of new Australians being described by their country of residence in the first instance followed by their country of birth heritage, such as, Australian-Chinese rather than Chinese-Australian.

Groups raised the topic of intercultural acceptance describing Australia's long history of ethnic gangs, commencing in the 1860's with the Irish razor gangs. Racism was still seen to be apparent and cyclical in Australia, with one participant observing, "Asia now has more of a place at our table than before. Muslims are copping it now, it used to be the Vietnamese, seems to go in cycles who will be next?" (KMC 2007 unpublished data extracted from interview transcript).

Migrant participants offered global perspectives to environmental discussions, drawing on their international knowledge, culture, values, views and experiences from their countries of origin. However, they demonstrated a more limited understanding of local and national issues. Conversely, Australian- born residents were less able to cite international examples but drew from their Australian based knowledge and experiences. Local environmental knowledge varied considerably according to residents' time living in the area, age, ethnic background, education and profession. Migrant participants acknowledged that ethnicity should not be isolated and its examination should be grouped along with influences such as: age, personality, social and life experiences, financial security and educational levels. They noted that ethnicity could vary in strength as an influence according to the situation and activity. For example the food, language and traditions at a Korean wedding would reveal a strong ethnic influence whereas a migrant from Korea's everyday life may have very little Korean influence.

Further refinement of the data lead to identifying key priorities, principles, values and the establishment of a vision statement to guide Ku-ring-gai's sustainable future. In July 2008, Ku-ring-gai Council adopted the Sustainability Vision Report (2008- 2033) titled Ku-ring-gai to global- 7 generations of residents planning for a sustainable future. This followed a 3-month public exhibition period when the draft report was distributed back to participants and the broader community for comment. 11 written submissions were received in response to the draft report .These were considered by a panel appointed by the Council during the draft documents review phase. The summary and full reports can be viewed on Ku-ring-gai Councils web site.

CONCLUSIONS AND FUTURE DIRECTIONS

Late in 2007 the Council called upon residents to assist them with the implementation of the Vision Report through the formation of an intergenerational Sustainability Reference Group. The 17 members appointed included 2 councillors and residents who ranged in age from 12 to 85 years. The members knowledge and experience included: atmospheric science, education, clinical psychology, social and urban planning, bush regeneration and law.



Ku-ring-gai Mayor, Nick Ebbeck (centre) with Sustainability Reference Group members: 12 year old Elijah and 85 year old Cecil. (Photo: E. Aubert, 2008)

The Ku-ring-gai study highlighted many areas that require further investigation, particularly the role of culture in sustainability. The next stage in this project is to build action plans based upon the Vision Report, a process that commenced in early 2008. Age- based forums were held where participants discussed how they could practically work towards achieving their 25-year vision and its objectives. The Council is not aiming to have a 'stand-alone' sustainability plan, rather, the long-term management plan is being aligned to accommodate the findings of this research which will in turn embed sustainability within the 'main frame' plan (including the budget) for managing the LGA. The inclusion of an international reporting system, the Global Reporting Initiative (GRI), within the management plan will link Ku-ring-gai to the sustainability of the planet.

Intergenerational Democracy is concerned with a commitment to generational equity. The ways in which this commitment is applied depends on the situation as there are many options. In the case of the Ku-ring-gai study a qualitative method was adopted. The approach of commencing the project with face to face interviews was highly successful in its ability to gather valuable data and assist the following focus group recruitment process. Staff members were required to visit participants in their schools, workplaces and homes. This resource commitment meant that the study was confined to 72 interviews or approximately 10 people in each age group. Each face to face interview was audio recorded and transcriptions made requiring substantial financial resources and staff time. If resources are limited with future projects, this model could be applied to focus groups and forums. I.D could equally encompass quantitative research, such as age based surveys or a mixed methods approach. In the case of the Ku-ring-gai study, a broad community survey aimed at achieving a larger community input and consensus, following the qualitative investigation, would have enhanced the research.

The inclusion of children in this project involved extensive advance planning and lead-time working with participating schools. The success of working with children required a commitment both from participating schools and the Council. The researcher found working with primary schools less difficult than high schools. This was due to the younger children being part of one class and their teacher becoming the key contact. Accessing older students was a more convoluted process which required linking with a subject coordinator who would then identify an interested teacher and group of students. Prior to involving children in projects, researchers should become familiar with the relevant legislation, protocols and requirements. The inclusion of children in planning

processes is vital as expressed in the words of a 10-year-old resident who said "We should work to a level where children's views are regarded just as important as any adults as we are the ones that shall be living the future..." (KMC 2007 unpublished data from interview transcript). The researcher noted an unexpected additional benefit of I.D. When young people were present at the forums and in committee meetings, adults behaved more responsibly and constructively than when they were not present setting an example for young residents and maintaining the meetings focus and intent.

The long-term success of the intergenerational Sustainability Reference Group will require a process of continual review as age- based logistical issues can present operational challenges. For example, children and the elderly need to attend meetings early in the evening which may not suit business people travelling from work. Keeping people of all ages engaged in committee discussions and processes requires a skilled chairperson and report writer.

As a concept, I.D requires future development in differing contexts both within Australia and internationally. For example, it would be informative to test its applicability in Aboriginal communities and various political, religious and cultural environments. It is envisaged that recruitment and the ongoing engagement of demographically representative participants could prove to be challenging in more diverse communities.

Intergenerational Democracy is not a solution to addressing global sustainability but it does offer opportunities to capture the micro and multi-dimensional pictures of specific communities and their environments. It has the capacity to accommodate and explore individual localities differences, strengths, challenges and identities. Culture is a pivotal key to sustainable futures acting as the 'lynch pin' by linking people to their place, value systems and growing their sense of belonging. There is a new form of culture emanating from contemporary multi-cultural communities that has been described as the 'ethnic strength' (Hugo 2001) of Australia. It requires the construction of strong linkages to local ecologies or the creation of new `eco- cultures'. This is a formidable challenge, which critically requires addressing by governments, communities and individuals, if humanity is to remain 'alive'.

BIBLIOGRAPHY

ABS, 2006, Community Profile. Canberra. Australian Bureau of Statistics, viewed 26th Feb. 2008: http://203.84.234.220/Profile/Kuringgai/Default.aspx?id=236

ABS, 2001, SEIFA index of disadvantage. Canberra. Australian Bureau of Statistics, viewed 26th Feb. 2008: http://203.84.234.220/Profile/Kuringgai/Default.aspx?id=236&pg=240&gid=10&type=enum

Barber, B., 2001, Strong Democracy in Blaug, R. and Schwarzmantel, J. (eds.) Democracy: A Reader: 447-451. New York: Columbia University Press, USA

Bayet-Charlton, F., 2003, Overturning the Doctrine: Indigenous people and wilderness – being Aboriginal in the environmental movement. In Grossman, M. (ed.) Blacklines: Contemporary Critical Writing by Indigenous Australians: 171-180, Melbourne University Press, Australia

Brundtland, G. (ed.)., 1987, Our common future: the world commission on environment and development. Oxford: Oxford University Press, UK

Bonaiuto, M, Carrus, G, Martorella, H. and Bonnes, M. Local identity processes and environmental attitudes in land use changes: The case of natural protected areas. Journal of Economic Psychology 23 (2002) 631-653, viewed 20th September 2007 www.elsevier.com/locate/joep

Carson, L Cole-Edelstein, L Hardy, M., 2000, Citizens Juries in Australia – A Discussion about Protocols, discussion paper, viewed 19th Feb. 2008: http://www.activedemocracy.net/articles/protocol.pdf

DEC, 2006, New South Wales Department of Environment and Conservation Who cares about the environment in 2006?, viewed 16th Sept 2007 http://www.environment.nsw.gov.au/whocares/whocares2006.htm

DCMS, 2004, Culture at the heart of regeneration. United Kingdom: Department of Culture, Media and Sports, UK

Diamond, J., 2005, Collapse: how societies choose to fail or survive, Penguin Group, Australia

DIC, 2007, Department of Immigration and Citizenship website, 2007, Living in Harmony programme, What is Harmony Day? viewed 3 April 2007, http://www.harmony.gov.au/what-is-hd/index.htm

DIP, 2005, NSW Department of Planning 2005 City of Cities: A Plan for Sydney's Future. Metropolitan Strategy Supporting Information. New South Wales Department of Planning, Sydney, Australia

Elkington, J., 1980, The Ecology of Tomorrow's World, Associated Business Press, London, UK

Erikson, E. 1964. Insight and Responsibility. Norton publishers, New York, USA

Flannery, T., 2005, The Weather Makers- the history and future impact of climate change, Australia, Text Publishing.

Gallopín, G., 2005, 'Essay on models and conceptualization of sustainability core question', in Forum on science and technology for sustainability, Initiative on Science and Technology for Sustainability, Harvard University, Cambridge, Massachusetts, United States of America, viewed 28 August 2005, <http://sustsci.harvard.edu/questions/interactions.htm>

Hannerz, U., 2001, Thinking about culture in a global ecumene, in Lull, J. (ed.), Culture in the communication age, Routledge, London, UK

Harder, A., 2002, The Developmental Stages of Erik Erikson, viewed 7 July 2008: http://www.learningplaceonline.com/stages/organize/Erikson.htm

Hawkins, G., 2006, The Ethics of Waste: how we relate to rubbish, UNSW Press, Sydney, Australia

Held, D., 2006, Models of Democracy, Stanford University Press, USA

Hugo, G., 2001, International Migration Transforms Australia, viewed 28 June 2007, http://www.prb.org/Articles/2001/InternationalMigrationTransformsAustralia.aspx

Hugo, G., 1986, Australia's Changing Population, Oxford University Press, Melbourne Australia

Huntley, R., 2006, The World According to Y: inside the new adult generation, Allen & Unwin Sydney, Australia

ICLEI, 2003, International Council for Local Environmental Initiatives, Triple Bottom Line Best Practice in Local Government, viewed 10th January 2006 http://www.iclei.org/anz/tbl/pdf/Full_TBL_BP_report.pdf

Inda, J. and Rosaldo, R (eds.), 2002, The anthropology of globalization: a reader, Blackwell Publishing Oxford, UK

KMC, 2007, Bushland Encroachment Policy, March 2007.Ku-ring-gai Municipal Council, Sydney, Australia

KMC, 2004, Comprehensive State of the Environment Report, Ku-ring-gai Municipal Council, Sydney, Australia

KMC, 2008, Sustainability Vision Report, Ku-ring-gai to global- 7 generations of residents planning for a sustainable future Ku-ring-gai Municipal Council, viewed 6th Sept 2008 http://www.kmc.nsw.gov.au/www/html/198-sustainability-plan-for-ku-ring-gai.asp

Knuttila, M., 1996, Introducing sociology: a critical perspective, Oxford University Press, viewed 28th June 2006 http://www.findarticles.com/p/articles/mi_qa3852/is_200201/ai_n9044814

Leung, C., 2002, Social Behaviour and Personality: comparison of Chinese-Australian and Anglo-Australian environmental attitudes and behaviour, pp. 1-8, viewed 27 June 2006, http://www.findarticles.com/p/articles/mi_qa3852/is_200201/ai_n9044814>.

Mackay, H., 1997, Generations: Baby boomers, their parents and their children, Macmillan, Sydney, Australia Norgaard, R.,1994, Development betrayed- the end of progress in a co evolutionary revisioning of the Future, Routledge, London, UK

Ong, A .1987. Spirits of resistance and capitalist discipline: factory women in Malaysia, State University of New York Press, New York, USA

Safdar, S, Lay, C. and Struthers, W., 2003, 'The Process of Acculturation and Basic Goals: testing a multidimensional individual difference acculturation model with Iranian immigrants in Canada', Applied Psychology: an International Review, volume 52, number 4, pp. 555-579, viewed 28 November 2006, Blackwell Synergy Publishing, UK

Sarantakos, S., 1998, Social Research, Macmillan Education, Melbourne, Australia

Shennan, S., 2002, Genes, memes and human history: Darwinian archaeology and cultural evolution. Thames and Hudson, London, UK

Shiva, V., 2006, Earth Democracy- Justice, Sustainability and Peace, Zed Books, London, UK

Sisk, T (ed.), 2001, Democracy at the Local Level, StrÖmsborg, International Institute for Democracy and Electoral Assistance Stockholm, Sweden

Slater, C., 2003, Generativity Versus Stagnation: An Elaboration of Erikson's Adult Stage of Human Development. Journal of Adult Development, 10 (1): 53-65, USA

SØrensen, G. 2008. Democracy and Democratization, 3rd ed. Boulder, Westview Press, USA

Stern, N. 2006. Stern Review on the Economics of Climate Change. United Kingdom: HM Treasury, viewed 12th Dec. 2007: www.sternreview.org.uk

Stern, P Dietz, T., 1994, The Value Basis of Environmental Concern, Journal of Social Issues, Plenum Publishing Corp, New York, USA

Stoddart, B., 2002, National research priorities: priorities submission 60, University of New England, Australia

Williams, D., 2000, Notes on Measuring Recreational Place Attachment, viewed 22nd June 2007, http://www.fs.fed.us/rm/value/docs/pattach_notes.pdf

Zimmerer, K., 2006, Cultural Ecology: at the interface with political ecology – the new geographies of the environmental conservation and globalization. Progress in Human Geography, 30 (1): 63-78, Sage Publishers, USA