MEASURING ETHNICITY IN NEW ZEALAND: DEVELOPING TOOLS FOR SOCIAL ANALYSIS

Paul Callister (Victoria University of Wellington)¹, Robert Didham and Deborah Potter (Statistics New Zealand).²

ABSTRACT

New Zealand is a microcosm in which to consider global mobility, indigeneity and intermarriage and their effects on culture and identity. Since the early days of New Zealand's colonisation there has been a significant level of ethnic intermarriage. One result is that descendents of intermarriage can affiliate with more than one ethnic group. Against a backdrop of historical debates about the measurement of race, and then ethnicity, the paper explores recent changes in the recording and reporting of ethnicity in New Zealand. There is particular emphasis on 1) how ethnicity is increasingly seen as a social construct, and 2) how individuals belonging to more than one ethnic group have been recorded and reported in research. The recording of more than one ethnic group presents challenges for ethnic analysis including measuring ethnic intermarriage. Finally, some social policy implications of the growing proportion of New Zealanders who claim multi-ethnic affiliations are explored.

INTRODUCTION

New Zealand stands out amongst industrialized countries in its use of self-defined culturally-based ethnicity in social science and policy making.³ While in many countries statistical agencies recognise indigenous groups with their populations, in New Zealand a defining document, the Treaty of Waitangi, signed in 1840 between Maori chiefs and representatives of the British monarchy, creates a special need for definitions as to who is part of the indigenous Maori group and who is not. Back in 1867 the Franchise Act also made a count of the Maori population (based on ancestry) imperative for electoral purposes (with specific Maori seats in Parliament), but more recently, population based agencies have been established by government whose constituencies encompass specified ethnic groups.⁴ This has expanded the demand for ethnicity data.

However, ethnicity is not a human characteristic that can be easily identified or measured. In common with other countries, in New Zealand there is ongoing consideration as to the best way of measuring ethnicity in data collections, like the fiveyearly Census of Population and Dwellings; in sample surveys, like the Household

¹ E-mail: paul.callister@vuw.ac.nz

 $^{^{2}}$ We would like to thank Tony Blakely for his helpful comments on many of the issues discussed in this paper.

³ A significant number of other countries use the term ethnic group in census questions but often underlying concepts and output categories reflect a racial based classification (Alemany and Zewoldi 2003). In the 2000 round of censuses they note that 51 countries had a question on 'ethnic group', 7 'ancestry or ethnic origin', 11 on 'race' and 21 on 'nationality'.

⁴ Unlike the United States, in New Zealand there is no statutory basis for granting preferential treatment to particular ethnic groups (Kukutai 2001: 29).

Labour Force Survey; and in administrative collections, like death certificates. This debate is informed by regular reviews of ethnicity statistics undertaken by Statistics New Zealand (Statistics New Zealand 2004). Equally there is a debate on the place of ethnicity in social policy, with a recent review by the labour-led government of 'race based (sic) policies' undertaken across the government sector (Mallard 2005).⁵

The first section of this paper explores some of the historical shifts around the collection and reporting of race, then ethnicity data in New Zealand.⁶ Intrinsic to understanding this is some historical perspective on race relations in New Zealand. With this background in mind, the paper then examines changes that have taken place in the recording of ethnicity in the New Zealand Census of Population and Dwellings since 1991. While there are many dimensions to debates about the collection and reportage of ethnicity data, we focus particularly on how those people who belong to more than one ethnic group have, historically been recorded and classified in official surveys. We then present the recommendations of Statistics New Zealand latest review of ethnicity statistics (Statistics New Zealand 2004).

Drawing on these recommendations, some data are then presented of rates of ethnic intermarriage in New Zealand. This includes a discussion of the problems of defining intermarriage when individuals are already recording more than one ethnic group.

Finally we review some of the recent debates about ethnicity and disadvantage in New Zealand. Underlying many of these debates are fundamental questions that remain about ways that ethnicity should be measured and reported in New Zealand.

MEASURING ETHNICITY

Background

New Zealand has experienced a number of waves of migration. The first was by Maori who became New Zealand's indigenous population. While there remains debate over the exact timing of the arrival of the first Maori settlers in New Zealand, generally it is agreed that this occurred less than 1,000 years ago (King, 2003).

The first recorded European visit to New Zealand was by the Dutch mariner Abel Tasman and his crew who arrived in 1642. Over 100 years later James Cook arrived in 1769 from Britain. In contrast to Tasman, Cook and his crew had numerous contacts with Maori (Salmond 1991). Cook was soon followed by small groups of whalers, sealers and traders who set up bases around New Zealand. From the earliest days of contact there has been a high level of intermarriage, both formal and informal, between Maori and the new arrivals (Belich 1996, Bentley 1999, Pool 1991, Wanhalla 2003).

When Cook arrived estimates of the New Zealand population vary from around 86,000 (Belich 1996: 178) through to around 100,000 (Pool 1991).⁷ The ethnic composition

⁵ In New Zealand, politicians often continue to use the term race and there are some agencies with the title race (such as Race Relations Office).

⁶ For a detailed history of changes to the census in New Zealand prior to 1991 see Brown (1984), Khawaja, Boddington and Didham (2000), Pool (1991) and Statistics New Zealand (2004).

⁷ Although Pool (1991) notes that no figures before contact are definitive (p. 29).

was, by current definition, 100 percent Maori. It has been estimated that the Maori population subsequently halved by the late 1880s from its pre-contact population.⁸ There are a number of reasons put forward for this initial post contact decline, including: exposure to introduced diseases such as measles to which Maori had no natural resistance; land dispossession and loss of culture; and an increased level of fatalities in inter tribal warfare due to the introduction of muskets (Belich 1996, Crosby 2001, King 2003, Sorrenson 1956). In the period of Maori population decline the settler population was rapidly increasing from fewer than a thousand to half a million between 1831 and 1881 (Belich 1996: 278). Following this migration driven population expansion, births in New Zealand took over in the mid 1880s (King, 2003: 230). Around the turn of the 20th century, the Maori population began to increase again. At 6 March 2001 the Census of Population and Dwellings recorded over half a million Maori or 14 percent of the total population. (Statistics New Zealand 2005)

Post WWII there was a significant migration from the Pacific, with this population growing quite rapidly during the late 1960s and early 1970s. This population remains of high social interest and has its own policy advisory agency. The fourth major group, Asian Peoples, predates recent Pacific migration. There have been people of Asian ethnicity living in New Zealand from the early days of European settlement, although in very small numbers and often disproportionately male. However, a century later in the 1980s and 1990s the number of people of Asian ethnicity grew rapidly. A more recent component of migration comprises refugees and other settlers from Africa (including non traditional sources such as Somalia) and the Middle East.

While migration has long been important in New Zealand, strong migration flows in recent decades means New Zealand, with just under a fifth of its population born overseas, is at the high end of industrialized countries in terms of the proportion of foreign-born residents.⁹

It is important to note that there is considerable heterogeneity in the four main ethnic groupings identified above. Customs and practices vary by tribe within the wider Maori group – although the Maori language was, and is, reasonably uniform across iwi (tribes). Pacific people are more heterogeneous again, with notable cultural differences between Islands of origin and different languages (e.g. Samoan, Cook Island, and Fijian). Usage of this high level Pacific Peoples descriptor among, for instance, media and others outside the groups has reinforced the concept (Gray 2001). A common claim is that Auckland contains the biggest Pacific Peoples represent a fairly unique migrant population. Gray notes that some individual groups within Pacific Peoples, such as Nuieans and Cook Islanders now have larger numbers in New Zealand than in the islands they or their ancestors came from. This gives these cultures special vulnerability.

The Asian population as ascribed in New Zealand is also extremely heterogeneous from an international perspective, including (to name a few) people of Indian, Sri Lankan, Chinese, Thai, Malaysia, and Japanese origin. That is, at least half the world's population – if they choose to immigrate to New Zealand – are likely to choose, at least

⁸ Statistics New Zealand report a figure of 42,113 people with Maori descent in the 1896 census.

⁹ In addition, a significant proportion of the New Zealand born population do not live in New Zealand (Dumont and Lemaître 2004).

in the initial years of living in New Zealand, an 'Asian' ethnicity. The Asian population as ascribed in New Zealand is also extremely heterogeneous from an international perspective, including (to name a few) people of Indian, Sri Lankan, Chinese, Thai, Malaysia, and Japanese ethnicities. Finally, while most people classified as European have ancestral roots in England, Scotland or Ireland, a not insignificant number of people have migrated from a wide range of continental European and Nordic countries, as well as from many other parts of the planet, or are their descendants.¹⁰

Internal migration has also been an important aspect of the changing ethnic mix of New Zealand. The urban migration of Maori has been described as the most rapid movement of any population. In 1945, 26 percent of the Maori population lived in the towns and cities (The Encyclopedia of New Zealand 2005). By 1956 this had increased to 35 percent. Mass migration continued into the early 1960s and the Maori urban population had reached nearly 80 percent by 1986.

As a result of urban migration, many rural Maori villages were depopulated. However there is much cultural resilience and 'urban Maori' identities began to form such as the non-kinship based Waipareira Trust. These new urban constructs challenge legislators – especially those concerned with allocation of indigenous resources – iwi (or tribal) groupings have been somewhat frozen in time by officials and there is tension between maintaining systems aimed at redress from the effects of European contact and resourcing contemporary indigenous structures.

Inevitably, with more contact through internal migration, intermarriage increased significantly during the 1960s. In contrast to some other countries New Zealand has never presented legal barriers to ethnic intermarriage. An urban shift of Maori people also gave rise to more intermarriage between members of different tribes.

Not only do 84 percent of Maori now live in urban areas, a quarter live in the region of Auckland, New Zealand's largest city. In addition, in the Auckland region, 1 in 3 people were born overseas. New Zealand, and Auckland in particular, can now be seen as a microcosm of global mobility and its effects on culture, identity and ultimately ethnicity (Table 1).

Table 1. Ethnic	Table 1. Lennie Groups (total responses)						
	Auckland Region	New Zealand					
European	68.5%	80.1%					
Maori	11.6%	14.7%					
Pacific Peoples	14.0%	6.5%					
Asian	13.8%	6.6%					
Other	1.2%	0.7%					

Table 1: Ethnic groups (total responses)

Source: 2001 New Zealand Census of Population and Dwellings

Census enumeration of Maori and non-Maori has paralleled these migratory trends and allowed for different methodological collection strategies that reflected cultural

¹⁰ Indeed, the tendency to think of people described as European as "white" is also misleading when considering ethnicities. People of Greek, Georgian, Romany and other ethnicities would have an issue with such an assumption. Moreover, East Asian people, for example, (by "race") may quite validly consider themselves European by ethnicity.

differences. Between 1858 and 1951 Maori people who were "living as Maori" were counted in a separate Census from the general population. The Maori census not only used schedules in Maori (gradually phasing in English language schedules) but also utilized the whanau unit (closely approximating an extended family concept) rather than the European household unit. The two processes were not however exclusive. There were instructions for instance for urban Maori wives of Europeans to complete the general Census in 1906. From 1951 however the two Censuses merged and the household became the principal parameter around which family information was constructed (Statistics New Zealand 2001).

As both the New Zealand population and ways of collecting data has changed, so too has thinking about how to classify people. In common with other countries, race, based on ancestry, was the foundation of most early New Zealand statistical collections (Statistics New Zealand 2004). Although use of descriptors such as 'black' and 'white' have not been used, notions of blood quantity have been applied.¹¹ While only one ancestral group was collected per person in early censuses there was early recognition of inter-marriage, the category Maori-European half-caste was one of the examples given in the 1916 census schedule. 19th century New Zealand census data identified and separated out "half-castes", an official indication that a mixed Maori-European population was becoming important (Brown 1984).

The 1936 Census question introduced a new complexity by allowing respondents to record fractions such as $\frac{3}{4}$ European - $\frac{1}{4}$ Maori. The term "race" was used until 1951, but then there was a switch made to "descent" related terms.

The concept of ethnicity, or more specifically "ethnic origin", was first introduced in the 1970s. The term "ethnic origin" then became "ethnic group" in the early 1990s. At this time there was also a separate question added on Maori ancestry in the five yearly census of population and this has been repeated in subsequent censuses.

¹¹ In Britain, historically the source of many migrants to New Zealand, even though ethnicity rather than race is used in official statistics, skin color (either actual or via some cultural or ancestral affiliation) is still used in a set of ethnic categories. In the 2001 census, British respondents were asked to choose a single ethnic identity from categories including White British or White Irish, Asian British, or Black British (Statistics New Zealand, 2001).

Figure 1: 2001 census ethnicity question

11 Whic Mark	h ethnic group do you belong to? the space or spaces which apply to you.
	New Zealand European
	Mäori
	Samoan
	Cook Island Maori
	Tongan
	Niuean
	Chinese
	Indian
	other (such as Dutch, Japanese, Tokelauan). Please state:

Table 2 shows the approaches used by a number of other countries when examining ethnicity or race. It indicates the lack of comparability even between quite similar settler countries such as Australia, Canada, New Zealand and the United States.

Country	Questions						
United States	Race, ethnicity for Hispanics, place of birth, citizenship,						
	ancestry, language spoken at home						
Canada	Race, language, ancestry, and specific questions for						
	Aboriginal or First Nation, Inuit and Métis peoples						
England and Wales	Country of birth, ethnic group, Welsh language						
Ireland	Place of birth, nationality						
Germany	Nationality/citizenship						
South Africa	Population group, citizenship, country of birth, language						
	spoken at home						
Australia	Citizenship, indigenous identity, ancestry, country of birth,						
	parents overseas born or Australian born, language spoken at						
	home						
New Zealand	Ethnic group, Maori descent, country of birth, languages able						
	to hold a conversation in						

Table 2: Census questions about 'ethnic' groups in selected countries

Source: Allan (2001a)

Given the often-complex backgrounds of people in settler societies, self-identified ethnicity in response to official surveys is often not a straightforward process. Much has been written about how ethnicity is, or should be measured, in New Zealand (e.g. Didham 2004 2005, Kukutai 2003 2004, Pearson 1990 2001, Robson and Reid 2001; Statistics New Zealand 2004). As a result of its latest review of ethnicity statistics, Statistics New Zealand (2004) sets out a number of factors that may contribute to, or influence, a person's ethnicity. As they note, many of these are interrelated. This list is:

- name¹²
- ancestry
- culture
- where a person lives and the social context
- race
- country of birth and/or nationality
- citizenship
- religion and language.

While the factors above flexibly demonstrate what ethnicity can mean to an individual seeking to determine an answer, culturally specific paradigms do not always overlap with official definitions. Broughton (1993) has identified the three key elements of defining Maori identity as whanaungatanga (the family and kinship ties), te whenua (the land) and te reo (the language). As will be discussed later, Broughton's description of Maori – were it collectable in official statistics – could well add explanatory power to the findings of socio-economic difference within the wider Maori group. Kilgour and Keefe (1992), when considering Maori health statistics, list three possible types of definition for Maori: biological, self-identity and descent. The key difference between biology and descent is that in the latter "degrees of blood" are not specified. How much these various influences matter often depends on the reason why identity is being determined.

While ancestry often influences ethnic choices, in their research on mixed-heritage individuals in the United States, Stephan and Stephan found that ethnic identity was not necessarily associated with ancestry (1989, 2000). Individuals may have ancestral ties with a group without identifying themselves or being identified by others as members of that group. Equally, some individuals may have no ancestral linkages with a group, but for a variety of reasons strongly identify with it. New Zealand census data indicate that there is not complete overlap between those recording Maori ancestry and those recording Maori ethnicity.¹³ For example in the 2001 census the number reporting ancestry was 604,110 while the total Maori ethnic group was 526,281. However, there are very few people claiming Maori ethnicity but not ancestry. This indicates some respondent distinction between cultural affiliation and ancestry. There has been little in the way of official direction for Maori identity either from legislators or from Maori as a group. New Zealand, for instance, has never employed a system of indigenous registration for indigenous status (Kukutai 2004). In terms of social policy, ethnicity is used as the primary measure for Maori (as well as all other ethnic groups) although Maori ancestry is also available in many data collections and could be available in place of ethnicity if it were seen as the standard measure.¹⁴

While focusing on individuals who are constructing their own ethnicity, it is always important to keep in mind that various "others", such as employers, landlords, teachers, funeral directors and the police, will also be constructing a person's ethnicity. For instance, Xie and Goyette (1997: 549-550) note that, for members of minority groups in the United States, "choice" about ethnicity is limited by "labels imposed by other

¹² Statistics New Zealand (2004:7) notes that a "name" is "a common proper name that collectively describes a group of individuals and authenticates the characteristics and the history of its members".

¹³ In New Zealand, only data on Maori ancestry are collected.

¹⁴ However, when specific ethnic support measures are put in place, such as Maori or Pacific scholarships, provable ancestry is generally used.

members of society or by custom." Waters (1990, 1996) also puts forward the view that minority groups have less flexibility in determining their ethnicity. Often this construction of ethnicity will be constrained or influenced by observable characteristics (Brunsma and Rockquemore 2001, Mason 2001, Thomas and Nikora 1995), hence the term used in Canada 'visible' minority. Observable characteristics include phenotypic expression of particular physical features, such as skin color or, at times, surnames. Yet physical characteristics and surnames can be misleading. For instance, when announcing a top female Maori scholar in New Zealand, Mana magazine (2002:22) focuses initially on physical characteristics, but notes, "Don't be fooled by the blond hair and the green eyes. She's Maori, really, and is our top scholar for the year." That a top all-round female Maori scholar in 2003 had a stereotypical Asian surname is another New Zealand example (NZQA 2003). In a more quantitative example, it is also known that mortality data during the 1980s and early 1990s undercounted Maori and Pacific deaths (Te Ropu Rangahau Hauora a Eru Pomare 2000). The 'ethnicity' recorded on the 'Death Registration Form' prior to September 1995 was biological race, determined by next of kin report of the decedent's parents percentage Maori or Pacific origin. In many cases funeral directors were reluctant to seek details and all nonresponses were coded as non-Maori/non-Pacific.

Finally, the language used in official forms and in discussions about ethnic groups has, and continues to be, the subject of much debate in New Zealand. There remains a particular problem in finding a name for New Zealand's largest ethnic group. At times the Maori word Pakeha has been used as a label for Europeans. However, this is a word often misunderstood and not universally accepted (Bedggood 1997, Pearson and Sissons 1997, Spoonley, 1993). In fact, one of the most common complaints to New Zealand's Race Relations Office has been from people objecting to being labeled "Pakeha" (Barnard, 2001). The search for a "New Zealand" identity, has also meant a small but significant number of New Zealanders, including some who have Maori ancestry, are recording "New Zealander" as a response to ethnic survey questions (Potter et al 2003). This behavior has occurred in other countries such as Canada (Boyd and Norris 2001) and Australia (Kunz and Costello 2003) where the response has been to include 'Australian' and 'Canadian' as examples or answer options in ancestry questions. As a result these responses have grown. In New Zealand this approach has not been taken because of particular concern for accurate counts of Maori, Pacific and Asian people. It could be anticipated that the immediacy of the ethnicity concept (rather than a retrospective ancestry measure) may lead to more of these types of responses. In the same way, the concept of individual affiliation could be more vulnerable to political or media influence.

Multiple Ethnicity in New Zealand: The influence of intermarriage

Throughout history when previously isolated ethnic groups have come into contact with each other there is some amount of ethnic intermarriage (Leroi 2005).¹⁵ When ethnic groups have low rates of intermarriage in a country, the cause may be either recent

¹⁵ The use of the term "ethnic intermarriage" is very wide in this discussion. For example, some early New Zealand "intermarriage" simply involved genetic mixing between Maori and visitors to New Zealand as a consequence of a prominent sex industry in ports of call. In a current context, it indicates both formal and informal marriage. The term 'miscegenation' is rarely used in New Zealand.

migration from a remote part of the world or social and religious processes that maintain separation between different groups (Collins 2001).

In New Zealand there was iwi (tribal) intermarriage pre-colonisation, which was then followed by intermarriage between Maori and the new mainly European arrivals. There have always been some potential benefits from intermarriage as indicated by history of Ngāi Tahu.

Ngāi Tahu, originally from Poverty Bay in the North Island, were named after their ancestor Tahu Potiki. Through a series of migrations, wars and marriage alliances, they became firmly established as tangata whenua over much of Te Wai Pounamu (the South Island) by the mid-1700s. By the early 1800s they enjoyed a lucrative trade with European whalers and sealers. Although contact with Pākehā brought diseases to which the tribe had no immunity, it also led to intermarriage and knowledge of European ways. When Major Thomas Bunbury was sent to negotiate the consent of leading chiefs to the Treaty in May 1840, he was surprised to find that many could speak English.

The "Nine Tall Trees of Ngāi Tahu", http://treatyofwaitangi.govt.nz/casestudies/ngaitahu.php

The complexity of constructing ethnicity when there has been historical ethnic intermarriage, as well as ethnic conflict, can be seen in New Zealand literature. In a poem entitled "Race relations", Colquhoun (1999) lays out a complex set of components of ancestry, kinship and country of origin for the individual the poem is about. This background includes Australian, English, Scottish, German, Jewish and Maori roots. He notes that historically many of these groups have been in conflict with each other. Referring to his English and German background, he remarks that, "One half of me lost a war the other half won" (p.38). Similarly, describing Scottish and Maori connections, he writes, "Somewhere along the line/ I have managed to colonise myself". Recording and reporting multiple ethnic groups in official data collections often reflects such complexity.

In the United States, the 2000 census was the first time that respondents could record more than one racial group.¹⁶ The decision to allow this in the United States was not without controversy, with some groups concerned that it might "dilute" the counts of some important minority groups (Bitzan 2001, Korgen 1998). In contrast, in New Zealand there was little controversy over the collection of more than one ethnic group. Instead, the debate focused on how these data should be reported.¹⁷

In New Zealand, recording more than one group in the five yearly census was first possible in 1936, but because of changes in concept, ethnic group dates only from 1991.¹⁸ A change in wording between 1996 and 2001 in the New Zealand censuses had a minor impact on responses. 2001 data shows that the multi-ethnic level 1 response decreased from 8.9% in 1996 to 7.9%. However, this decline was due primarily to the effect of increased immigration between 1996 and 2001 with only 2% of the foreign

¹⁶ While the multi response option in the census is a recent development, Mays et al (2003) note some US surveys allowed such response much earlier. For example since 1982 the National Health Interview Survey has been collecting multi-race data. This survey has a follow-up question asking multiracial people to indicate which race best represents their identity.

¹⁷ Alemany and Zewoldi (2003) notes that in the 2000 round of censuses, only 11 countries from 95 included a question on ethnicity that allowed the option of selecting multiple responses.

¹⁸ The 1986 census asked a question about ethnic origin rather than ethnic group. In this census it was possible to tick more than one box for origin and/or record an additional ethnic group.

born identifying with more than one level 1 grouping. If we exclude those who were overseas in 1996 from the 2001 data we find that 8.2% identified with more than one level 1 grouping – very slightly lower than the 1996 level and attributable to other factors. Moreover, when parallel indicators, such as birth data, point to the multi-ethnic group in New Zealand actually growing over this period.

Table 3 shows the proportion of each total ethnic group who recorded more than one ethnic identity. Of all those people who recorded Maori as one or more of their ethnic groups, only 56% recorded *only* Maori in 2001. As a comparison, data on race drawn from the 2000 US census indicates that 2.4% of the population recorded more than one racial group. Amongst whites, only 2% recorded other than white only, for Asians it was 14%, while for Native Americans/Alaska Natives it was 40% similar to Maori in New Zealand (Allan 2001a). However, Farley (2002) notes that changes in coding can change the US data. If those writing a Spanish-origin term were excluded, the proportion who were multi-racial drops to 1.6%. Similarly, New Zealand data could change with a change in coding. For example, if lower level ethnic groups were considered, then a person recording German and Italian would be considered to have a dual ethnicity.

Table 3: Dual or Multiple Ethnicity Responses by Each Ethnic Group, 2001

Ethnic group (total responses)	2001
European	9
Maori	44
Pacific peoples	29
Asian	10
Other	22

Source: New Zealand Census of Population and Dwellings

Note that people that "only identify with that ethnic group" would include the following examples: a Pacific person that selfidentified as both Samoan and Cook Island ethnic groups; and an Asian person that self-identified as both Chinese and Korean ethnic groups.

As in the US, affiliation to one or more ethnic groups also varies by age (Farley 2002) Figure 2 shows the proportion of the wider Maori ethnic group who recorded dual or multiple ethnicities in 2001. In the younger age groups less than half the Maori ethnic group are Maori only.





Source: New Zealand Census of Population and Dwellings

Although a higher proportion of the Pacific peoples ethnic group recorded only one ethnic group, the overall pattern by age is similar. In addition, while much lower than for Maori and Pacific peoples, the proportion of young people in the Asian ethnic group who list two or more ethnic groups is not insignificant. For example, in 2001, 28% of Asians and 23% of Europeans under the age of five recorded, or more likely had recorded for them, more than one ethnic group. As this is based on a total count of ethnicity, there is some overlap between all groups.

For all ethnic groups, it is likely that based on ancestry alone an even greater proportion of people 'could have' reported two or more ethnic groups. Whilst this issue is not exclusive for Maori, it is more apparent due to parallel recording of Maori ancestry (but no other ancestry) in the New Zealand census. In addition, Butterworth and Mako (1989: 1) argue that all Maori have some degree of non-Maori ancestry. So why do people record only one ethnic group when they could record more based on ancestry? Some of the reasons why someone might identify as only one ethnic group:

- When quickly completing an official form, many individuals may tend to simplify their ethnicity down to one group. This is a form of self-prioritisation.
- The ethnicity question does not encourage multiple responses.
- Some respondents may be basing their response primarily on lived cultural experiences rather than strictly on ancestry.
- Connected with this, some respondents may be influenced by the networks they are linked into. For example, if a respondent has a spouse with Maori ancestry and lives in a community with a high proportion of Maori they may be more likely to record sole Maori.
- Some respondents living in mixed ethnic marriages or partnerships who clearly perceive their children as belonging to two or more ethnic groups may feel more inclined to just solely identify with their own 'self-prioritised' ethnic group.

- Some respondents may be reflecting how others view them. For example, it may be that those who "look more Maori" (or look more "Pacific") are more likely to record only Maori (or a Pacific Peoples) ethnicity. If this is correct, and if discrimination is rife is New Zealand, the Maori only (or Pacific Peoples) group would be more likely to suffer discrimination by the police, landlords and healthcare providers.
- For some, recording a single ethnicity may be a political statement.

When only one ethnic group was collected, reporting membership of ethnic groups was straightforward. When more than one group started to be collected, then reporting became more complex. In the early period during which more than one group was recorded it was normal to output combinations but then consider groups based on a half-or-more affiliation basis. However, more recently Statistics New Zealand (as well as most government agencies and researchers) has relied primarily on the prioritisation of ethnic groups in order to simplify the presentation of the data. Under this system, Maori had priority coding, followed by Pacific peoples, then Asian, other ethnic groups besides European, followed by "Other European" and, finally, New Zealand European (Allan 2001b:18). This prioritisation system meant that, for example, if a person recorded himself or herself as belonging to both Maori and Samoan ethnic groups, they were classified as belonging just to the Maori ethnic group.

Prioritizing data has not been unique to New Zealand. Mays et al (2003) set out a variety of ways that US agencies have prioritised multi-race/ethnic data when it has been available. One example is to reclassify those giving more than one multi-response to the 'rarest' group. For example, in California, the hierarchy of rarest to most common racial/ethnic group is: Native American/Other Pacific Islander, American Indian/Alaska Native, Black or African American, Asian, Latino then White. Again in the US, Goldstein and Morning (2002: 121) note that in relation to the enforcement and monitoring of civil rights laws the Office of Management and Budget have developed the following hierarchy:

- Responses in the five single race categories are not allocated.
- Responses that combine one minority race and white are allocated to the minority race.
- Responses that include two or more minority races are allocated as follows:
 - If the enforcement action is in response to a complaint, allocate to the race that the enforcement alleges the discrimination was based on.
 - If the enforcement action requires assessing disparate impact or discriminatory patterns, analyze the patterns based on alternative allocations to each of the minority groups.

There are both advantages and disadvantages in any process of prioritisation. The one (and perhaps only) major advantage is that when studying populations ethnic counts equal counts of the total population. However, in New Zealand this advantage was greatly outweighed by the disadvantages. The disadvantages were that (1) there is no underlying logic to the order of prioritisation, (2) it is not ethnically neutral (that is, it elevates one ethnic group over another), (3) it undermines the preferences of people, and (4) it biases population measures. However, it should be noted that the process of prioritisation has only become problematic in New Zealand recent years, with the growth in the number of people reporting more than one ethnic group. When prioritisation of ethnic responses was first introduced in New Zealand, multiple

reporting of ethnicity was half that of 2001 at 4.2% in 1986. Thus, prioritisation of the responses had less impact on resulting national statistics. The impact of prioritisation can be seen by examining ethnicity data from the 1991, 1996 and 2001 censuses. This shows a decline for each ethnic group (except Maori) as a result of prioritisation (Table 4). The greatest loss is experienced among young people and is a reflection of the increasing number of children/younger people with multiple ethnicities resulting from ethnic intermarriage.

The Pacific group recorded the highest total decline due to prioritisation - a figure which can be correlated with the growing occurrence of ethnic intermarriage between Maori and Pacific. The older age groups also experience a decline in numbers but not to the same extent. However we can expect more multiple ethnic responses from older people as today's young move through the lifespan.

Increasingly then, prioritisation conceals diversity within and between ethnic groups as well as decreasing ethnic group counts.

 Table 4: Ethnicity - Percentage decline by prioritisation: 1991, 1996 and 2001

 censuses

	Conque	Under	15-19	20-24	25-29	30-34	35-39	40-44		
Ethnicity	Census	15	Years	Years	Years	Years	Years	Years	45+	Total
European	1991	11.6	8.1	5.4	4.4	3.5	2.8	2.0	1.1	4.7
	1996	24.4	19.4	14.7	11.8	10.1	8.2	6.6	3.3	11.0
	2001	24.0	17.2	15.4	12.4	9.1	7.4	5.9	2.6	10.0
Maori	1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pacific	1991	18.4	9.5	5.0	4.4	4.1	2.5	1.7	1.0	9.2
	1996	30.0	20.9	12.8	8.7	7.8	7.8	5.6	4.4	16.8
	2001	29.5	18.5	14.4	9.1	6.4	6.4	5.8	2.6	15.8
Asian	1991	10.7	9.6	6.3	3.8	2.7	2.9	3.6	3.1	6.1
	1996	13.3	8.5	9.2	8.2	5.3	4.2	4.0	4.7	8.0
	2001	10.5	4.5	4.8	5.2	4.1	2.7	2.4	2.5	5.1
Other	1991	13.9	9.9	5.1	4.9	3.0	2.3	1.2	2.6	6.5
	1996	19.8	16.9	12.6	8.1	6.7	8.9	7.4	5.3	12.0
	2001	14.4	8.1	7.8	5.5	3.4	4.5	4.1	3.8	7.7

A number of other options were suggested when Statistics New Zealand was considering the reportage multi-ethnic data responses as part of its *Review of the Measurement of Ethnicity*, as follows.

- Let people choose their own prioritization.
- Publish total counts.
- Randomly allocate multi-ethnic people to a single ethnic category
- Use fractional ethnicity model
- Do not prioritise ethnicity.

There are advantages and disadvantages to all the systems (Callister 2004). After considering the options, Statistics New Zealand (2004) recommended abandoning its practice of ethnic prioritisation. Instead, they recommended an expansion of the reportage of non-prioritised multi-ethnic data with the standard output for ethnicity data

being single and combination responses as well as total response data. Single/combination output places each person in a mutually exclusive category; that is, each person is allocated to a single category, based on whether the person has given either one or more than one ethnicities. Statistics New Zealand recommended that the following single and group combinations be used (For the composition of these groups see Appendix 1):

- single-ethnic group: European, Maori, Pacific Peoples, Asian; and two new groups, MELAA (Middle Eastern, Latin American and African) and Miscellaneous, later to be renamed 'Other ethnicities' (Statistics New Zealand 2005).
- two-ethnic groups: Maori/European, Pacific Peoples/European, Maori/Pacific peoples, Asian/European, two groups not elsewhere included
- Three-ethnic groups: Maori/ Pacific Peoples/ European, three groups not elsewhere included.

The groups MELAA and 'Other ethnicities' replace the group 'Other'. MELAA is the abbreviation for the level-one group "Middle Eastern, Latin American and African", while a major component of the 'Other ethnicities' group will be those people recording 'New Zealander' type responses. Previously, 'New Zealander" responses had been classified at level 1 as European (Callister 2004).

Table 5 indicates the size of the main single-group, two-group and three-group ethnic combinations in 2001 (the new groups MELAA and 'Other ethnicities' are not shown). It also shows total ethnic group counts.

	Ethnic group combination	0-14 yrs	15-24 yrs	25-44 yrs	45-64 yrs	65-74 yrs
Duis vities d. data	Г	(0.5	(2)	72.0	92.2	00.1
Prioritised data	European	60.5	62.9	/2.0	82.2	89.1
	Maori	24.0	18.9	14.2	8.9	5.5
	Pacific Peoples	8.3	/.1	5.6	3.4	2.2
	Asian	6.2	10.0	7.3	5.0	3.0
	Other	1.0	1.1	0.9	0.5	0.2
	Total	100.0	100.0	100.0	100.0	100.0
Main single	European only	60.5	62.9	72.0	82.2	89.1
and multi-	Maori only	11.0	9.8	8.8	6.4	4.2
group data	Pacific People only	6.5	5.8	4.9	3.2	2.1
	Asian only	5.3	9.5	7.1	4.9	2.9
	Other only	0.6	0.8	0.7	0.4	0.2
	Maori / European	10.1	7.6	4.9	2.3	1.2
	Maori / Pacific People	1.2	0.7	0.2	0.0	0.0
	Pacific People/ European	1.8	1.3	0.7	0.2	0.1
	European / Asian	0.9	0.5	0.2	0.1	0.1
	Maori/Pacific/ European	1.2	0.5	0.2	0.0	0.0
	Combinations not above	0.9	0.6	0.3	0.3	0.1
	Total	100.0	100.0	100.0	100.0	100.0
Total counts	European	75.1	73.2	78.1	85.0	90.6
	Maori	24.0	18.9	14.2	8.9	5.5
	Pacific Peoples	11.0	8.5	6.1	3.6	2.3
	Asian	6.9	10.5	7.6	5.1	3.0
	Other	0.9	0.9	0.8	0.4	0.2
	Total**	117.9	112.0	106.8	103.0	101.6

Table 5: Percentage breakdown of 2001 census data by ethnic group, using the following categorisations: prioritised; main one, two and three-group census ethnic combinations; and total counts *

** This total indicates the overlap between the groups. In this table the not specified responses are excluded.

Source: New Zealand Census of Population and Dwellings

As already shown in Table 4, one of the groups most affected under the system of prioritisation was Pacific Peoples, particularly young Pacific Peoples. For example, Table 5 shows that in the 0-14 age group under prioritisation Pacific Peoples represented 8.3 percent of the population but 11 percent when total counts are considered. The complex mix of ethnicities among young Pacific Peoples can be seen in more detail in Table 6. This table also breaks down the total counts of Maori and Europeans by their main component complex ethnic groups. For example among young New Zealanders (0-14) who belong to the total European ethnic group, 13 percent recorded both Maori and European ethnic groups.

	0-14	15-24	25-44	45-64	65-74
Total Maori ethnic group					
Maori only	45.8	51.9	62.0	71.9	76.4
Maori /European	42.1	40.2	34.5	25.8	21.8
Maori /Pacific Peoples	5.0	3.7	1.4	0	0
Maori /Pacific/ European	5.0	2.6	1.4	0	0
Other combinations	2.1	1.6	0.7	2.2	1.8
Total Pacific Peoples ethnic group					
Pacific only	59.1	68.2	80.3	88.9	91.3
Pacific/Maori	10.9	8.2	3.3	0	0
Pacific/European	16.4	15.3	11.5	5.6	4.3
Pacific/Maori //European	10.9	5.9	3.3	0	0
Other combinations	2.7	2.4	1.6	5.6	4.3
Total European ethnic group					
European only	80.6	86.0	92.2	96.8	98.4
European /Maori	13.4	10.4	6.2	2.7	1.3
European /Pacific	2.4	1.8	0.8	0.2	0.1
European/Asian	1.2	0.7	0.3	0.1	0.1
European/Maori/Pacific	1.6	0.6	0.2	0.1	0.0
Other combinations	0.8	0.5	0.3	0.1	0.1

Table 6: Changing ethnic mix of the total Maori, Pacific Peoples and European ethnic groups by age, 2001

Source: New Zealand Census of Population and Dwellings

While the small dual and multiple groups can be reported with some accuracy when large surveys such as the census are undertaken, this becomes problematic with small surveys. In this context, total counts are being promoted as the way of reporting data.

MEASURING ETHNIC INTERMARRIAGE IN NEW ZEALAND

Historically intermarriage between Maori and other ethnic groups has been the most studied largely because of the availability of information but also because of, until recently, the relative insignificance of other partnering. In the early research, Harré (1968) produced the most detailed empirical work on ethnic intermarriage. While the high level of intermarriage between Maori and other New Zealanders have been mentioned by a number of researchers (e.g. Belich 2001, Butterworth and Mako 1989, Pool 1991), virtually no empirical research was carried out on intermarriage between 1960s and the turn of the century. There is now a new interest in the topic, and recent research that either directly focuses on intermarriage, or has it as part of a wider investigation (e.g. Archie 2005, Callister 2004, Callister, Didham and Potter 2005, Didham 2004, Kukutai 2003 2005).

Studying ethnic intermarriage is relatively simple if ethnic groups are clearly defined and do not overlap.¹⁹ Early studies of intermarriage in New Zealand were undertaken when it was generally assumed that individuals belonged to only one ethnic group. A within ethnic group (endogamous) marriage would be where both partners were from the same ethnic group. In contrast, unions where the partners were from different ethnic

¹⁹ We are grateful to Tahu Kukutai for her contribution to discussions on this topic.

groups would be considered to be ethnic intermarriage (exogamous unions). But where people can report more than one ethnic group, some patterns of marriage include both endogamous and exogamous unions.

Tables 7 and 8 are based on total count data. This means the people recording more than one ethnic group are counted more than once hence the total percentages adding to more than 100 percent (row totals). Table 7 shows the proportion of men in each ethnic category by the ethnicity of their partner, while Table 8 illustrates this for women. Tables 7 and 8 show a number of patterns. First, those in the European group are the most likely to have a partner who records European as at least one of their ethnic groups (96 percent for both women and men). This is not surprising given group size. In contrast, those in the Maori group are the least likely to have a partner recording the same ethnicity (53 percent for men and 52 percent for women). Amongst some groups there are also gender differences. A Maori male is less likely to have a Pacific partner (4 percent) than is a Maori female (7 percent). In 2001 Asian men were far more likely to have a partner from the Asian category (90 percent) than were Asian women (78 percent). Twenty percent of Asian women had a European partner, while only 9 percent of Asian men had a partner recording European ethnicity.

				Fema	ıle		
				Pacific			
		European	Maori	Peoples	Asian	Other '	Total %
	European	96	6	1	2	0	104
	Maori	58	53	4	1	0	117
	Pacific						
Male	Peoples	25	15	70	2	0	112
	Asian	9	2	2	90	0	102
	Other	36	4	2	4	60	107

 Table 7: Percentage of partners in each ethnic group for men, opposite sex couples,

 Total counts, 2001

Source: New Zealand Census of Population and Dwellings

				Mal	e					
			Pacific							
		European	Maori	Peoples	Asian	Other	Total %			
	European	96	6	1	1	0	104			
	Maori	53	52	7	1	0	114			
	Pacific									
Female	Peoples	23	9	73	2	0	108			
	Asian	20	2	1	78	0	102			
	Other	33	3	1	1	68	106			

 Table 8: Percentage of partners in each ethnic group for women, opposite sex couples, Total counts, 2001

Source: New Zealand Census of Population and Dwellings

When intermarriage rates are considered using the old prioritisation system, total counts and single and multiple ethnic groups, the various measures used do not make a major difference when *within-group* marriage is being considered for the main ethnic groups. For example, when the European group is considered under the old prioritisation system 93% of men had a partner from the same group, if total counts are used then this rises to

96% (where one of their partners ethnic groups is European), and again is 93% when the single European *only* group is considered. That the prioritised and European *only* data are the same is to be expected given that European was a residual group under the old system of prioritisation.

Where the differences are stronger are in areas such as Maori/European intermarriage. Under the prioritisation system, 43% of Maori men had a European partner, with total counts this rises to 58%, but under single groups reduces back to 33%. These are significant differences and the different measures could be used to tell quite different stories about intermarriage.

Whatever measure used, data show that New Zealand Europeans have relatively low rates of marriage outside of their group. They are also slightly more likely to have a European partner than random sorting would predict. However, when size of group is considered, the intermarriage rates for Europeans do not suggest that this group is particularly adverse to intermarriage (Callister, Didham and Potter 2005).

In contrast intermarriage rates are high for Maori, and to a lesser degree, Pacific Peoples. However, based on group size, ethnic intermarriage is lower for Maori, Pacific and Asian Peoples than would be expected had random mating taken place across ethnic groups.

COMPLEX ETHNICITY, INTERMARRIAGE, AND DISADVANTAGE

As discussed in the first section of the paper, ethnic choices for individuals reflect a complex mix of factors, including culture and ancestry, so intermarriage potentially brings together, in possibly even more complex ways, cultural and ancestral mixes within a family setting. Historically, there have been and continue to be, at least three potential impacts of this intermarriage: intergenerational genetic mixing, intergenerational cultural mixing and intergenerational resource mixing.

As an historical example of intergenerational genetic mixing, O'Regan (2001:135) notes that early in the colonisation of New Zealand, "Kai Tahu leaders were quick to recognise the increased resistance to European illnesses in those of mixed descent".

Cultural mixing can and does occur with or without intermarriage. In a discussion of biculturalism in New Zealand, Sharp (1995:118) notes that, "although the autonomy and incommensurability of cultures is asserted often enough, cultures are actually leaky vessels, created, renewed and transformed in endless contact with others". While this contact with others can occur in a variety of ways, intermarriage provides a particularly intense and intimate site for potential cultural exchange.

A common view is that intermarriage will lead to a dissipation of cultural practice of the partner who is from the minority culture. However, outcomes are likely to be far more complex than this in New Zealand. In a history of changing ideology in relation to the "counting of Maori" in the Census of Population and Dwellings, Riddell (2000) demonstrates that historical intermarriage between Maori and non-Maori has not, as some commentators had predicted, resulted in the disappearance of a once "dying race". Instead, Riddell asserts that intermarriage has added directly to the numbers of those

who can define themselves as Maori and of Maori descent.²⁰ This is not unique to New Zealand. For example, in the US the growth of Native Americans has been far faster than natural population growth would predict (Light and Lee 1997).

A critical policy question is whether the new complex ethnic data will help in identifying factors that influence disadvantage. Just as importantly, can they help in overcoming these disadvantages?²¹ While outcomes for Maori and Pacific peoples have improved since the mid-1990s in many areas including life expectancy, rates of participation in early childhood and tertiary education, and unemployment, indicators of wellbeing for Maori and Pacific Peoples are still relatively poor in a number of areas (Ministry of Social Development 2005).

To date there has been limited use made of multi-ethnic responses when analysing disadvantage among the wider Maori ethnic group in New Zealand.²² In a 2000 paper, Gould reports on work he carried out using 1981 census data on average per capita incomes for three groups. They were: Maori (then defined as half or more Maori blood); those with some, but less than half Maori blood; and non-Maori.²³ Gould found that the income of Maori was just under 74% of that of non-Maori, but for those defined as having less than half blood it was over 92%. Using 1986 census data, he found that the proportions of the population in the 20-24 age group who lacked any school qualifications were 64% for sole Maori, 26% for sole European and near the middle, 41%, for those recording Maori and European responses. Using 1991 data, he then went on to look at some basic ancestry/ethnicity interactions. As an example, he calculated the proportion of men in managerial and professional occupations. He found that 14.8% of non-Maori men were in this occupational group, 11.8% for those of Maori ancestry but not ethnicity, 8.5% of those recording Maori and European ethnicity, and 5% for those recording sole Maori. Again he found a gradient of disadvantage in relation to 'degree of "Maoriness".

In a number of papers Chapple (1999, 2000) and Chapple and Rea (1998) divided the wider Maori ethnic group into two groups, "sole Maori" and "mixed Maori". In his 2000 paper, Chapple raised the idea that the disadvantage amongst Maori is concentrated in a particular subset, that is those who identify only as Maori; who have no educational qualifications; and who live outside of major urban centres.²⁴ As Baehler (2002) notes, the idea that a particular sub group are "truly disadvantaged" parallels the work of Wilson (1987) in the U.S.

²⁰ However, Riddell fails to acknowledge that many Maori are also recording other ethnic groups as well.

²¹ This issue is not addressed in this paper. However, dual and multiple ethnicity raise issues about ethnic based social policy targeting, affirmative action etc where clear group definitions are needed. For instance, in the US, when reviewing changes in American data collections, Hirschman, Alba and Farley (2000) argue that in the short term changes to include multi-race categories may influence both litigation and legislation, more particularly with regards to affirmative action policies. In a New Zealand context, this issue is discussed more fully in Callister (2004).

 $^{^{22}}$ In contrast, little attention has been given to dual ethnicity among the wider Pacific peoples ethnic group when investigating disadvantage among Pacific communities.

²³ In New Zealand, researchers commonly publish Maori/non-Maori comparisons. Yet the category non-Maori can in no way be regarded as or treated as an ethnicity. When the group non-Maori is used often characteristics are attributed to it which are inappropriate given the diversity of this residual population.

²⁴ "Sole Mäori" are those who recorded only Mäori as an ethnic identity. "Mixed Mäori" reported Mäori as one ethnic identity, but also recorded a further identity (or identities). This is, of course, a form of prioritization, given that the other ethnicity or ethnicities could have been given priority. For example, a person who recorded both European and Mäori ethnic groups could be labeled "mixed European".

Kukutai (2003), using a survey data and a system of self prioritisation, has shown those individuals who identify as both Maori and non-Maori, but more strongly with the latter, tend to be socially and economically much better off than all other Maori. In contrast, those who identify more strongly as Maori, had socio-economic and demographic attributes similar to those who only record Maori as their ethnic group. Based on these data, Kukutai argues that the key differences within the wider Maori ethnic group are between those who identify primarily as non-Maori and all others. Thus, she suggests social policy makers should not put much weight on the two categories "Maori only" and "Maori plus other ethnic group(s)".

Kukutai's work indicates that for some people multiple ethnicity responses show strong belonging in more than one culture but for others factors such as visible difference or social networks mean an uneven affiliation. These observations have strengthened calls for Statistics New Zealand to evaluate self prioritisation to better understand cultural strengths.

While not based on dual or multiple ethnicity of individuals but instead the prioritized ethnicity of both partners in couples, labor force data from the 1991 census showed that for couples with a pre-school child the association between ethnicity and whether neither was in paid work related to the ethnicity of both partners (Callister 1996). The couples most likely not to be in work were those where both partners were from a Pacific Peoples group, closely followed by those where both were Maori. The least likely were those where both were those where both were just one partner was Maori or Pacific were intermediary. However, those where one partner was Maori and one from a Pacific group were worse off than those where the other partner was non- Maori, non-Pacific. Labor market outcomes are a major factor in determining family resources, and family resources can then impact on children's health, education and home conditions. For example, in 1982 Fergusson, Horwood and Shannon reported that:

...as a general rule children with two Pakeha parents fared best, from the material point of view, in most comparisons whereas those with two Maori or Pacific Island parents fared the worst; the group with one Polynesian and one Pakeha parent had results which lay between these extremes.

The different resources according to ethnic mix of couples can also be seen with net worth data drawn from the 2001 Household Savings survey (Statistics New Zealand 2002). While again using prioritized data, and not controlling for age, couples where both were Maori had a mean net worth of \$89,700, where both were non-Maori this rose substantially to \$348,700, and where one was Maori and the other non-Maori the figure was \$203,600. Thus, extrapolating from the various studies cited, the material resources available to children most likely to report Maori and another ethnicity, rather than just Maori ethnicity, are likely to be considerably higher.

Finally, recent exploratory research on complex ethnicity and mortality indicated some differences in mortality rates by single ethnic responses versus dual and multiple responses (Callister and Blakely 2004). For example, when considering the component groups within the total Maori ethnic group it was found that Maori only mortality rates were similar to or greater than those for the Maori plus Pacific ethnic group, but certainly greater than for the Maori plus non-Maori non-Pacific ethnic group.

These types of finding are not unique to New Zealand. For example, in the US Snipp (1988) looked at two groups to both assess various socio-economic outcomes, and to explore issues of assimilation and discrimination. The first group was those who responded that they had Native American ancestry but cited a non-Native American race.²⁵ The second, smaller, group reported both Native American ancestry and race. Snipp found that, although not identical to Whites, those Native Americans only recording descent were economically better off than those reporting both Native American ancestry and race.

More recently, Farley (2002) used 2000 census data to study how multi racial people compared with monoracial groups on a range of socio-economic characteristics. He found that on most indicators, on average, monoracial Asians, monoracial White, and White-Asian biracials were high on the rankings while Hispanics, monoracial Blacks, and monoracial American Indians were in the lower ranks. He notes that on a number of key indicators, White-American Indian and White-Black biracials fell between the characteristics of their monoracial groups.

The New Zealand research on complex ethnicity and disadvantage has prompted Kukutai (2004) to ask:

These findings raise the question of why orientation towards the European mainstream confers benefits in terms of better outcomes. Or, alternatively, why those who are committed to a Māori ethnic identity incur certain costs, net of the benefits that might come with being part of a cultural community.

As yet, in New Zealand we are far from answering this question. The material discussed here shows that while tools for further analysis exist and much may be learnt by employing them, there is also a need to develop refined measures of cultural connectedness, cultural strength, and, possibly the most important, the impact of visible difference.

CONCLUSION

There is a general consensus in New Zealand that it is better to collect culturally determined ethnicity data rather than race based data. This is despite the fact that some people in New Zealand may determine ethnic responses in terms of 'race' based on ancestry rather than cultural affiliation and political rhetoric can also centre on race and ancestry rather than ethnicity. In New Zealand, ethnicity is seen to have greater explanatory power in terms of understanding social behaviour and outcomes.

New Zealand was amongst the first countries in the world to allow respondents to official surveys to record more than one ethnic group. This required the development of new ways of presenting and analysing these data. An initial response was to use a system of ethnic prioritisation. However, subsequent research and debate has suggested that the disadvantages of a prioritised system outweigh any of its advantages, with some age groups in particular ethnic groups effectively "losing" up to 30% of their people.

²⁵ In this census only one racial group could be picked.

Statistics New Zealand has now recommended abandoning this practice nationally. Two methods of presenting data are recommended, total counts and, when samples are large enough, main single and combination groups. While total counts provide initial conceptual challenges when undertaking particular types of analysis, for example ethnic intermarriage, most, but not all, of the research community appear to have accepted the use of total counts. However, the general public at times do not understand why the proportions of ethnic groups in the population do not add to 100.

The dual and multiple ethnicity measure provides a new tool to analyse disadvantage because it allows an analysis of the internal diversity within groups and a more detailed analysis of the relationship and interaction between groups. Moreover, when all combinations are included in the table, the sum of the categories add to the sum of the population. The limitation is that some groups currently contain few people and data quality issues then begin to dominate. Even with only six groupings of ethnicities, there are 61 separate single-combination categories (including one residual category for those without stated ethnicities). Despite these limitations, this remains the most powerful approach for detailed analysis of populations.

However, the data still do not provide a clear idea as to why there is a gradient of disadvantage, from those who only affiliate with Maori and Pacific Peoples through to those who show no affiliation with these groups. While ethnicity is theoretically based primarily on current cultural affiliation (and therefore cultural practice), we have yet to develop official measures of cultural strength. Cultural strength may go some way to explaining the gradient. We suspect factors such as physical appearance, which may not be entirely independent of cultural strength, still matter.

Finally, the international research literature suggests that, based on their unique histories, countries have been developing their own measures of ethnicity, race, nationality or some other way of classifying groups in society. While from a research point of view internationally comparable measures would be useful, it is unlikely that such measures will emerge for some time. However, based on the New Zealand experience, we suggest that as international migration continues and as intermarriage becomes more frequent in most countries there will be pressure to move from race-based measures towards culturally based ethnicity measures.

REFERENCES

- Alemany, J. and Zewoldi, Y. (2003) Ethnicity: A review of data collection and dissemination, United Nations Statistical Division.
- Allan, J. (2001a) International Concepts and Classifications: Review of the Measurement of Ethnicity: Main Paper, Statistics New Zealand, Wellington.
- Allan, J. (2001b) Classification and Issues: Review of the Measurement of Ethnicity: Main Paper, Statistics New Zealand, Wellington
- Archie, C. (2005) Skin to skin, Auckland: Penguin.
- Baehler, K. (2002) Ethnicity-based research and politics: Snapshots from the United States and New Zealand, *Social Policy Journal of New Zealand*, 18:18-30.
- Barnard, L. (2001) Submission of the Human Rights Commission on: The Review of the Measurement of Ethnicity, Wellington: Human Rights Commission.
- Bedggood, J. (1997) Pakeha ethnicity?, Sites, 35: 81-100.
- Belich, J. (1996) Making peoples. A History of the New Zealanders, from Polynesian Settlement to the End of the Nineteenth Century, Honolulu: University of Hawai'i Press.
- Bentley, T. H. (1999) Pakeha Maori: The extraordinary story of the Europeans who lived as Maori in early New Zealand, Auckland: Penguin.
- Bitzan, A (2001) Does race exist anymore?, Commonsense, 2(3):16-18, http://www.cs-journal.org/ll3/index.html [accessed 14/10/02]
- Boyd, M. and Norris, D (2001) Who are the "Canadians"?: Changing census responses, 1986-1996, Canadian Ethnic Studies Journal,33 (1): 1-27.
- Brown, P. (1984) Official ethnic statistics in New Zealand, in P. Spoonley, C. Macpherson, D. Pearson and C. Sedgwick (eds.) *Tauiwi: Racism and Ethnicity in New Zealand*, Dunmore, Palmerston North.
- Broughton, J. (1993) Being Maori, New Zealand Medical Journal, 106(968):506-508.
- Brunsma, D.L and Rockquemore, K.A. (2001) The new color complex: Appearances and biracial identity, *Identity*, 1(3): 225-246.
- Butterworth, G. and C. Mako (1989) *Te Hurihanga o Te Ao Maori: Te Ahua o Te Iwi Maori Kua Whakatatautia*, Department of Maori Affairs, Wellington.
- Callister, P. (1996) Ethnic and labour force classifications in couple families: Some methodological issues in the use of census data, *New Zealand Population Review*, 22 (1&2): 83-87.
- Callister, P. (2004) Ethnicity measures, intermarriage and social policy, *Social Policy Journal of New Zealand*, 23: 109-140.
- Callister. P. and Blakely, T. (2004) Ethnic classification, intermarriage, and mortality: Some methodological issues in relation to ethnic comparisons in Aotearoa/New Zealand, Working Paper, Wellington School of Medicine, <u>http://www.wnmeds.ac.nz/academic/dph/research/nzcms/index.html</u>
- Callister, P., Didham, R. and Potter, D. (2005) Ethnic Intermarriage in New Zealand, Working paper, Wellington: Statistics New Zealand.
- Chapple, S. (1999) Explaining patterns of disparity between Māori and non- Māori employment chances, *Labour Market Bulletin*, 70-100.
- Chapple, S. (2000) Maori socio-economic disparity, Political Science, 52(2):101-115.
- Chapple, S. and Rea, D. (1998) Time series analysis of disparity between Māori and non-Māori labour market outcomes, *Labour Market Bulletin* 1&2: 27-144.
- Collins, R. (2001) "Ethnic change in macro-historical perspective" in E. Anderson and D.S. Massey (eds.) *Problem of the Century: Racial Stratification in the United States*, Russell Sage, New York.

Colquhoun, G. (1999) The Art of Walking Upright, Steel Roberts, Wellington.

Crosby, R. D. (2001) The musket wars: A history of inter-iwi conflict, 1806-45, Auckland: Reed.

- Didham R. (2004) *Fertility of New Zealand Women by Ethnicity*, Statistics New Zealand, Wellington.
- Didham, R. (2005) Understanding and working with ethnicity data. Statistics New Zealand, Wellington
- Dumont, J. and Lemaître, G. (2004) Counting immigrants and expatriates in OECD countries: A new perspective, *Social, Employment and Migration working papers*, Paris: OECD.
- Farley, R. (2002) Race Reporting in the Census of 2000: how do multiracial groups compare to monoracial groups on key characteristics?, *PSC Research Report No. 02-516*, July, <u>http://www.psc.isr.umich.edu/pubs/abs.html?ID=1347</u>
- Fergusson, D. M., Horwood, L. J. and Shannon, F. T. (1982) Family ethnic composition, socio-economic factors and childhood disadvantage, *New Zealand Journal of Educational Studies*, 17(2): 171-179.
- Gray, A. (2001) *The definition and measurement of ethnicity: A Pacific perspective* Statistics New Zealand, Wellington.
- Goldstein, J. R. and Morning, A. J. (2002) Back in the box: The dilemma of using multi-race data for single race laws, in J. Perlmann and M.C. Waters (eds.), *The new race question: How the census counts multiracial individuals,* New York: Russell Sage, pp. 119-136.
- Gould, J. D. (2000) Counting Maori, New Zealand Population Review, 26(2): 1-19.
- Harré, J. (1968) Maori-Pakeha intermarriage, in E. Schwimmer (ed.), *The Maori people in the nineteen-sixties: A symposium*, London: C. Hurst & Co.; New York: Humanities, pp. 118-131.
- Hirschman, C., Alba, R. and Farley, R. (2000) The meaning and measurement of race in the US Census: Glimpses into the future, *Demography*, 37(3):381-393.
- Khawaja, M., B. Boddington, and R. Didham (2000) *Ethnic Diversity in New Zealand and its Implications for Measuring Differentials in Fertility and Mortality*, unpublished paper, Statistics New Zealand.
- Kilgour, R. and V. Keefe (1992) *Kia Piki Te Ora: The Collection of Maori Health Statistics,* Discussion Paper 15, Health Research Services, Department of Health, Wellington.
- King, M. (2003) The Penguin history of New Zealand, Auckland: Penguin.
- Korgen, K.O. (1998) From Black to Biracial: Transforming Racial Identity Among Americans, Praeger, Westport, Connecticut.
- Kukutai, T. (2001) Maori Identity and "Political Arithmetick": The Dynamics of Reporting Ethnicity, Master's thesis, Waikato University, Hamilton.
- Kukutai, T. (2003) *The Dynamics of Ethnicity Reporting: Māori in New Zealand*, Te Puni Kōkiri, Wellington.
- Kukutai, T. (2004) The problem of defining an ethnic group for public policy: Who is Maori and why does it matter? *Social Policy Journal of New Zealand*, 23: 86-108.
- Kukutai, T. (2005) White mothers, brown children: Understanding the intergenerational transmission of minority ethnic identity, paper presented at the annual American Population Association meeting, Philadelphia, March 31-April 2.
- Kunz, C. and Costello, L. (2003) 2001 Census: Ancestry Detailed Paper, Australian Bureau of Statistics, Canberra.

Leroi, A. M. (2005) A Family Tree in Every Gene, NY Times, Published: March 14, http://www.nytimes.com/2005/03/14/opinion/14leroi.html

- Mallard, T. (2005) Review of targeted policies and programmes: Summary of recommendations on the second tranche of reviews, Paper to the chair of the Cabinet, Office of the Co-ordinating Minster, Race Relations.
- Mays, V. M., Ponce, N. A., Washington, D. L. and Cochran, S. D. (2003) Classification of race and ethnicity: Implications for public health, *Annual Review of Public Health*, 24: 83-110.
- NZQA (2003) Top Scholars from 2003 bursaries exams, http://www.nzqa.govt.nz/forproviders/awards/topscholars/awards2003.html
- Mana (2002) Top Scholar, Mana Magazine, 45(April-May):22.
- Mason, P.L. (2001) Annual income and identity formation among persons of Mexican descent, *American Economic Review*, 91(2):178-183.
- Ministry of Social Development (2005) Social Report 2005, http://www.socialreport.msd.govt.nz/
- O'Regan, H. M. (2001) Ko Tahu, Ko Au: Kāi Tahu Tribal Identity, Horomaka, Christchurch.
- Pearson, D. (1990) A Dream Deferred: The Origins of Ethnic Conflict in New Zealand, Allen and Unwin, Wellington.
- Pearson, D. (2001) The Politics of Ethnicity in Settler Societies: States of Unease, Palgrave, Hampshire.
- Pearson, D. and Sissons, J. (1997) Pakeha and never Pakeha, Sites, 35: 64-80.
- Pool, I. (1991) Te Iwi Maori, Auckland University Press, Auckland.
- Potter, D., J. Woolf and T. Bullen (2003) New Zealander responses in the 2001 Census, Statistics New Zealand, Wellington.
- Riddell, K. (2000) 'Improving' the Maori: Counting the ideology of intermarriage, *New Zealand Journal of History*, 34(1): 80-97.
- Robson B. and Reid P. (2001) Ethnicity matters: review of the measurement of ethnicity in official statistics: Māori perspectives paper for consultation. Wellington: Te Ropu Rangahau Hauora a Eru Pomare.
- Salmond, A. (1991) Two worlds: First meetings between Maori and Europeans 1642-1772, Auckland: Penguin.
- Sharp, A. (1995) 'Why be bicultural?' in M. Wilson and A. Yeatman (eds.) *Justice and Identity: Antipodean Practices*, Bridget Williams Books, Wellington.
- Snipp, C. M. (1988) On the costs of being American Indian: Ethnic identity and economic opportunity, Institute for Social Research, http://repositories.cdlib.org/issr/volume4/25
- Sorrenson, M. P. K. (1956) Land purchase methods and their effects on Maori Population, 1865-1901, *Journal of Polynesian Society*, 65(3): 183-189.
- Spoonley, P. (1993) Racism & Ethnicity, 2nd edition, Oxford University Press, Auckland.
- Statistics New Zealand (2001) Introduction to the Census, Statistics New Zealand, Wellington.
- Statistics New Zealand (2002) The net worth of New Zealanders: A report on their assets and debts Statistics New Zealand, http://www.stats.govt.nz/domino/external/web/prod_serv.nsf/874ea91c1422893 84c2567a80081308e/cbcbcaf5cee17dc1cc256c3d0078dadb/\$FILE/Net%20wort h.pdf

Light, I. and C. Lee (1997) And just who do you think you aren't?, Society, 34:28-30.

- Statistics New Zealand (2004) *Report of the Review of the Measurement of Ethnicity*, Statistics New Zealand, Wellington.
- Statistics New Zealand (2005) *Demographic Trends*, Statistics New Zealand, Wellington.
- Stephan, C. W. and Stephan, W. G. (1989) After intermarriage: Ethnic identity among mixed heritage Japanese-Americans and Hispanics, *Journal of Marriage and the Family*, 51:507-519.
- Stephan, C.W. and Stephan, W. G. (2000) The measurement of racial and ethnic identity, *International Journal of Intercultural Relations*, 24(5):541-552.
- Te Ropu Rangahau Hauora a Eru Pomare (2000) Counting for nothing: Understanding the issues in monitoring disparities in health. *Social Policy Journal of New Zealand*, 14, 1-16.
- The Encyclopedia of New Zealand (2005) Urbanisation, http://www.teara.govt.nz/NewZealanders/MaoriNewZealanders/UrbanMaori/1/e n
- Thomas, D. R. and Nikora, L. W. (1995) Conceptions of ethnicity in New Zealand, paper prepared for 0518.102 Social Psychology Readings, Psychology Department, University of Waikato, Hamilton, http://psychology.waikato.ac.nz/mpru/pubs/ paps-sums/thomas-nikora.htm
- Waters, M. C. (1990) *Ethnic Options: Choosing Identities in America*, University of California, Berkeley.
- Waters, M. C. (1996) Optional ethnicities: For whites only?, in S. Pedraza and R. G. Rumbaut (eds.) Origins and Destinies: Immigration, Race, and Ethnicity in America, Wadsworth, Belmont, California.
- Wilson, W. J. (1987) *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*, University of Chicago Press, Chicago.
- Wanhalla, A. (2003) Transgressing Boundaries: Intermarriage at the Taieri Native Reserve, 1844-1890s, Blurring Boundaries, New Zealand Historical Association Conference, 27-29 November, University of Otago, Dunedin.
- Xie, Y. and K. Goyette (1997) The racial identification of biracial children with one Asian parent: Evidence from the 1990 Census, *Social Forces*, 76(2): 547-570.

Appendix One: Structural overview of the 2005 ethnicity classification:

Level one has six categories and a residual category. Level two has 21 categories and six residual categories. Level three has 36 categories and six residual categories. Level four has 233 categories and six residual categories.

Level one categories are:

- 1 European
- 2 Maori
- 3 Pacific Peoples

4 Asian

- 5 Middle Eastern/Latin American/African
- 6 Other Ethnicity
- 9 Residual Categories

Level two categories are:

- 10 European nfd
- 11 New Zealand European
- 12 Other European
- 21 Maori
- 30 Pacific Peoples nfd
- 31 Samoan
- 32 Cook Islands Maori
- 33 Tongan
- 34 Niuean
- 35 Tokelauan
- 36 Fijian
- 37 Other Pacific Peoples
- 40 Asian nfd
- 41 Southeast Asian
- 42 Chinese
- 43 Indian
- 44 Other Asian
- 51 Middle Eastern
- 52 Latin American
- 53 African
- 61 Other Ethnicity
- 94 Don't Know
- 95 Refused to Answer
- 96 Repeated Value
- 97 Response Unidentifiable
- 98 Response Outside Scope
- 99 Not Stated