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## 36. Kinship and Identity

## Genetic testing and Aboriginality

36.56 In the Tasmanian ATSIC election controversy discussed above, some disputants talked about using genetic testing as a means of addressing the practical difficulty of proving their Aboriginal descent through direct documentary evidence. The argument goes that such people could instead provide scientific evidence that they are biologically related to a known Aboriginal person.

36.57 As suggested above, however, genetic kinship and ancestry testing has important limitations in practice. First, it relies on the availability of reference samples for comparison. If a living person wishes to establish that he or she is a member of a particular family group, the person must find someone within that group who can provide a genetic sample for the purpose of comparison. This becomes more difficult where a person seeks to establish a biological relationship with a person or family group that has been dead for years, decades or centuries.

36.58 John Presser, a forensic scientist, commented in a submission:

In conjunction with other information, especially lineage or family trees, mtDNA is informative as to aboriginality where an unbroken female lineage exists. But it is imperative to remember that if no 'aboriginal' sequence is found, this result is silent as to aboriginality, all you can say is that there is no direct female line of descent and the result is inconclusive. It does not prove non aboriginal descent.<sup>[76]</sup>

36.59 Second, mtDNA and Y chromosome analysis are both extremely narrow in their focus when compared with the rich tapestry of a person's genetic ancestry. Elliott and Brodwin have written that:

The problem is that mapping Y chromosome and mitochondrial DNA polymorphisms will trace only two genetic lines on a family tree in which branches double with each preceding generation. For example, Y chromosome tracing will connect a man to his father but not to his mother, and it will connect him to only one of his four grandparents: his paternal grandfather ... Continue back in this manner for 14 generations and the man will still be connected to only one ancestor in that generation. The test will not connect him to any of the other 16,383 ancestors in that generation to which he is also related in equal measure. [77]

36.60 AIATSIS pointed to the inappropriateness of genetic testing in establishing Aboriginality, submitting that:

Pure scientific analysis of genetic identity cannot take stock of the effects of colonisation and past governmental policies. For example, a history of inter-marriage has resulted in large populations of Indigenous people of mixed descent, ie Indigenous and non-indigenous ancestry. Such ancestry generates extreme social and cultural complexity that has not been raised in this paper.

The inherent right (also contained in international conventions) to determine one's own cultural identity will be seriously eroded by a reliance upon a scientific method that has no capacity to consider cultural and social changes ...

Genetic testing provides no 'pure' point of reference for Aboriginal identity, especially given the history of colonisation in Australia. Scientists cannot now recover the control data that establishes the set of Indigenous genetic traits at contact. This raises the question of why Indigenous peoples have been singled out for particular attention for genetic testing?<sup>[78]</sup>

36.61 Similarly, the Queensland Government commented that:

Caution should be given against the use of genetic tests as a primary tool of evidence and application should be limited, particularly given that it has only been in the last few years that any serious attempt has been made to collect tissue samples on a regular and systematic basis. It will always be difficult for Aboriginal and Torres Strait Islander people to trace their ancestry, in a physical sense, to some long distant ancestor.<sup>[79]</sup>

36.62 The Human Genetics Society of Australia agreed that, in the absence of archival genetic material, genetic testing that identifies particular polymorphisms among a group might support the contention of common ancestry, but would not prove it definitively:

The relative isolation and small population base of indigenous peoples of Australia prior to European settlement makes it very likely that the frequency of many genetic polymorphisms in pre-European contact indigenous peoples differed from that of Europeans. Such differences may be expected to vary across the continent. A polymorphism absent or rare in Europeans but common in an ancestral indigenous population is likely to persist at a higher frequency in the descendents of that population than in peoples of European descent. Its presence at an appreciable frequency in a group claiming common ancestry would support the contention of common ancestry but not prove it. Its presence or absence in any given individual would not establish or refute membership of the group. None of the above, in the absence of archival genetic material, could establish association with a geographical location. Cultural and genealogical information is more likely to provide evidence of association between a group of indigenous individuals and a geographical location than genetic information. [80]

36.63 Genetic kinship testing is irrelevant where a person seeks to establish descent based on social or cultural—rather than biological—considerations. The Inquiry heard concerns that the use of genetic testing to establish biological relatedness would ultimately lead to a stronger emphasis on biological descent as an aspect of the legal definition of Aboriginality, and this would be contrary to traditional understandings of Aboriginal identity. AIATSIS challenged

the notion that Aboriginal identity can be determined through a eurocentric model of descent that privileges western familial structures. Indigenous familial structures differ in cultural organisation and historic context. For example adoption of children is a very common practice within extended families and regional clusters of families. It is also common for families to move great distances and be given rights to new territories. Models that identify genetic descent as the key to familial identity and land relations are highly inappropriate in this context.<sup>[81]</sup>

36.64 The South Australian Department of Human Services submitted that:

It is imperative that western notions of 'biological' family and kinship should not become the benchmark for the determination of what constitutes family and kin in the Aboriginal context. Aboriginal concepts of kinship should be equally respected in all legal proceedings addressing parenting rights and/or obligations. This is particularly relevant in many Torres Strait Islander communities where 'traditional adoption' between families is widely practiced.

Other 'social' means of establishing Aboriginality may be more important and it is this part of the identification process, which should be regulated by ATSIC.<sup>[82]</sup>

36.65 AIATSIS also suggested that the use of genetic testing could be seen as a return to outmoded and offensive legal classifications of Aboriginality based on 'strains of blood', such as the classification of people as being of 'half', 'quarter' or 'one-eighth' Aboriginal descent:

A possible danger of such testing (amongst a range of others), is that testing will result in the exclusion of Indigenous people—in other words create a 'blood rule' not dissimilar to previous legislative regimes and the current situation in other jurisdictions. As has been demonstrated in the past, these methods for determining Indigenous identity are destructive, assimilationist and divisive.<sup>[83]</sup>

36.66 Dr Loretta de Plevitz and Larry Croft summarised the four major barriers to proving Aboriginality by means of genetics as follows:

Firstly, there is no such thing as a genetically differentiated 'race': we are all one species. Secondly ... if race is defined by cultural and genetic context, then there are difficulties in proving membership of the 'Aboriginal race' as on this definition there were hundreds of Aboriginal races pre-1788. Thirdly, looking at the polymorphisms in an individual's DNA shows us who they are related to. But this just defers the problem of whether those people related to the claimant are Aboriginal or not. Fourthly, who could the claimant's genetic inheritance be tested against? It would be necessary to construct DNA reference groups based on 'pure blood'

Aboriginal people covering all geographic groups in Australia. If by chance one of the reference DNA groups was very similar to the claimant's then we can show descent ... as the Australian Aboriginal population is so genetically diverse, there would need to be a large reference set of people for all genetically distinct groups ... Where there has been the wholesale extermination of entire groups of people, claimants attempting to prove their Aboriginality may not be related to any of the reference groups because there is no longer a reference group for them.<sup>[84]</sup>

36.67 Concern also was expressed in consultations that if genetic kinship testing were used in this context, even on a voluntary basis, this might lead to undue pressure being placed on persons to 'prove' affirmatively their descent through testing. Such pressure might come from government departments or other service providers, or perhaps from people within their own communities. The imperative to submit to genetic testing runs contrary to ethical principles, including the principles of autonomy, informed consent and the individual's 'right not to know'. Further, any requirement that a person must prove his or her descent through genetic testing in order to access goods, services or other facilities may contravene the Racial Discrimination Act 1975 (Cth). [85]

36.68 In their submission, de Plevitz and Croft commented that compelling persons to undergo any genetic testing in order to confirm their Aboriginal identity would serve to compound their social disadvantage:

Other disadvantaged groups such as the poor, the uneducated or the disabled do not have such requirements of proof to access benefits. ... Aboriginal people will walk away from such humiliation rather than face legal questioning on their identity. An Australian legal test based on cultural difference would fulfil the same purpose as the descent test without its potentially divisive effects. [86]

36.69 Dr Paul Henman also submitted that any shift towards genetic testing to determine eligibility to Indigenous programs, policies and benefits should be resisted because social processes are much more significant than genetic processes in determining identity:

Policy makers should be encouraged to ensure that the eligibility criteria to policies and programs aimed at Aboriginal and Torres Strait Islanders give greater importance to cultural, rather than genetic, identity. Having said this, genetic information may be important in testing claims of genetic identity. Even so, genetic heritage should not necessarily constitute immediate eligibility to such programs. Programs aimed at individuals who have been forcibly removed from their cultural heritage—such as the 'Stolen Generation'—may also find it appropriate to use genetic information.<sup>[87]</sup>

36.70 The Inquiry considers that under no circumstances should any person be required to undergo genetic testing to establish their Aboriginal descent. As noted above, this would have significant ethical implications, and would arguably constitute racial discrimination against Aboriginal persons.

- [76] J Presser, Submission G183, 3 October 2002.
- [77] C Elliott and P Brodwin, 'Identity and Genetic Ancestry Testing' (2002) 325 British Medical Journal 1469, 1469–1470. See also J Presser, Submission G183, 3 October 2002. This point was also made by Dr Ian Anderson of Melbourne University: M Langton and I Anderson, Consultation, Melbourne, 23 October 2002.
- [78] Australian Institute of Aboriginal and Torres Strait Islander Studies, Submission G286, 16 December 2002.
- [79] Queensland Government, Submission G274, 18 December 2002.
- [80] Human Genetics Society of Australasia, Submission G267, 20 December 2002.
- [81] Australian Institute of Aboriginal and Torres Strait Islander Studies, Submission G286, 16 December 2002.
- [82] Department of Human Services South Australia, Submission G288, 23 December 2002.
- [83] Australian Institute of Aboriginal and Torres Strait Islander Studies, Submission G286, 16 December 2002.

- [84] L de Plevitz and L Croft, Submission G115, 13 March 2002. Dr de Plevitz is a lecturer in the Faculty of Law, Queensland University of Technology; Mr Croft is employed by the Institute for Molecular Biosciences, University of Queensland.
- [85] See Racial Discrimination Act 1975 (Cth) s 9.
- [86] L de Plevitz and L Croft, Submission G115, 13 March 2002.
- [87] P Henman, Submission Go55, 15 January 2002. Dr Henman is a Research Fellow in Sociology at Macquarie University.

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