FUTURE PATHWAYS TE ARA PAERANGI GREEN PAPER SUBMISSION

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14th March 2022

Submission to: Future Pathways Policy Team Ministry of Business, Innovation & Employment

SCIENCE AND POLICY

The broad term 'science'¹ refers to the knowledge created by scientific methods and procedures². Nations which allow ideologies to shape scientific research soon lose standing in the international science community. This will happen to New Zealand if the Green Paper's "tiriti-led system" is implemented.

Scientific research may well inform policies in ways which do accommodate cultural values and practices. This is evidence-based policy. But *policy follows research*; it does not precede it. Science can inform policy but policy informing science leads to misinformation and the loss of scientific integrity. This would be equivalent to making science 'Christian-led' (or, if we were in another country, 'Taliban-led' or 'Hindutva-led' or 'Xi Ping thought-led'). It will not further science in New Zealand but will reduce this country's attractiveness to international students and research collaborations.

¹"The word science is used to refer to the systematic organization of knowledge that can be rationally explained and reliably applied. It is inclusive of the natural (including physical, mathematical and life) science and social (including behavioural and economic) science domains, which represent the ISC's primary focus, as well as the humanities, medical, health, computer and engineering sciences." (International Science Council, Position Paper, 'Science as a Global Public Good, October, 2021, p. 1, footnote 1)

² "Science is a special form of knowledge; a formalised approach to knowledge that is rationally explicable, tested against reality, logic, and the scrutiny of peers. It has two fundamental attributes that form its bedrock, and which are ultimately the source of its value as a global public good:

[•] that knowledge claims and the evidence on which they may be based are made openly available to be tested against reality and logic through the scrutiny of peers;

[•] that the results of scientific inquiry are communicated promptly into the public sphere and circulated efficiently to maximise their availability to all who may wish or need to access them." (Ibid, p.1)

SCIENCE AND MĀTAURANGA MĀORI

Enabling mātauranga Māori

The Green Paper assumes that mātauranga Māori should be 'enabled' in research institutions. It fails to recognise that science and traditional knowledge are fundamentally different in terms of their constitution, methods, procedures, value to society, and policy requirements.

Science provides naturalistic explanations for physical and social phenomena. It proceeds by conjecture and refutation. It requires doubt, challenge and critique, forever truth-seeking but with truth never fully settled.

Traditional knowledge, including mātauranga Māori, employs supernatural explanations such as 'mauri' and other vitalist concepts, for natural and social phenomena. It also includes practical knowledge (proto-science or pre-scientific), acquired from observation, experience, and trial and error. Such traditional knowledge provides ways for humans to live in the environment³. Examples are ocean navigation by the stars and currents, efficacious medicines from plants, and social structures organised according to kinship relations and birth status.

Protection

The Green Paper's reference to protect(ing) mātauranga Māori" (p. 5) is alarming. A fundamental principle of science is that *no knowledge is protected*. It develops from the systematic criticism and refutation of its own ideas⁴. Knowledge that requires protection is belief, not science.

Science produces knowledge which may support or reject cultural knowledge. This means that the relationship between the two is necessarily one of tension. Mātauranga Māori's inclusion in science is a rejection of this necessary relationship; indeed it goes further by placing research *under* cultural authority and interests. Knowledge authorised by culture is ideology, not science.

'We may need to kill off one of the most important theories of all time.' https://www.space.com/end-of-einstein-space-time

³ Evolutionary cognitive scientists, for example David Geary, refer to this type of knowledge as 'primary' and distinguish it from the cognition required for 'secondary knowledge, i.e. science.

⁴Was Einstein wrong? Why some astrophysicists are questioning the theory of space-time'.

SCIENCE AND THE TREATY

New Zealand universities⁵ already undermine the conditions required for scientific research by requiring adherence to treaty principles, a practice which goes much further than intended by the term 'acknowledgement' used in the 1990 Education Act⁶. The Green Paper's "tiriti-led system" proposes to take that adherence much further in ways that will give ideology authority over science, imposing direction and constraints so that New Zealand research cannot meet international standards.

The intellectual freedom required for science is incompatible with a "tiriti-led system". Such a system will need to remove New Zealand's current legislative requirements that academic staff and students have the freedom "within the law, to question and test received wisdom, to put forward new ideas, and to state controversial or unpopular opinions" and that the university's "principal aim is to develop intellectual independence". These aims are to be achieved by "people who are active in advancing knowledge, who meet international standards of research and teaching, who are a repository of knowledge and expertise and who accept a role as critic and conscience of society".

Either New Zealand strengthens its commitment to science's universalism or it continues down the destructive path of cultural ideology. The Green Paper's reference to creating a "modern research system that is Tiriti led" is nonsensical. Research which includes the controls that characterise traditional knowledge cannot be modern.

Tinkering with the Green Paper will not improve matters given that its numerous faults arise from the very assumption upon which the Paper is built. This is the incorrect belief that a treatyjustified co-governance system is already in New Zealand's constitution. A new constitution of Iwi-New Zealand Government co-governance has not been placed before the public and has not been agreed to.

The Green Paper must be soundly criticised for being complicit in ideological interests which use policy to make constitutional reform by stealth rather than by Parliament⁷.

Please note:

Our submission is available for public circulation. It contains nothing that is confidential. We wish to be engaged throughout the Future Pathways Programme.

⁵ Rata, E. (2013). Knowledge and the Politics of Culture: An example from New Zealand's Higher Education Policy and Practice. *Anthropological Theory*, 13 (4), 329-346. https://doi-org.ezproxy.auckland.ac.nz/10.1177/1463499613509993

⁶ <u>https://www.newsroom.co.nz/science-or-ideology-the-nz-university-at-the-crossroads</u>

⁷ Rata, E. (2005). Marching through the Institutions, The Neotribal Elite and the Treaty of Waitangi, *Sites New Series*, 1 (2) 56 - 81.