

Decolonisation: a Postscript

Science and indigenous knowledge

BY MURRAY SHORT

I have had some lively conversations about my article on decolonisation published in ANZ Friends Newsletter March 2022. There seems to be a good measure of agreement with the points made in the article, but one aspect that some Friends reacted to, was a statement I made that claiming Western science is 'universal' can be read as 'superior'. Those who did not support this statement made the point that science is universal in the sense that it is accepted by all, and this does not mean superior. I agree with this point, particularly in relation to scientific methods used to test hypotheses but not in relation to the generation of hypotheses.

However, my comment about superiority was sparked by the way in which the group of Auckland University academics linked the universal nature of science with the suggestion that indigenous knowledge was not science.

Science is universal, not especially Western European... Indigenous knowledge is critical for the preservation and perpetuation of culture and local practices and plays key roles in management and policy. However, in the discovery of empirical, universal truths, it falls far short of what we can define as science itself.

I am no expert on 'indigenous knowledge', or 'mātauranga Māori' as it was also called in the academics' statement, but I would assume that such knowledge includes the understanding and use of the methods of science such as observation, experimentation, and analysis. Indeed, as I mentioned in my article, some indigenous academics responded to the statement by pointing out that the exploration and settlement of the Pacific by Polynesians was enabled by deep knowledge of the stars, the oceans, tides, winds, and bird life to name but a few, which they 'discovered' by means of scientific method.

The academics' statement contends that such knowledge does not amount to 'empirical, universal truths' and the 'discovery' of the knowledge 'falls far short of what we can define as science itself'. As such it is a statement of superiority.

It is worth noting that non-indigenous science for many years characterised Māori and Pacifica voyaging as the search for new lands that occasionally and fortuitously (not by science) achieved desperate success. This characterisation was based on the unilinear theory of human cultural evolution that saw Pacifica cultures being at a 'primitive' stage of development and therefore incapable of intentional and science-based discovery. It is difficult to see how the academics' position is any different.

There is another aspect to the academics' stance that I find particularly disappointing. The generation of hypotheses is a critical part of science. Without creative hypotheses that lead to new paths of enquiry, the scientific method is at risk of simply producing more and more information about less and less. As Robert Pirsig highlighted in his book *Zen and the Art of Motorcycle Maintenance*, science needs to include more than the purely rational.

In the generation of hypotheses, culture plays a central role. The questions asked are shaped by, amongst other things, world views, beliefs and the unique relationship each culture has with its environment. One could ask why science has generated more information about the moon than it has about the deep seas. Perhaps if indigenous science was valued more highly and its insights had contributed more to 'universal' science, we might know more about the seas, which are now recognised as having a critical role in the survival of humans on this planet.

As with all human endeavours, there is strength in diversity, and this requires valuing, not demeaning, the other.