

## **Submission: Developing a New Māori Language Strategy**

### **Background:**

Since the presentation of “Te Reo Mauriora” in March 2011, there has clearly been significant response from TPK to its recommendations such as setting up specific whānau-orientated programmes but the recommendation to appoint a committee to plot and steer a strategic course has not yet been implemented. I believe that such a plan would give needed clarity and cohesiveness to those with interest in the revitalisation of the language. Progress has now been achieved with the publication of “Developing a New Māori Language Strategy” which lays out a high-level approach to be developed over the next 12 months. This submission notes issues, that while mentioned in the new strategy, do not give me confidence that their importance is recognised and will be adequately addressed in the following months.

I am in general agreement with the recommendations of TRM, that the key is ensuring intergeneration transmission. I have noted with interest that this consensus has been arrived at by a process of consultation and that an extensive international literature on the subject has arrived at a similar conclusion. Nevertheless, since the time is coming that a specific plan is needed; policies could be guided by past knowledge obtained from international experience. At the very least, some input to policies from current sociolinguistic theory is acknowledged. On the other hand, theory is merely theory and until tested and validated, remains just that. In my studies of evolutionary biology results are sometimes counterintuitive. My submission is a plea for consideration of an attempt, through the development of suitable models, to analyse our situation in New Zealand.

### **Issues for consideration:**

1). The influence of Te Reo Pākeha (ko te arewhana i roto i te ruma) on the possibilities of success of the programs.

It is clear to me, after a careful reading of the Strategy Document, that this influence is not well addressed, perhaps in an effort to focus on major initiatives. Never-the-less, I believe we ignore this influence at our peril, because the influence exerted is strong and pernicious.

There are numerous papers/models on how dominant and sub-dominant languages and bilinguality can influence the maintenance of the sub-dominant language (see Appendix 1). Briefly, this body of research has found that various forms of models that have been developed for understanding prey-predator relationships in nature are suitable for understanding the relationship between dominant and sub-dominant languages. Put bluntly, the dominant language will consume (i.e. cause the extinction) the sub-dominant language unless deliberate interventions are made. These models tend to fit past trends well and can be used to predict future trends, including the outcomes from different interventions. No model is perfect, but I believe that their use as part of the Te Reo Māori rejuvenation strategy would provide benefits around ensuring positive outcomes.

These models, used for bilingual environments such as French-English in Canada and Welsh-English in Great Britain can be adapted to our situation in NZ. We have sophisticated modelling and ecological expertise within our universities, Crown Research Institutes and elsewhere. For optimum success, we need crucial relationships between these specialists and specialists in Māoridom who can

- 1) determine the assumptions necessary for model functionality that are important and specific to Te Reo Māori: Te Reo Pākeha interactions e.g. cultural awareness
- 2) have knowledge of and access to data sets needed to run the models
- 3) have understanding of the range of possible interventions especially those already identified as important and
- 4) lead the interpretation of the results.

Thus the exercise could be used as a tool, but not a single tool, to guide the range and direction of proposed interventions and to provide a measure of their outcomes; are the trends in the desired direction, are the trends significant, are the current interventions the best use of limited resources? If a suitable candidate is found, this project would be ideal as postgraduate training in mathematical modelling, a skill with a multitude of uses within the iwi business environment and elsewhere.

### **Additional Issues**

There are three additional important issues that could also be addressed, but not without drawing focus from the major issue above. This is strictly a personal view and I recognise that others consider these issues to be both worth discussion (1 below) or paramount (2 below).

1) A role, if any, for Te Tangata Pākeha, to help preserve Te Reo Māori. This is a huge resource, largely untapped. Is it unnecessary or vital? Should the focus be on Pākeha within whānau? Or is a compulsory bilingual education essential? We really do not know the answer to these questions. Models developed above may help answer this question. Many authors have noted the crucial importance of increasing the prestige of a language for its survival. This might include increasing its acceptance by Pākeha at large. The COMET Trust in Auckland sees this as a vital issue. As a personal note, over the years I have seen many enthusiastic, well-intentioned Pākeha start to learn Te Reo Māori but fall by the wayside. If an increased proportion of Pākeha Te Reo Māori speakers is considered desirable, then a good understanding of the reasons for the current failure to attract significant numbers is needed and incentives for iwi-based or community-based programmes to seek new learners.

2) The likely resource conflict between preserving Te Reo Māori, even as a pan-Maori language and the emphasis on preserving dialectical variation. If saving the former is urgent and costly, what cost the latter? Additionally, if strategy is iwi-based and variable it will be inevitable that some failures will occur. Is the Māori community prepared for this. Or is a centrally-based strategy even more risky? After all, there is likely only one chance to get this right. Can we collect data that might suggest what is possible for a given resource allocation? I have ideas based on how biological extinction theory that might provide a way forward for difficult decision-making.

3) The strongest trend I have noticed in the last 15 years is the increasing use of Te Reo Māori within Te Reo Pākeha, particularly by Māori but also by Pākeha. Within both groups this signals increasing prestige of Te Reo Māori and from this viewpoint should be celebrated. However the trend may also be of concern that it will lead, not to more people learning Te Reo Māori itself but to the development of a New Zealand hybrid language that would condemn Te Reo Māori to a ceremonial language status. This issue is not raised in the new strategy, should it be encouraged, discouraged or ignored as irrelevant to language rejuvenation?

In these brief paragraphs, I have identified a potential lack within the current strategy and sketched out a possible solution. There seem to me two ways forward that would work although TPK may have other ideas. Firstly, The New Strategy implies that TPK will establish a monitoring and evaluation unit. I believe a small modelling group within this structure would be ideal. TPK could hire or contract modelling expertise if it lacks these skills at present but I feel sure other personnel are already present. Secondly, if TPK wants independence from the research, then a proposal through Te Rangahau would be a satisfactory pathway. In either case, a strong detailed proposal would be needed and the requirements would be broadly similar.

**Proposal:**

A multi-year research programme is required to complete the following tasks:

- 1) Develop a bilingual language model(s) for Te Reo Māori: Te Reo Pākehā that is appropriate for New Zealand.
- 2) Validate this model for data sets available and identify data gaps.
- 3) Identify current interventions and compare outcomes with a null model. Note this will likely require identification of sub-groups of Te Reo Māori users and use of collected data (thus coordination with groups performing and monitoring interventions).
- 4) Integrate bilingual modelling into the decision and evaluation process of Te Reo Māori rejuvenation.

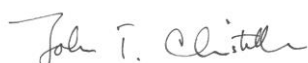
Personnel resources needed (approximate FTE) would be modelling scientist (0.25), MSc or PhD student (1.0), specialist advisors (4 at 0.2) and a liaison/project manager (0.1).

**Concluding Remarks**

I would like to emphasize I am not putting myself forward as an expert in either the broad field of language revitalisation or mathematical modelling but I am perhaps uniquely qualified to create a synthesis between them and understand how this synthesis might be a value Te Reo Māori preservation in New Zealand. Nor am I actively seeking a role in strategy development but my hope is that this submission does raise issues as yet not under consideration but which could positively influence their development. The ideas expressed here are also likely to be modified in the future through discussions; guidance and input from others (see Appendix 2).

Nōku hinengaro ngā whakaaro nei  
Nōku waha ngā kupu nei  
Nōku ngākau te aroha  
Tihei mauriora ki taiao, he uriuri, he tangata, he uwaha

Kei te tukuna te manu  
Nāku noa, nā



Dr John Christeller

**Submission Author:**

My name is John Tāne Christeller, until recently Principal Scientist at Plant and Food Research Institute in Palmerston North and now retired with emeritus status that allows me to continue to conduct research. I have been learning Te Reo Māori for a number of years, initially with Te Wananga o Aotearoa (Diploma Te Ara Māori, 2006) and latterly in a conversation group with a group of local kaumatua under the guidance of Matua Tahi Gotty. I now have the time and enthusiasm to use my kete of research skills in new areas.

I ngā tau maha, kua puta mai ahau i te mātauranga i te puna reo.  
Anāiane te wā, ka whakaututia āku mātauranga ki te puna rā.

My journey towards competency in Te Reo Māori has been life-changing, making it a natural choice to

explore where I could assist in the massive task of language revitalization. I believe my rare perspective (a long scientific career and a passion for Te Reo Māori) has allowed me to think independently and identify areas of concern to me not identified by “Te Reo Mauriora” nor fully addressed by “Developing a New Māori Language Strategy”.

**Appendix 1.** A selection of papers relevant to the submission.

- An, Z., Q. Pan, et al. (2012). "The spatial distribution of clusters and the formation of mixed languages in bilingual competition." Physica a-Statistical Mechanics and Its Applications 391(20): 4943-4952.
- Baggs, I. and H. I. Freedman (1993). "Can the Speakers of a Dominated Language Survive as Unilinguals - a Mathematical-Model of Bilingualism." Mathematical and Computer Modelling 18(6): 9-18.
- Bernard, C. and S. Martin (2012). "Building strategies to ensure language coexistence in presence of bilingualism." Applied Mathematics and Computation 218(17): 8825-8841.
- Chapel, L., X. Castello, et al. (2010). "Viability and Resilience of Languages in Competition." Plos One 5(1).
- Castello, X., L. Loureiro-Porto, et al. (2007). The fate of bilingualism in a model of language competition. Advancing Social Simulation: The First World Congress pp 83-94.
- El-Owaidy, H. M. and M. Ismail (2002). "A mathematical model of bilingualism." Applied Mathematics and Computation 131(2-3): 415-432.
- Fernando, C., R.-L. Valijarvi, et al. (2010). "A Model of the Mechanisms of Language Extinction and Revitalization Strategies to Save Endangered Languages." Human Biology 82(1): 47-75.
- Hanski, I., J. Alho, et al. (2000). "Estimating the parameters of survival and migration of individuals in metapopulations." Ecology 81(1): 239-251.
- Houmanfar, R., L. J. Hayes, et al. (2005). "An Analog Study of First Language Dominance and Interference over Second Language." The Analysis of verbal behavior 21: 75-98.
- Sole, R. V., B. Corominas-Murtra, et al. (2010). "Diversity, competition, extinction: the ecophysics of language change." Journal of the Royal Society Interface 7(53): 1647-1664.

**Appendix 2.** People consulted prior to preparing this submission. No inference should be drawn that those listed agree with my ideas or support this submission. The list indicates an honest attempt by the author to understand aspects of the submission.

Dr Arapera Ngaha, University of Auckland;  
Dr Peter Keegan, University of Auckland  
Ms Susan Marsh, CEO, COMET, Auckland  
Mr Timoti Brown, TPK, Wellington  
Dr Alistair Hall, Plant & Food Research, Palmerston North