

## **The world's languages in crisis: toward quantitative scenarios of future global linguistic diversity**

Thirty years ago linguist Michael Krauss predicted that, if present conditions remain unchanged, more than 50 percent of the world's linguistic diversity could vanish before the end of the 21<sup>st</sup> century. Here, we explore the future of 50 indigenous languages of Canada — all of which are threatened of extinction — by simulating the life and death of each of their speakers. The propensity of speakers to transmit their heritage language to their children and to abandon it upon growing older are estimated based on census data collected in the years 2011 and 2016. The model gives for each language future population numbers and age distributions, and it is able of estimating plausible extinction dates and the corresponding confidence intervals given constant parameters over time, thus constituting a powerful tool for exploring the future of the world's linguistic diversity. The model can also be used for establishing targets to be reached in terms of revitalization efforts, to evaluate the impact of past or ongoing efforts on survival prospects, or for establishing priorities for documentation efforts, and constitutes thus a potentially useful addition to the different tools available for assessing endangerment levels among languages.