Isaac Newton

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Annotation #8

Sutherland, William J.
2003 Parallel Extinction Risk and Global Distribution of Languages and Species. Nature 423(6937):276.

Sutherland contributed more quantitative analysis to the discussion of biolinguistics by applying internationally agreed upon criteria for classifying species extinction risk to prove that languages are at greater risk of extinction than most animal species. Sutherland found that linguistically diverse areas have correspondingly high varieties of bird and mammal populations.

By comparing total number of languages (6,809) and bird species (9,797) and then comparing them to the total number of extinct languages and bird species Sutherland concluded that the threat to languages is much greater than the threat to birds. Then comparing the threat status of birds and mammals based on population size, decline, rapid decline, range size, habitat fragmentation he inferred threats to corresponding languages.

Sutherland was able to statistically prove that linguistically diverse countries have high bird *(r=0.75, n=204, P <0.001)* and mammal diversity *(r=0.69, n=197, P,0.001).* Conversely, countries with the most endangered and extinct languages also have the more endangered and extinct birds ($r_s = 0.34, n = 200, P < 0.0001$). When expressed as a proportion of total numbers the relationship is not significant. He also found a negative correlation between population size and the proportion of languages deemed declining or elderly.

This is a valuable contribution to the discussion of biolinguistics.