

Did cannibalism play a role in the extinction of the Neanderthals?

Spanish anthropologists Jordi Agustí and Xavier Rubio-Campillo (2016) conducted a virtual experiment to study factors underlying the extinction of Neandertals.

In their experimental model, they included the location of the group with a definitive home range (where resources are collected), the size of the group, cannibalism (in order to eliminate competition and gain additional resources), and the chance that a group will fracture in two (fission).

What their computer model revealed was provocative.

From a game-theory point-of-view, cannibalism appears to be an optimal way to obtain resources. Here, it is important to distinguish between two kinds of cannibalism: *endocannibalism* and *exocannibalism*.

Endocannibalism is where a group eats its own members. This type of cannibalism can be practiced for nutritional reasons.

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Exocannibalism, in contrast, involves eating members from other groups. Exocannibalism might be practiced to eliminate competition from a group's resources (food, shelter, etc.), to frighten away other groups, and/or for symbolic or nutritional reasons.

Agustí and Rubio-Campillo found that when resources were plentiful, neither endo- nor exocannibalism would be necessary to survive. However, when resources were scarce and/or the environmental conditions were difficult (e.g., extreme cold), cannibalism may have been an optimal trait.

[This is an excerpt. Read the original post here.](#)