Why humans and Neanderthals look so different

Compared to modern humans, Neanderthals had heavy eyebrows, huge noses, and large, long faces that bulged forward. Using 3D computer models, an international team of scientists has analyzed these facial features in detail, uncovering some likely explanations for these dramatic physical differences.

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[Some] features are so distinctive that paleontologists figure they must've evolved for a special reason. New <u>research</u> published [April 3] in Proceedings of the Royal Society B suggests this is very much the case, and that Neanderthals acquired a facial structure that made life during the Ice Age more bearable.

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[One hypothesis is] Neanderthals were better at drawing in cold air, using their large nasal cavities to warm and humidify the air before it reached the lungs. This notion is a bit more controversial, as airway size may relate to an animal's respiratory demands (i.e. heavy breathing during exertion) and not climate. Lastly, and on a related note, the large airway passages may have allowed for so-called "turbo breathing," allowing Neanderthals to take some extra gulps of air while performing strenuous work, or when burning significant amounts of calories to keep the body warm.

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The nasal cavities of Neanderthals, and especially those found in modern humans, were shown to condition air more efficiently than H. heidelbergensis, which suggests both species evolved to withstand cold and dry climates.

Read full, original post: Why Neanderthals Had Faces That Were So Different From Ours