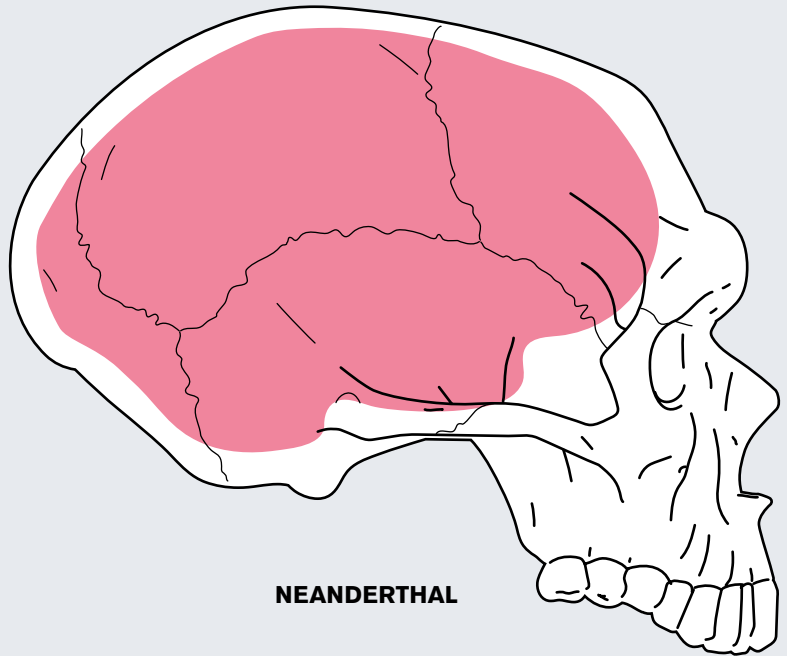
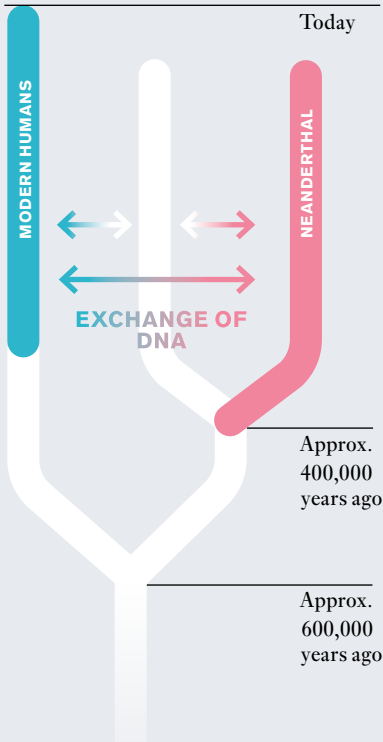


THE NEANDERTHAL IN US



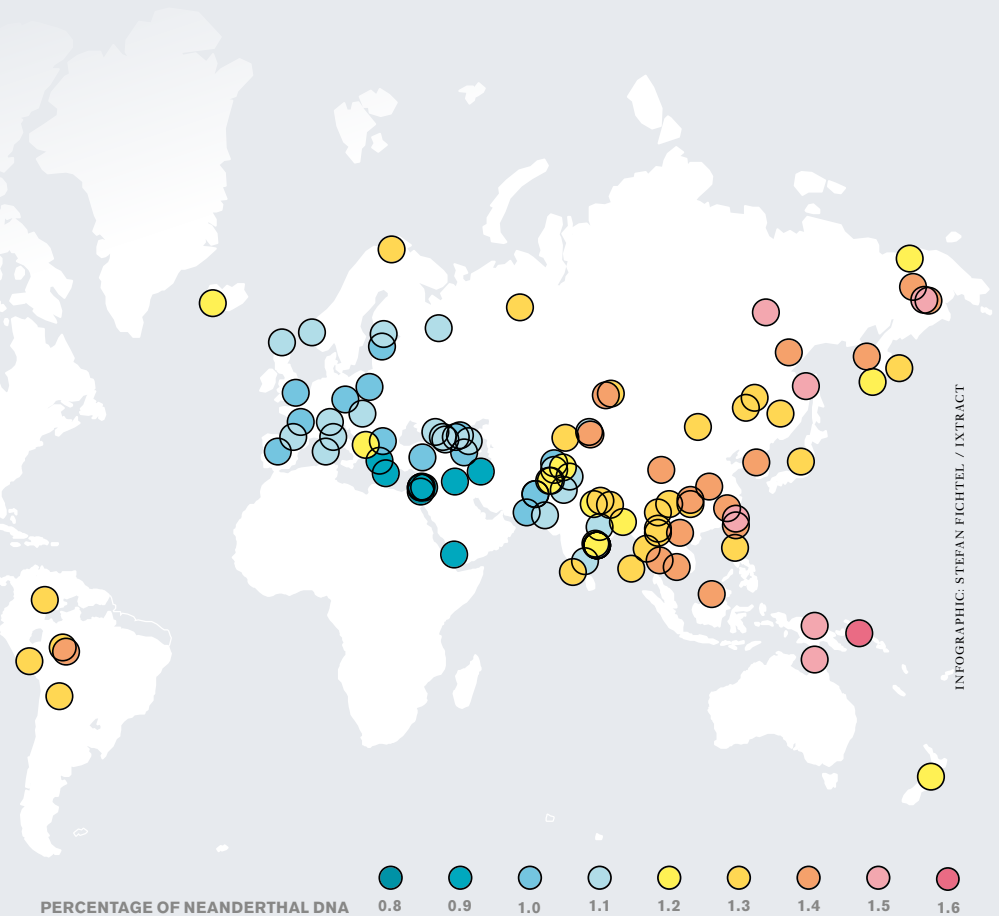
46

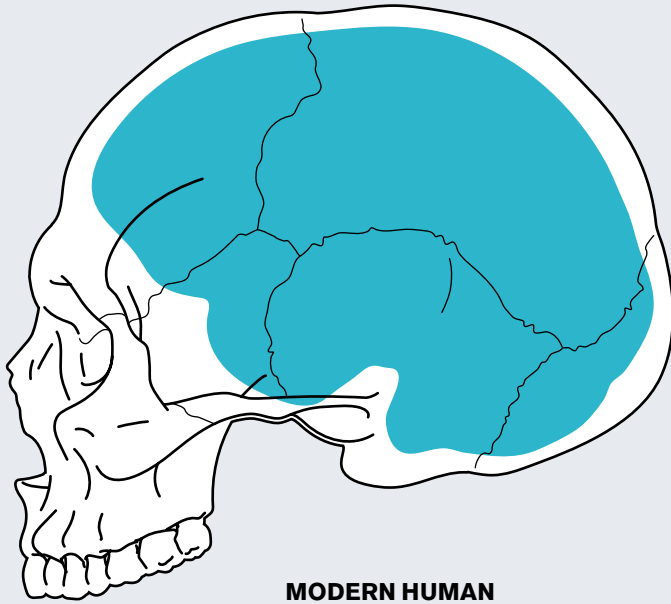
BUSH INSTEAD OF TREE

The human family tree is not so much a tree with a single trunk, but more a bush with many branches. For many thousands of years, several lines of descent existed simultaneously, which intermingled several times.

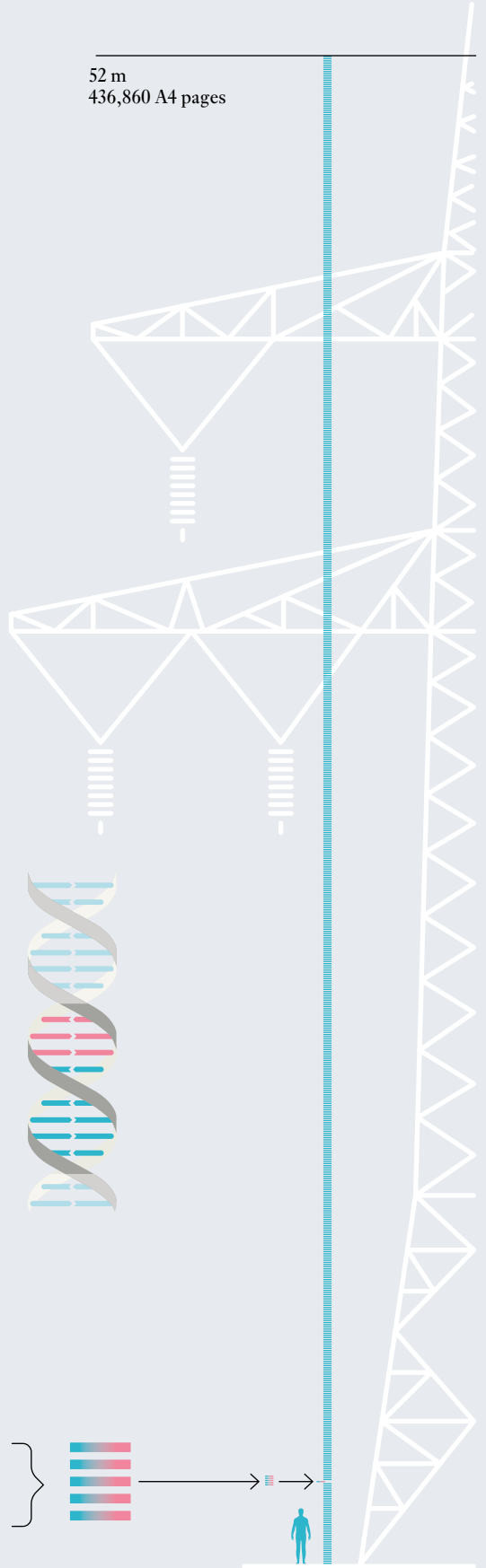
TRACES OF STONE-AGE ENCOUNTERS

Since Neanderthals never lived in Africa, they did not come into contact with the modern humans who emerged in Africa. It was not until after leaving the African continent that modern humans encountered Neanderthals in the Middle East and Europe and reproduce with them. Varying degrees of genetic traces from such encounters can still be found today in the genome of people outside Africa.



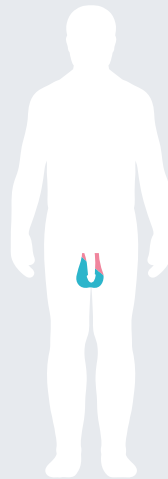


52 m
436,860 A4 pages



THE LEGACY OF NEANDERTHALS

Neanderthals and modern humans exchanged genetic material: on average, people living today carry between one and two percent Neanderthal DNA. To date, 40 percent of the entire Neanderthal genome has survived in modern humans. Neanderthal genes influence the development and function of many different organs. The testes are an exception, where the Neanderthal versions of genes are less active.



EXTRINSIC LETTERS IN THE GENETIC CODE

The genetic code of modern humans consists of 3.2 billion letters. This corresponds to 436,860 A4 pages in 10-point writing. Stacked on top of each other, this would amount to 52 meters, about the height of a utility pole. The mixing with Neanderthals has led to the alteration of 31,000 letters in the human genome. Combined on A4 pages, this stack would be 0.6 millimeters high.

