

COMMENTARY: IODINE AND NEANDERTALS

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Pity the poor Neandertals. For they, alone among all extinct hominids known—some twenty species by now—have regularly been singled out for “explanation” as the expression of pathology of some kind. Partly this is an artifact of history, for the first Neandertal fossil was discovered in 1856, three years before Charles Darwin published his great work, *On the Origin of Species*. In those pre-evolutionary days only two possible reasons could be imagined for the “so human yet so different” morphology of the large-brained but low-skulled hominid whose remains had been unearthed in a limestone cave in Germany’s Neander Valley. One was that the skeleton had belonged to a member of a “brutish” and “primitive” race of humans that had relatively recently vanished from Europe (Huxley 1863). The other was that the Neandertaler was an unusual individual of *Homo sapiens* whose peculiarities had been due to disease or dietary deficiency. The most famous such notion was Rudolf Virchow’s claim that the individual had suffered from rickets (caused, as we now know, by insufficiency of vitamin D) (1872).

With the advent of evolutionary thought the possibility arose that the Neandertals, known before the end of the first decade of the twentieth century from relatively abundant and geographically diverse material, actually represented their own kind of hominid. Related to *Homo sapiens* but distinct from it, this species had first been named *Homo neanderthalensis* by William King in 1864; and in the years preceding World War II King’s nomenclature became firmly established. Although it became fashionable in postwar times to return to Thomas Huxley’s view of the Neandertals as no more than a bizarre form of *Homo sapiens*, over the last decade or so the pendulum has appropriately begun to swing back toward the notion that Neandertals do indeed merit specific recognition in their own right (Tattersall 1998).

Nonetheless, the notion that Neandertals were somehow pathological has refused to go away. In 1970, for example, Francis Ivanhoe resuscitated the notion that Neandertals were vitamin D-deficient in an article entitled, “Was Virchow Right about Neandertal?” And now Jerome Dobson has claimed in the pages of this journal that the distinctive morphology of Neandertals may have been due to dietary iodine deficiencies, leading to cretinism (1998). It thus seems a rather cruel irony that in large part the Neandertals owe their unfairly “brutish” popular image to a failure to recognize pathology where it actually existed. For the stereotype of the slouching, bent-kneed Neandertal was born largely of Marcellin Boule’s portrait of the species (1911–1913). This portrait was based on an aged male from the French site of La Chapelle-aux-Saints, whose remains show extensive degenerative arthritic changes throughout the skeleton.

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