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Our Hidden History

Day by day, the ability to analyze genomes -- sequences of DNA -- grows more and more sophisticated. Scientists are able to examine the biological past in finer detail and with greater accuracy. The results will almost certainly transform what we know about how species are interrelated, and that, of course, includes us.

Consider, for instance, a new analysis of the genetic links between early humans and chimpanzees by a group of scientists at the Broad Institute in Cambridge, Mass. Their hypothesis, using new analytical techniques, is that the two species diverged more recently than previous estimates, which were based solely on fossil evidence. Their results suggest further that the ancestors of humans and chimpanzees might have diverged but then hybridized to produce the early lineage from which modern humans eventually developed.

This really lets the genie out of the bottle. Even after Darwin, the popular vision of how humans became humans has always had something platonic about it. The details of our descent have been vague enough to implicitly reinforce what one geneticist, commenting on this new finding, called "a more Victorian view of our genome."

The thought that we might be descended from the mating of ancestors of separate species -- that in our origins we are hybrids -- is a bold one, and a reminder, once again, of what we always forget: that humans are animals too, closely related to all of life on earth. It's also a reminder how hard it is to do away with Victorian views.

If these results hold up, we will have some reimagining to do, not only of our own history but of the processes of speciation as well. And even if this particular analysis of our family tree doesn't survive, there is certainly more in store as genomic research becomes increasingly refined. We will need to learn a certain agnosticism about the nature of our origins, a willingness to face up to the best analysis of who we really are. This should be an invigorating task.