

## CARTOGRAMS

# OUT OF AFRICA

#### **BY BENJAMIN HENNIG**

It took a long time for humankind to move out of Africa and inhabit the rest of the planet. Archaeological research and genetic studies based on fossils found in plains of east Africa suggest that modern humans evolved nearly 200,000 years ago. Palaeontological findings and genetic footprints are also the basis for current theories of how modern humans (Homo sapiens) started spreading around the globe. Such models and timings keep changing, with new discoveries being made on a fairly regular basis. The above map illustrates the migration of humanity across the Earth with all movement originating in Africa and with the estimated dates of arrival shown at key directions and locations. The dates are based on a number of scientifically validated estimates. They build upon the 'Out of Africa' model that assumes the spread of modern humans from their African origins across the globe, superseding any other human species that had lived in parts of the planet before (and sometimes as) Homo sapiens arrived.

The human migration patterns are drawn on top of a gridded population cartogram. This base map reflects the population density of humanity today, indicating how humanity's journey relates to today's distinct population distribution. That density, with most humans now living in Africa, India and China, has been long established, and so this base map is similar to one showing area in proportion to all humans that have ever lived. In such a map, Europe would be a little smaller, and Australia and the Americas would be drawn even smaller than they are shown here.

The spatial evolution of humanity across Earth following genetic footprints started around 100,000 years ago – approximately 125,000 to 75,000 Before Current Era (BCE) – and took as long as into the year 1000 Current Era (CE) to reach the remotest parts of Oceania and possibly also the definite arrival on Madagascar. Environmental changes kept humanity on the move and ever expanding. This led to geography leaving a footprint on our DNA as humans changed and adapted slightly while they shaped and were shaped by their environments. This allows us today to compile this comprehensive picture of human migration. And yet, Homo sapiens managed to remain the only extant human species on the planet, leaving all other species of the genus Homo behind.

This global map draws a picture of what we know today about who we all really are, where we come from and how long it took us to get to where we are now. The history of humanity is also the story of the emergence of the current most influential species on the planet. The picture is quite certainly not a conclusive one, but based on a model supported by most scientists that see sufficient evidence for a common origin of modern humanity. Some dates might be adjusted in future, and more detail will emerge. More importantly, this is not the end of human migration as today's environmental and socio-economic challenges keep the patterns of where humanity spreads constantly changing.

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### LANGUAGE

# CHARACTER BUILDING

Canada's Inuit population is beginning a year-long project to amalgamate its varying written characters in order to create a common alphabet

It may be an exaggeration to believe the claims made by anthropological linguists Franz Boas and Benjamin Lee Whorf that Inuits have hundreds of words for snow. What is clear is that it has not been helpful for Canada's 60,000-strong Inuit population to be unable to fully communicate in Inuktitut, the Inuit language, thanks to their varying dialects and distinct written characters.

'Currently there are nine different forms of Roman orthography and four syllabic systems for one language that possesses 12 main dialects,' explains Natan Obed, president of Inuit Tapiriit Kanatami, the national organisation representing Canada's Inuits. It has been costly in terms of producing, publishing and distributing common Inuit language materials.'

Therefore, the Atausiq Inuktitut Task Group, a group comprising Inuit Linguists and language experts from each Inuit region, is currently gathering the existing characters used across the four Inuit regions of Canada (pictured below), in order to begin the arduous process of creating a single alphabet for Inuktitut, with common grammar, spelling and terminology.

'A unified Inuit writing system will improve mobility and allow consistency in the education system for students and teachers moving from one region to another,' explains Obed. 'It will strengthen the Inuit language, help to improve literacy and education across Inuit Nunangat, and strengthen Inuit unity and culture.'

Obed insists that the process won't compromise or replace any regional or community dialects, and that each region will be able to continue to communicate in their respective dialects using the new common symbols. Writing systems are tools to communicate language - they are not the language itself, 'he says. 'This will enhance learning and retention of the Inuit language.'

