New research points to earlier human migration out of Africa, 125,000 years ago

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For decades, the consensus scientific opinion has held that anatomically modern humans first migrated out of Africa some 60,000 years ago, heading north into the eastern Mediterranean region and then on to Europe and Asia.

But new research released Thursday paints a very different picture. Similarly identifiable humans left Africa as early as 125,000 years ago, it says, and wandered east into the Arabian peninsula, parts of which were then wet and lush.

From there, the researchers report in a paper in the journal Science, the people who may well have been our true ancestors later headed north and on into Eurasia.

Hans-Peter Uerpmann, of Germany's University of Tubingin, said that the chiseled stone tools found by his team at Jebel Faya in the United Arab Emirates were very similar to those made at roughly the same time by early humans in East Africa.

The very early dating was done with new light-based technology that the research team said yields more precise results than in the past.

"These were our ancestors," Uerpmann said in a teleconference. "I don't see there's doubt about that."

The findings, based on a dig that went on from 2004 to 2010, are at odds with results from DNA testing and other archeological finds that put the "out of Africa" migrations much later. Some excerpts in the field described the finding as very interesting but a hypothesis that needs more research.

The southern route out of East Africa proposed by the new research is also significantly different from the northern route across the Nile River and into the Sinai that has been traditionally accepted as most likely.

Addressing those very different scenarios, Uerpmann said that their archeological findings offer a new interpretation and that the advanced method of determining the age of the tools gives them great confidence in their results.

Team member Anthony Marks of Southern Methodist University, an anthropologist, said the tools were made in ways consistent with the 125,000-years-ago time period and therefore raise the inevitable question of how they got to the area near the Persian Gulf.
"Either these people came out of East Africa or they came from nowhere," he said.

The dig is being conducted about 40 miles from the Straits of Hormuz, the entry point into the Persian Gulf. The tools were found in a small limestone mountain range in the UAE's Sharjah province.

While a broad consensus based on fossil finds exists that the earliest anatomically developed humans evolved in eastern Africa, the path of their spread across the globe has proven far more difficult to follow. The new research from Jebel Faya offers clues, but the team said the region's soil and climate history makes it very unlikely that any human fossils will be found, perhaps closing the door to any definitive conclusions.

In their paper, the researchers report that the migration likely happened between Ice Age periods, when the crossing at the southern end of the Red Sea was narrow because glaciers had locked up water worldwide. They also point to evidence that the Arabian peninsula at that time was about to become significantly wetter than today.

Another possible explanation for the presence of early toolmakers in Arabia is that they were actually the same pre-modern stock as the Neanderthals. These earlier and somewhat less developed humans are believed to have left Africa some 200,000 years ago and spread across Europe and into Central Asia.

But Uerpmann dismissed the possibility that Neanderthal-like peoples made the tools because of currently understood migration patterns. The Neanderthals, he said, first arrived in Europe and then migrated across southern Russia to Central Asia. To make the needed turn south to arrive at the Arabian Peninsula was highly unlikely, he said, because of mountains and deserts that would have to be crossed.

He also said that while the artifacts were consistent with the tools made by humans in Africa at the time, they were not similar to those made by modern humans who arrived in the Middle East thousands of years later.

Marks said that an earlier "out of Africa" migration made sense in relation to the appearance of modern humans in places such as Australia, where the earliest human habitation has been dated to as far back as 50,000 years ago.

To make it there from Africa under the generally accepted theory - with migration beginning at 60,000 years ago - would mean that people "would have to be running all the way," Marks said. An earlier migration would have allowed for time to inhabit such far-away places, he said.