OAHPERD, Columbus, OH

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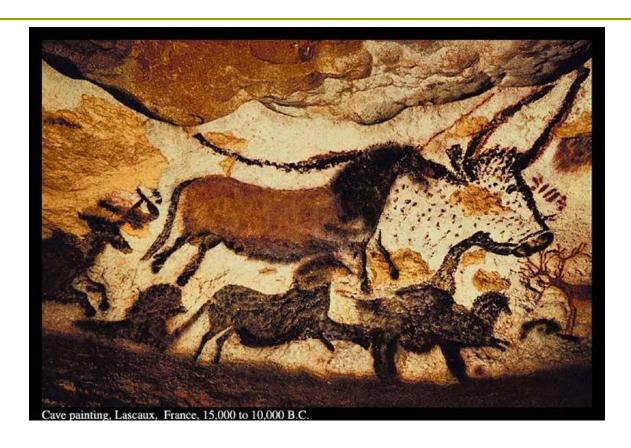
The Language and Effects of Music on Health and Learning

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Anthropological Perspective

- For years, scientists have known of a handful of objects (artifacts) that suggest that humans were engaging in modern practices long before Homo sapiens first painted a cave wall in France. They include:
- 400,000 year old wooden throwing spears from Schoningen in Germany;
- 233,000 year old putative figurine from the site of Berekhat Ram in Israel;
- 195,000 year old fossils of Homo Sapien remains in Omo Kibish, Ethiopia



QuickTime™ and a decompressor

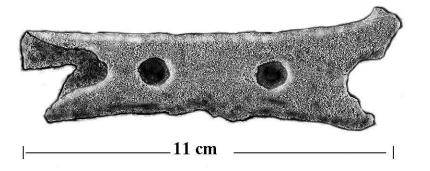
75,000 year old shell beads from Blombos Cave in South Africa shell bears a hole in the same...possibly collected and perforated by humans nearly 75,000 years ago.



- Earliest work of art known = carved sculpture with the essence of a horse
- Found in Vogel herd, Germany
- Carved from ivory more than 32,000 years ago

QuickTime™ and a decompressor are needed to see this picture.

- Oldest musical instrument
- Bone flute from France
- About 32,000 years ago





- Oldest evidence of painting in Namibia, Africa
- 28,000 years ago



Linguistic Development

- Somewhere in history, the notion of associating words with objects and ideas developed...
- A transition from a nonlinguistic lifestyle to a linguistic one.
- Language is, indeed, the ultimate symbolic mental function...For words... function as the units of human thought..." (p. 79)

Historical Pattern

- Early indications of symbol use include jewelry and body paint
- Key component of human behavior

Historical Comparison

- "Comparison of the head and neck of modern human and a (reconstructed) Neanderthal shows the differences in the structure of the vocal tract. The much longer pharynx in the modern human is what makes possible the full range of sounds demanded by articulate speech." p. 72
- "In modern humans, the larynx lies low in the neck, lengthening the pharynx and increasing the potential for sound modulation."

