

Gurche Reconstructions

- Narrator: 00:02 For the Hall of Human Origins at the Smithsonian's Natural History Museum, paleo artist John Gurche sculpted a series of hominids or early humans. Gurche and the Smithsonian curators chose poses that would reflect a signature characteristic of each species. A homo erectus female is sculpted in mid-stride carrying a dead antelope over her shoulder. A homo heidelbergensis male squats next to an open fire, holding out a piece of meat. A Neanderthal female holds an animal hide in her teeth as she makes a piece of clothing. **(00:46)** Gurche is now working on a model of Paranthropus boisei. As always, he starts with a fossil bone.
- John Gurche: 00:59 Right here, this collection of things that look like granola, this is actually a partial skeleton from one individual. And believe it or not, that has a lot of information contained in it that tells us something about the proportions of these critters. So for example, this flange that you see on this humerus or upper arm bone speaks volumes about the kind of musculature that this individual had on its arm, because the muscle attachment sites are places where the muscles have stimulated bone growth and caused a rippling of the bone. So this flange, for example, tells you that a couple of the muscles of the arm were very well-developed and those are these two right here, and you can see I've given them quite a bit of development.
- Narrator: 01:45 The skull reveals a central feature of Paranthropus boisei.
- John Gurche: 01:49 And basically the species is a specialist in chewing tough vegetable food. And they have massive molars, four times the size of ours. And they have bony crests to support very large chewing muscles on the skull. So we decided to have this individual pulling a tough root out of the ground. The contrast that's made between this individual and our hominids that are in our own ancestry living at the same time, are sort of the path of the chewing machine and the path of the thinking machine, and this is the chewing machine.

[Return to the web page for this video, "Gurche Reconstructions "](#)