



ex nihilo



On the footsteps of the first humans

A
Cédric Robion Film

Produced by
Blanche Guichou

In collaboration with
France 5

90'

How did humankind emerge? At Kromdraai in South Africa, the palaeoanthropologist José Braga has unearthed the remains of two children- the oldest ever found. They date from 2.5 million years ago, and one is human, the other a *Paranthropus* - a member of the hominin genus most closely related to humans. These finds are the starting-point for ground-breaking research that may at last reveal the origins of our genus. Cédric Robion proposes to recount this fascinating archaeological investigation in an exciting, content-rich documentary aimed at a very wide audience.



We have spent the last four years filming the progress of the excavation and its most important finds. We have a unique access to this promising archaeological investigation. Professor Braga's research will provide the main narrative thread. Cédric Robion has built a strong confident link with him and other scientifics involved in the project. Field work looking for fossils and other clues will be followed up by scenes in the laboratory. Diagrams and scientific computer animations will enable us to present ground-breaking scientific concepts in a form that is easy for viewers to grasp. We will move around within 3D tableaux in sequence shot, using framing and movement to achieve maximum dramatic. That allow us to see figures or animals from close to and take in the details of the unprecedentedly realistic reconstructions. The animated drama scenes will be scripted on the basis of the archaeologists' factual discoveries. We want to combine a high degree of factual accuracy with a powerful storyline so as to convey a strong sense of kinship with our first human ancestors.



Kromdraai is the only place in the world where fossils of archaic Humans and *Paranthropus* have been found together, in an astonishingly good state of preservation, just above a level containing *Australopithecus* fossils - the complete *Australopithecus* / *Paranthropus* / Human evolutionary sequence at a single site! As geomorphologist Laurent Bruxelles explains it, a network of underground caverns acted as a fossil trap. The cavities were gradually filled by layer upon layer of sediments and animals that made

their way down from the surface. Each layer contains a record of a specific period, like shelves in a library. **A preliminary dig outside the site's historical perimeter uncovered a spectacular fossil - the jawbone of a human child.** Could it have belonged to a "First Human"? If so, it would be the best-preserved relic of the species ever found and might hold the key to its elusive defining characteristics.

Fossils this ancient cannot be dated directly from DNA or carbon 14. This

delicate task has been entrusted to taphonomist Jean-Baptiste Fourvel. He specializes in identifying fossilized animal species and working out their connection with their surroundings. Fourvel found a fang from a sabre-toothed tiger, a prehistoric species that became extinct two million years ago. So the fossil jawbone is at least two million years old - a staggering age: **it is the oldest human child ever found - and the most complete fossil of a "First Human".**





To identify traits that are unique to humans, the palaeoanthropologist must be able to compare between the two genera. He found exactly what he was looking for - a "First *Paranthropus*" jawbone belonging to an immature specimen, the exact equivalent of the jawbone of the human child. **A find that exploded the prevailing linear view of evolution by showing that several genera of hominins could exist side by side.**

For the first time, he holds all the keys to the transition from *Australopithecus* to *Paranthropus* and *Homo*. The entire way we think about our earliest ancestors is about to be revolutionized.

In milk teeth, the Synchrotron can be used to analyse the striae to determine how old the individual was and to identify certain life events. Incredible as it seems, new technologies have made it possible to compare the development and everyday lives of *Paranthropus* and *Homo* children over two million years ago.

The results show that the *Homo* child had a significantly longer developmental period than the *Paranthropus* child. A longer childhood enabled the *Homo* genus to develop a larger brain. Nonetheless, allowing babies to remain vulnerable and totally dependent on their parents for longer

represented was a risky adaptation strategy. It implies a complex social organization, in which resources and probably knowledge are shared. The care devoted to young members of a colony is the missing key factor needed to define the *Homo* genus and explain the changes that occurred in its biology during this period.

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Blanche Guichou produces both documentaries and feature films. She has worked in television for the last 25 years and has been involved in the production of over 50 television documentaries.

For the last 20 years, she has concentrated on producing scientific documentaries that use drama, CGA and graphic treatments of archives and cutting-edge imaging technology, starting in 1998 with *A Flag, What For?* by Axel Clévenot and Patrick Cabouat (16x13 min, La Cinquieme), then *Wanderers of the Sky* by Véronique Ataly, Jean-Pierre Luminet and Mathias Ledoux in 1999 (52 min, La Sept Arte).

Her science documentaries include *Atome Sweet Home* by Vincent Gaullier and Raphaël Girardot (52 min, ARTE, 2015), *There's Something about Species* by Denis Van Waerebeke, in coproduction with France 5, Arte, NHK and RTBF (52 min & 90 min, 2008). She has produced several documentaries on archaeology, including Cedric Robion's films and *Alesia* by Christian and Gilles Boustani (20 min, 2011).

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He has been making archaeology documentaries for the past 10 years. His background in engineering enables him to understand complex research and present it in a way that is intelligible to a wide audience. He makes creative use of sophisticated technological tools to give visual form to what cannot be seen. He works alongside archaeologists, immersing himself in their day-to-day reality to recreate the intense atmosphere of field expeditions and allow viewers to share the excitement of making scientific discoveries while learning about little-known civilizations.

2018: *Oman, the Archaeological Key to Arabia* (52 min) / Planète +

2016: *In Search of the Secret Tomb – Genghis Khan aka The Tomb of Genghis Khan, The Secret Revealed* (90 min) / France 5

Grand Prix International Archaeological Film Festival of the Bidasoa (Spain), 2017; Best Scientific Film Lumexplore (Festival International du film d'exploration scientifique), La Ciotat (France), 2017; Audience Award International Festival of Archaeological Film, Rovereto (Italy), 2017; Jury Prize Rencontres d'Archéologie de la Narbonnaise Documentary Festival, Narbonne (France), 2017.

2013: *Warlords of the Frozen Steppes aka In the Frozen Tomb of Mongolia* (52 min) / Arte

Grand Prix International Archaeological Film Festival of the Bidasoa 2014.