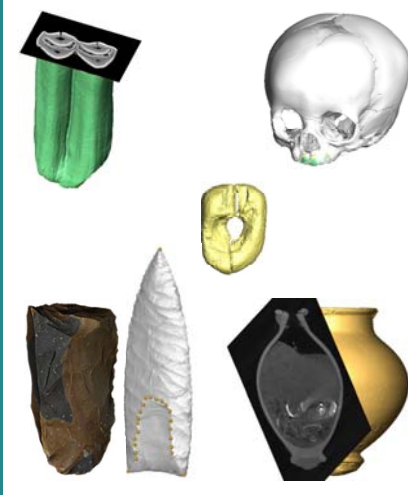


Graduate Program ARCHEO
3D Imaging and Geometric Morphometrics

3D imaging in Archaeological sciences

Priscilla Bayle

Day 1 (23/06/2022)



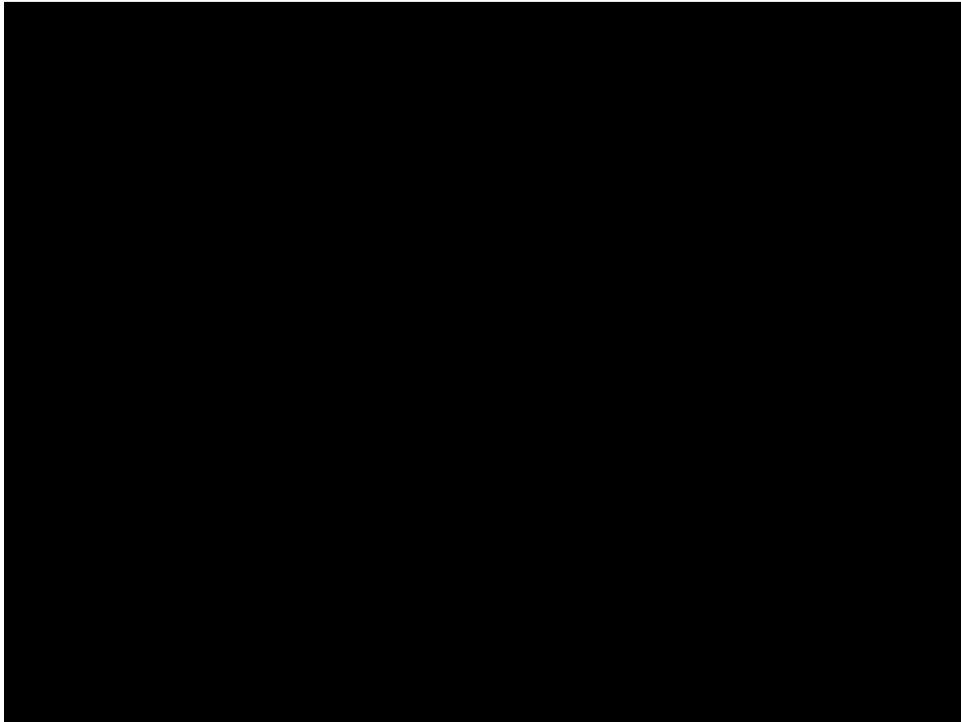
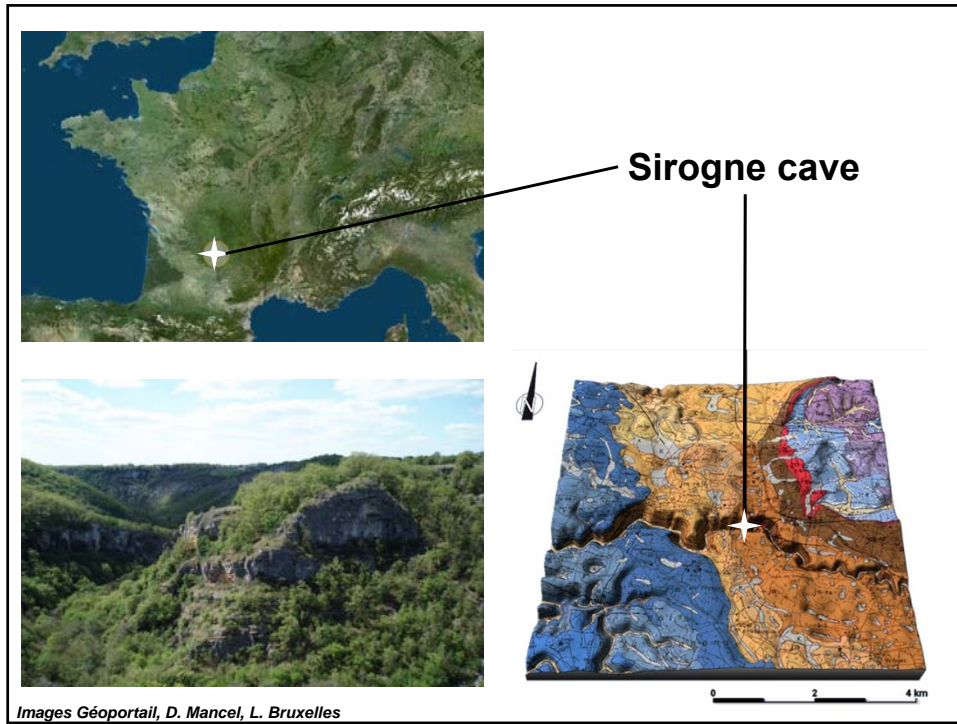
3D Imaging and
Morphometrics
Graduate Program

université
BORDEAUX

pacea

>128 000 years ago in Rocamadour





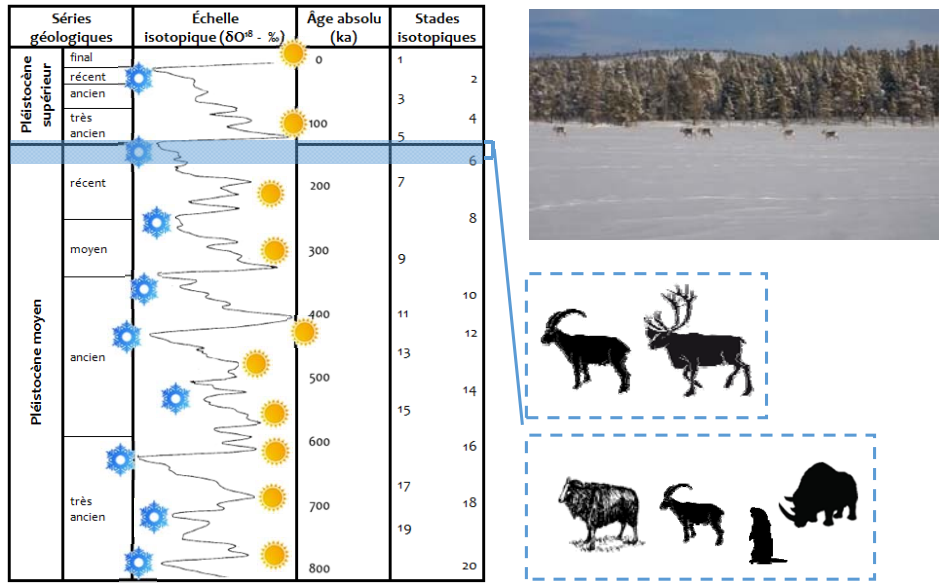
Sirogne 2018



Grotte Sirogne



A cold atmosphere characteristic of “Riss III”



B. Albouy, modified from Bassinot 1994

89 remains, at least 10 Neandertal individuals

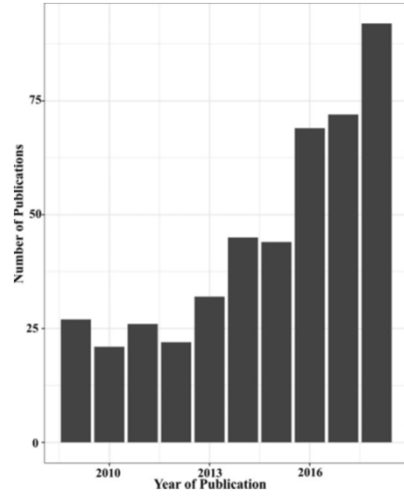
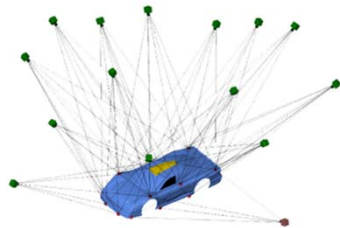


Images not to scale



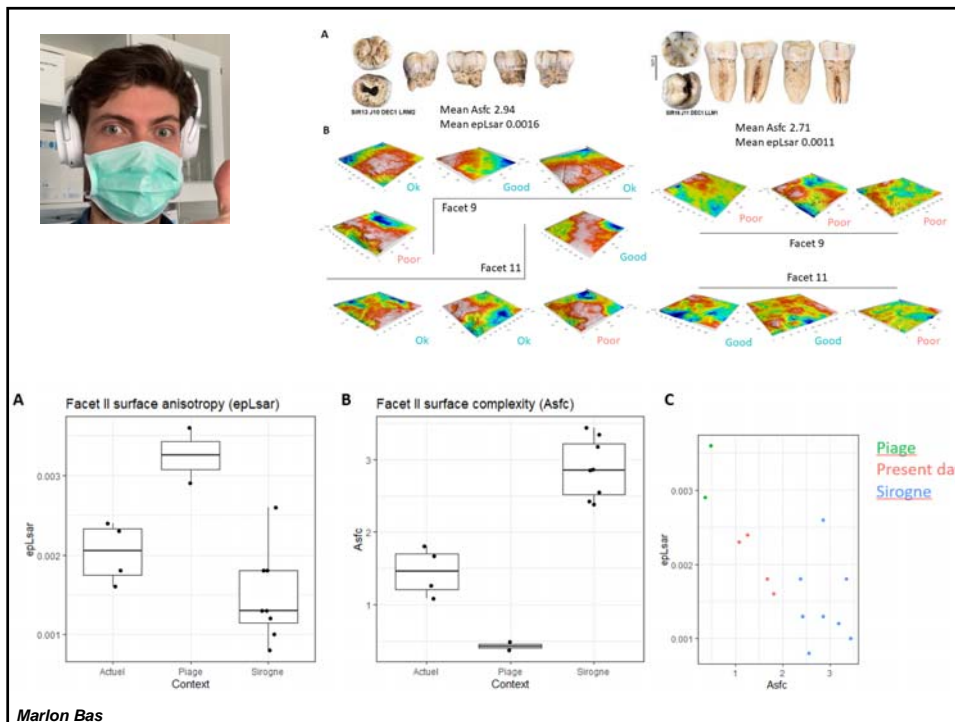
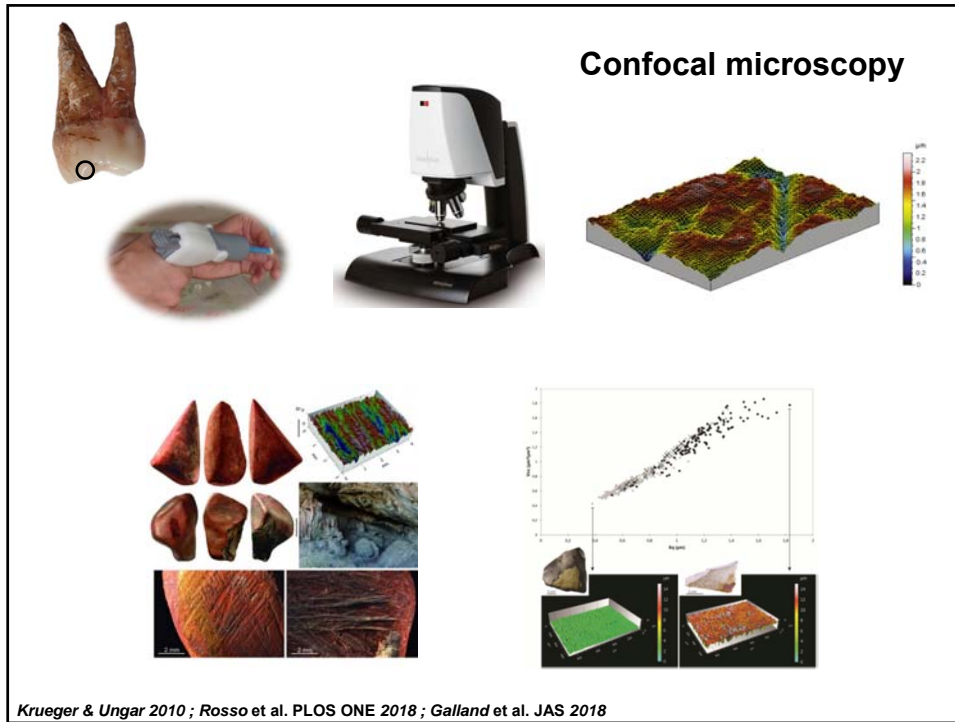
Agora 3D

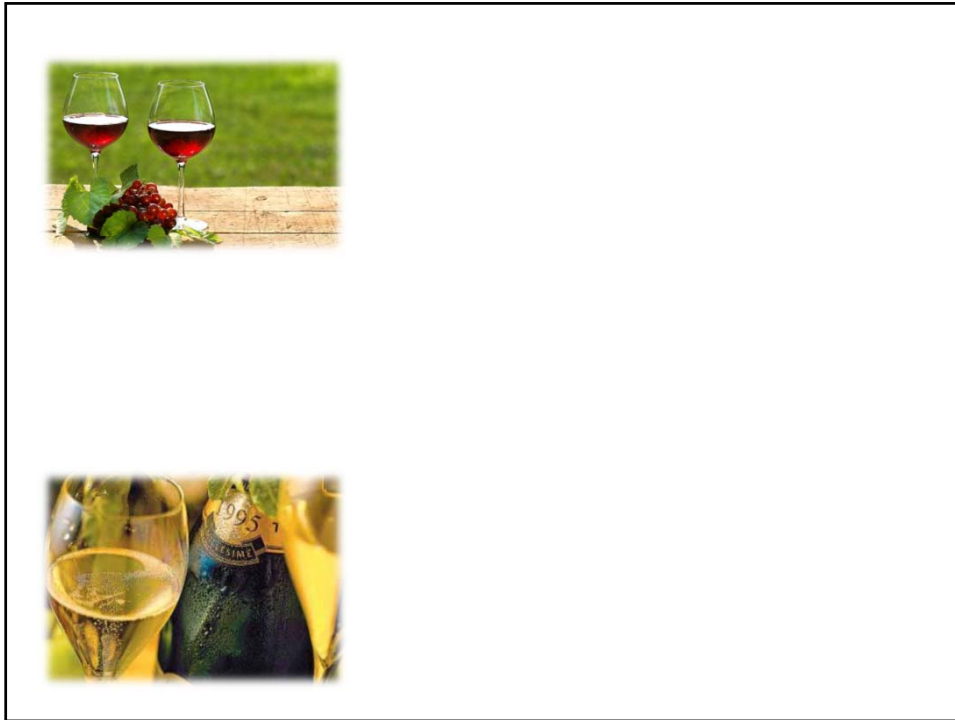
The digital revolution to come: Photogrammetry in archaeological practice

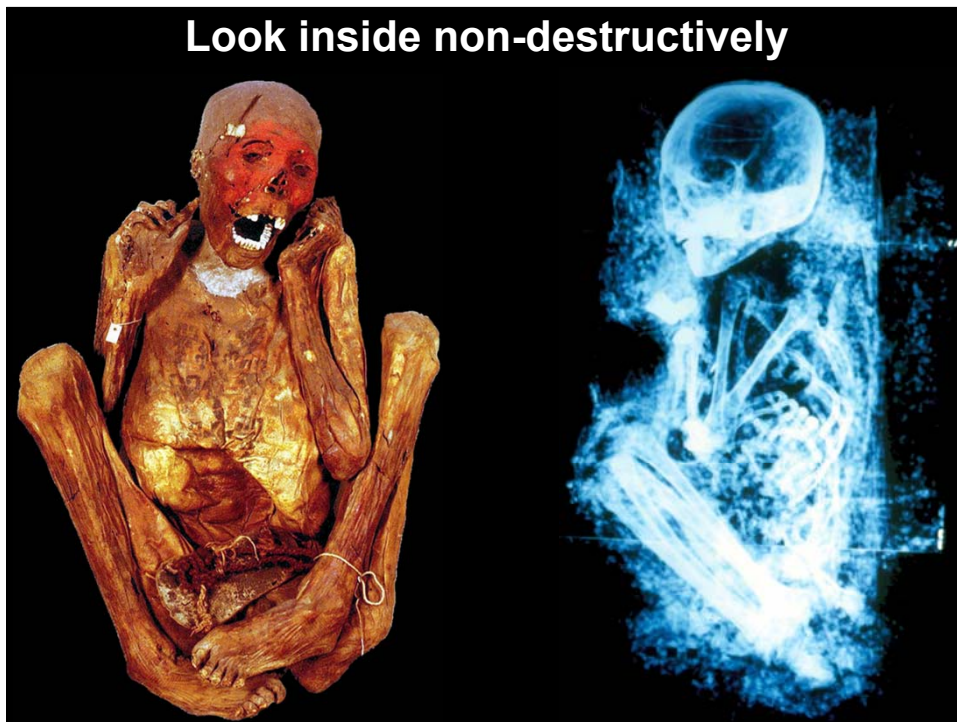
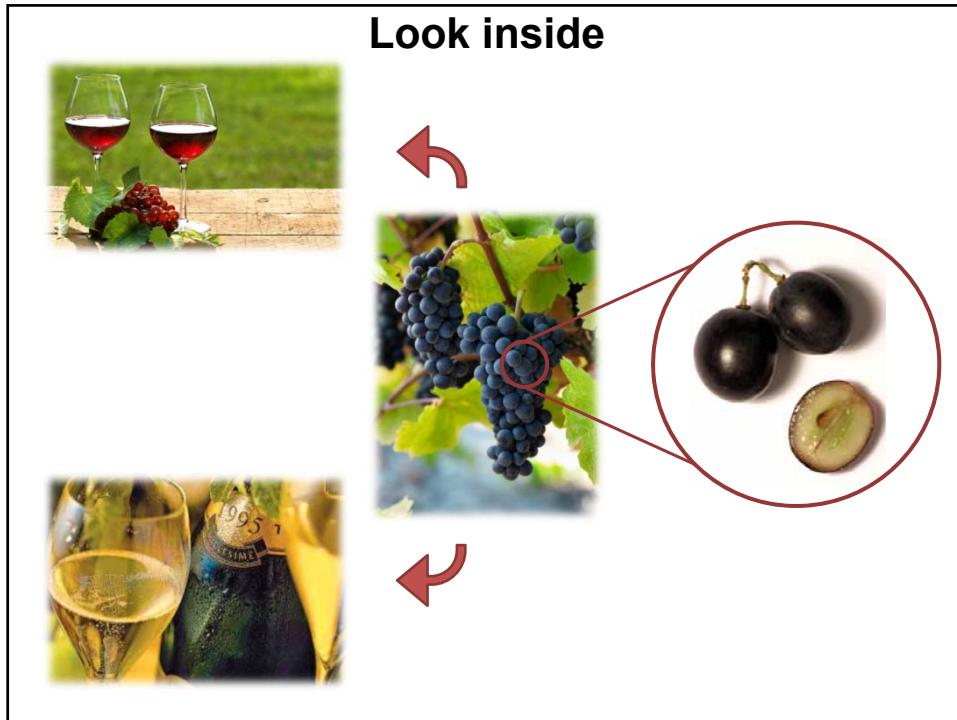


Magnani et al. American Antiquity 2020









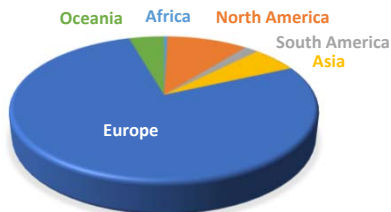
Teeth interest many specialists



17th International Symposium on Dental Morphology (ISDM) Bordeaux 4-7 October 2017

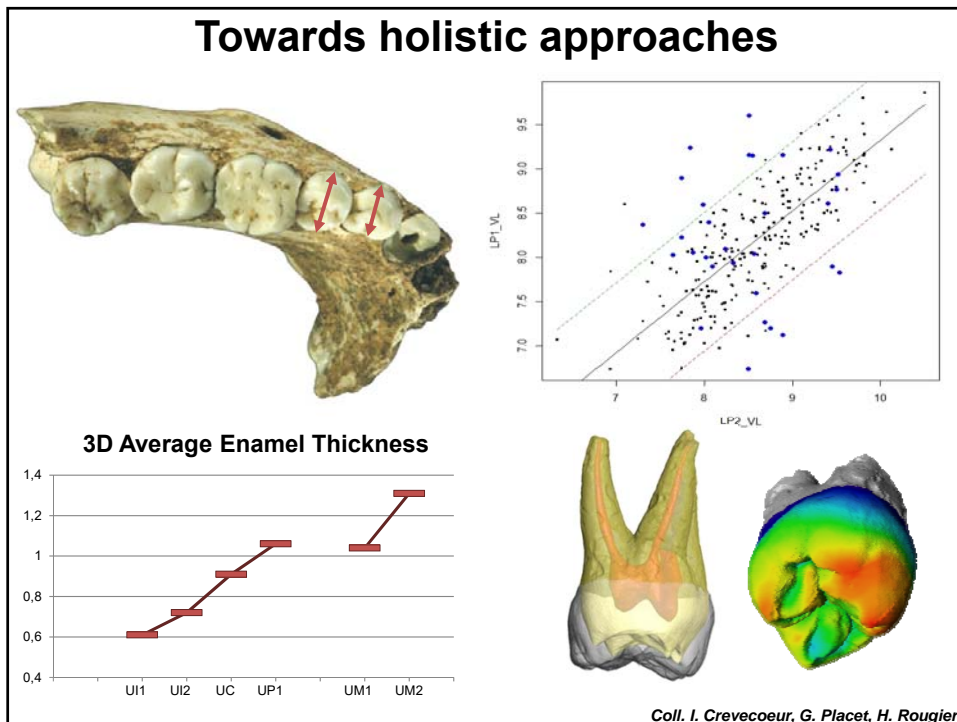
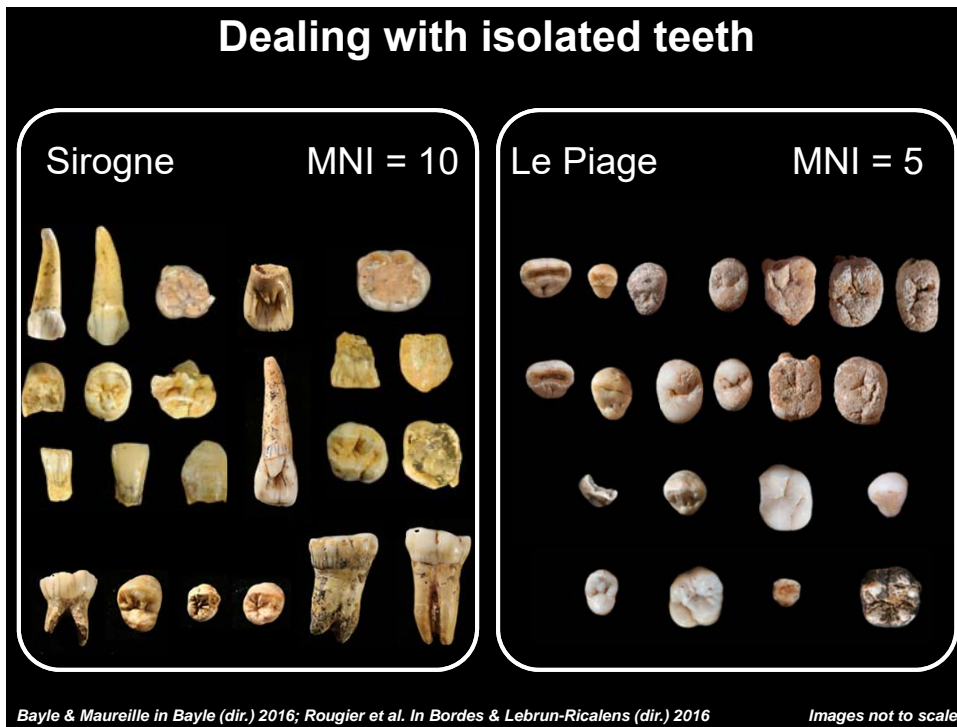


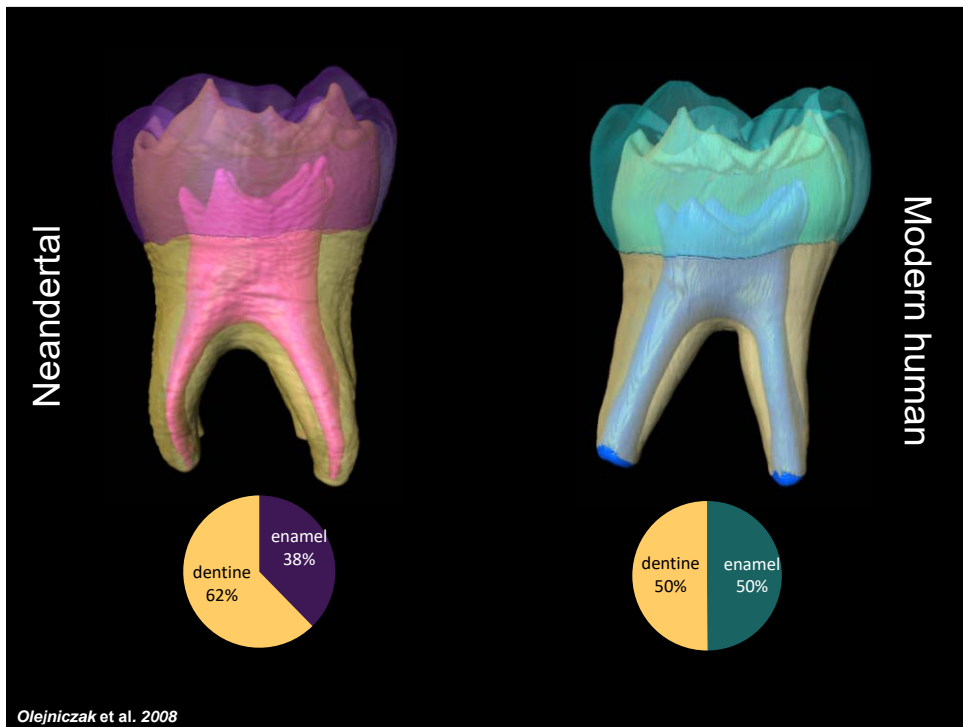
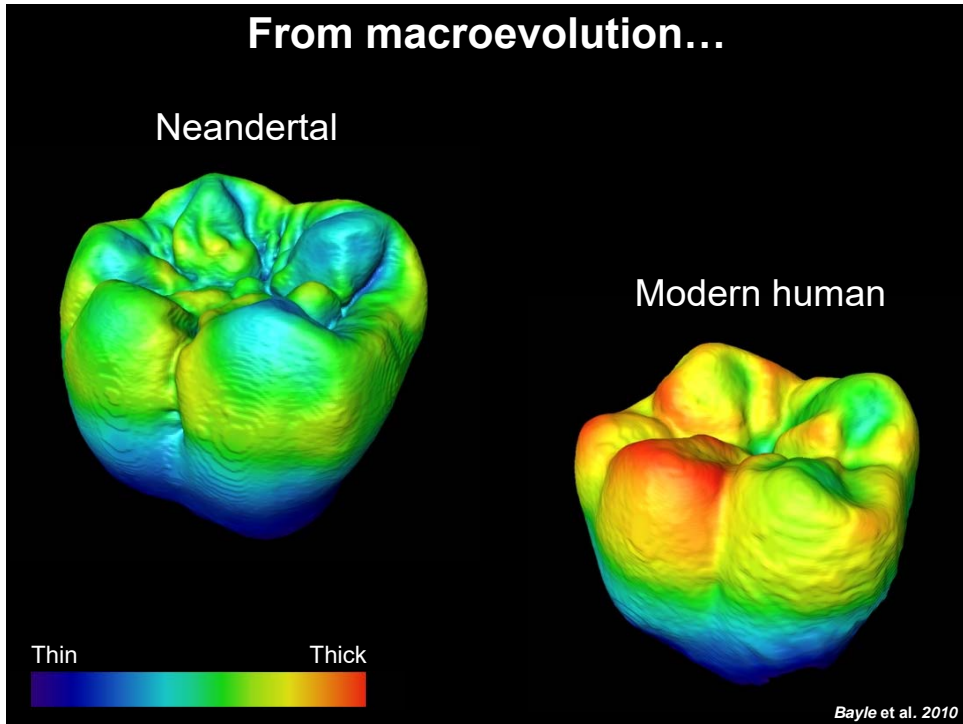
225 participants from 27 countries
 8 scientific sessions
 Workshop in PACEA histology lab
 Excursion in the Prehistoric sites and decorated caves of the Vézère valley

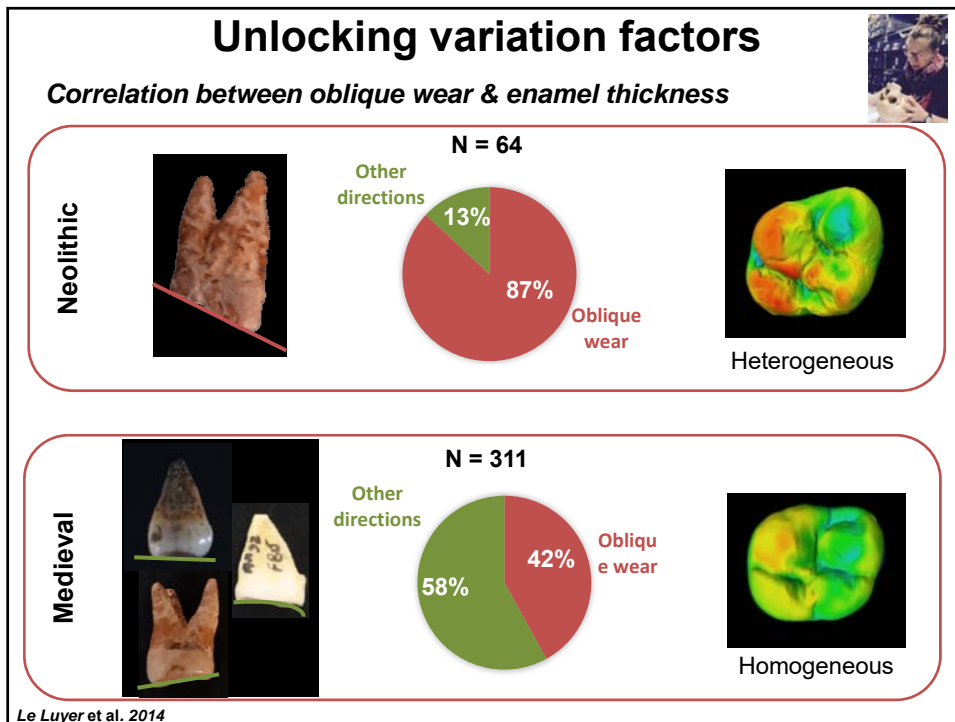
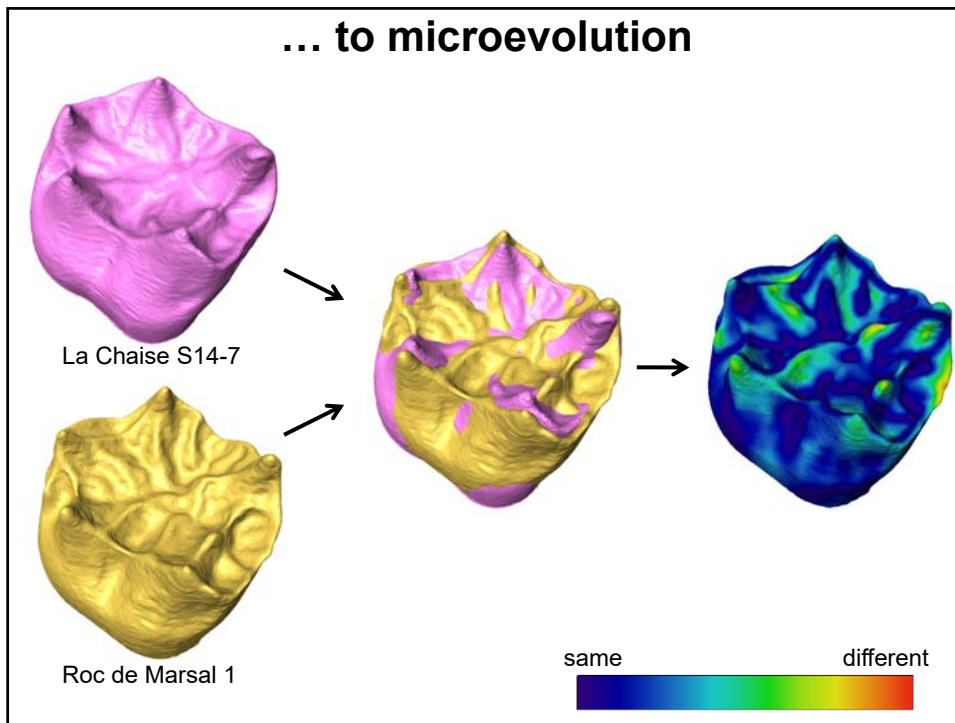


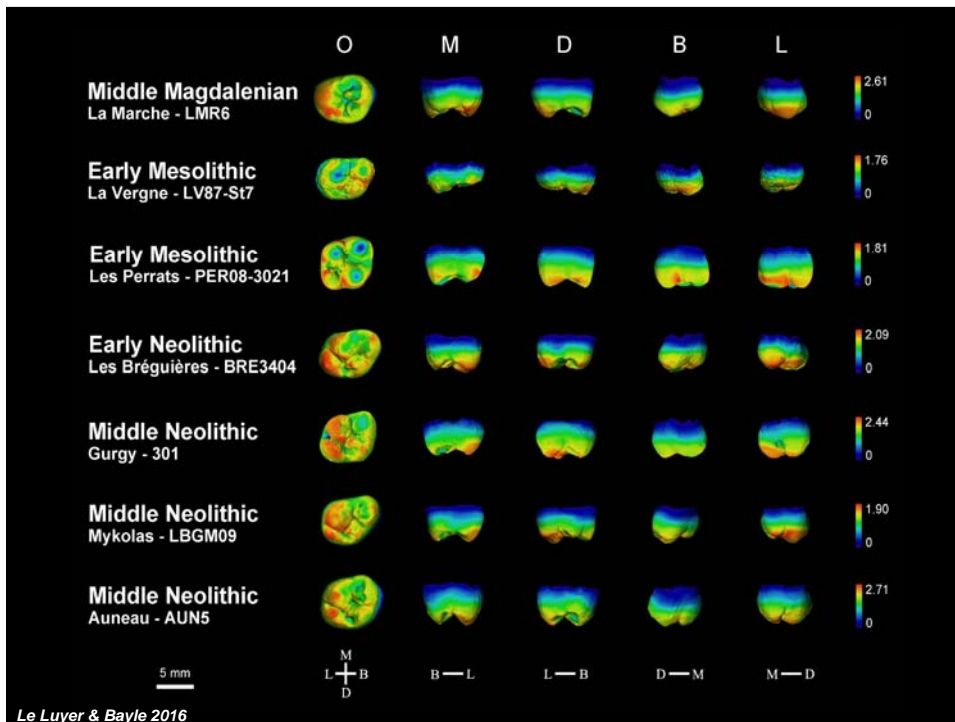
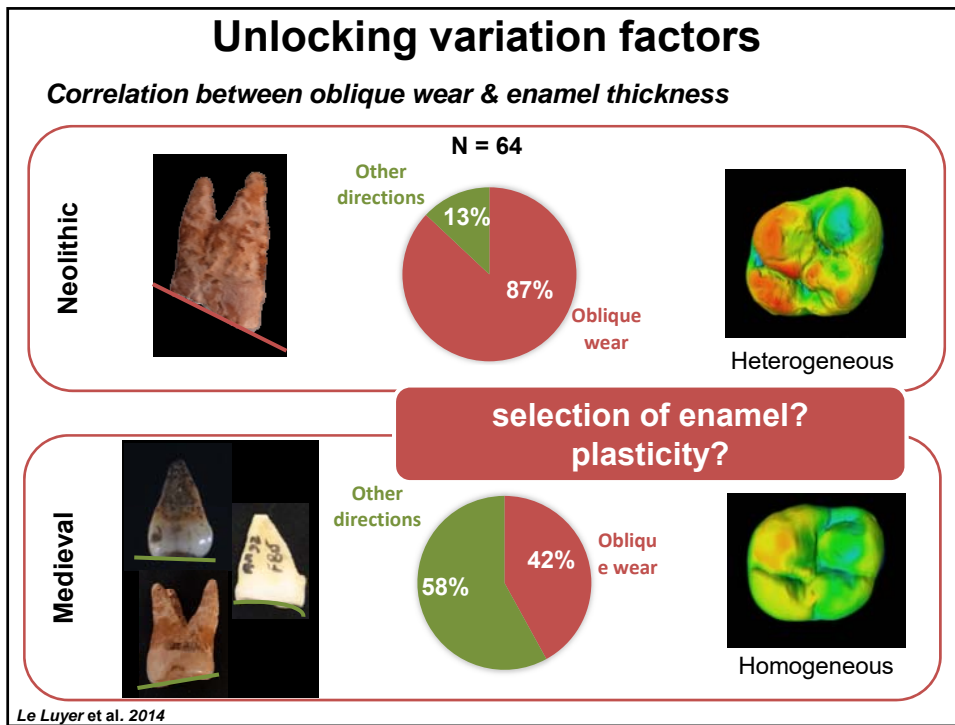
- Dental evolution in deep time
- Teeth and archaeology (humans & animals)
- Dental growth and development
- Dental function and biomechanics
- Odontology and Paleodontology
- Tooth evo-devo
- Genetics and epigenetics
- New methods in dental studies

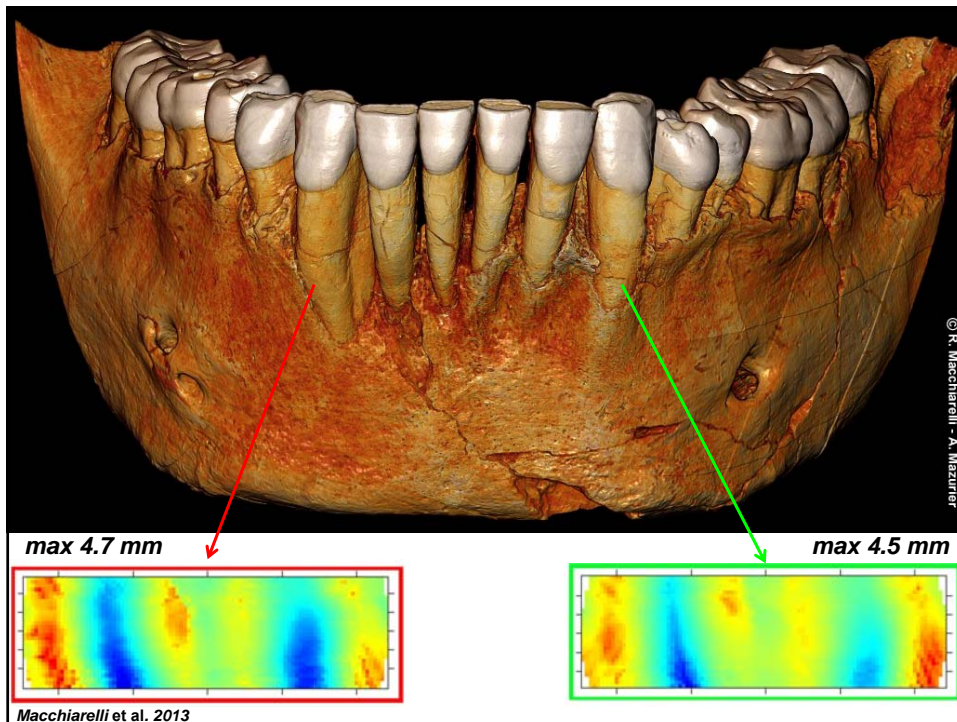
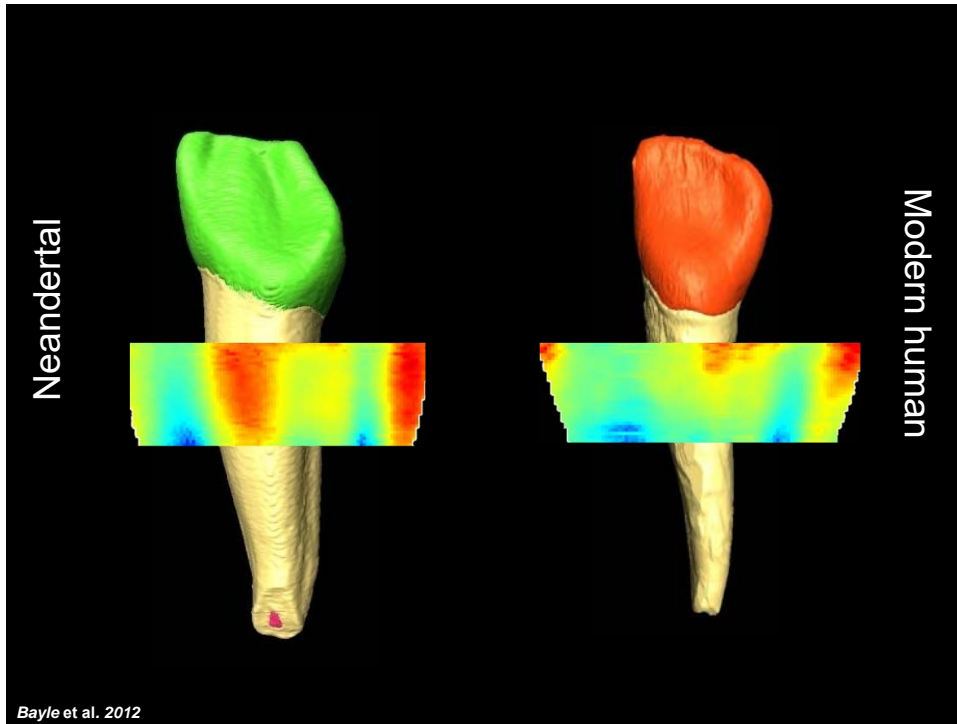


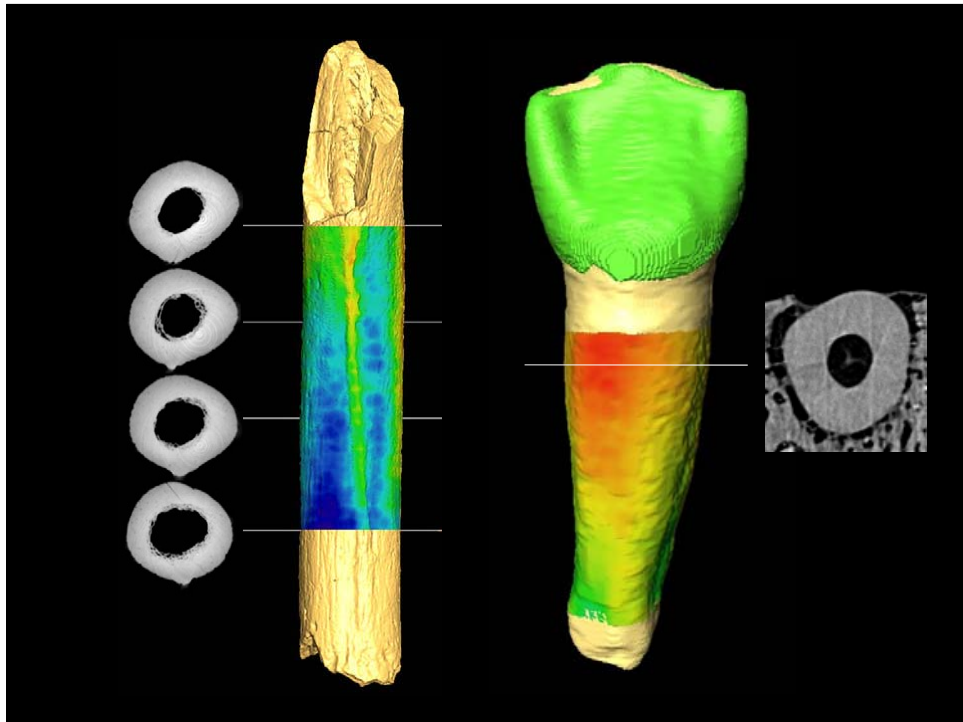
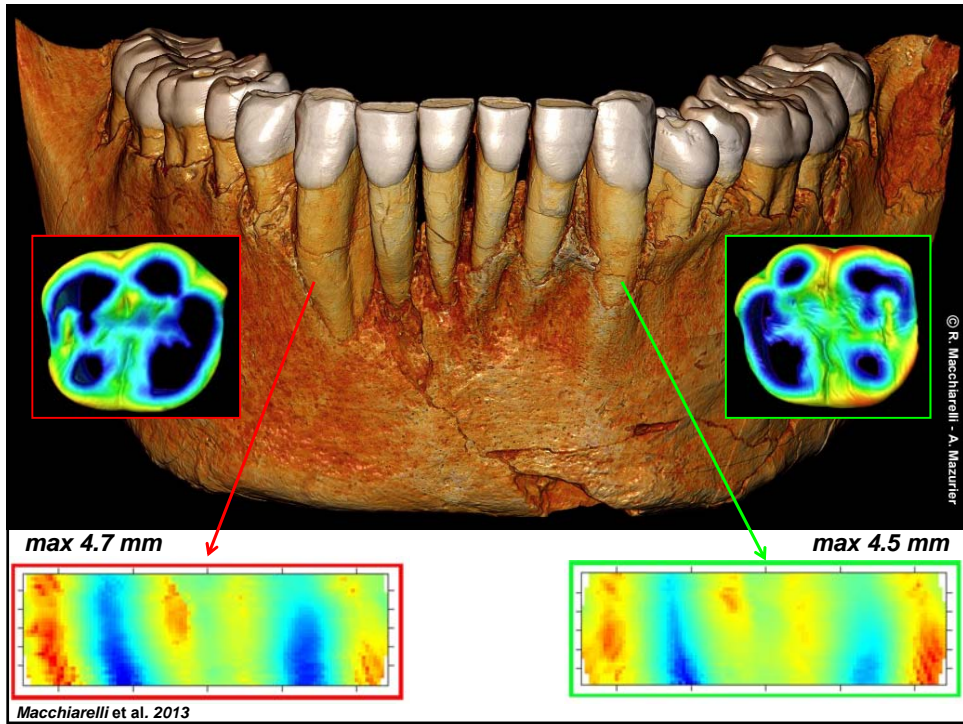


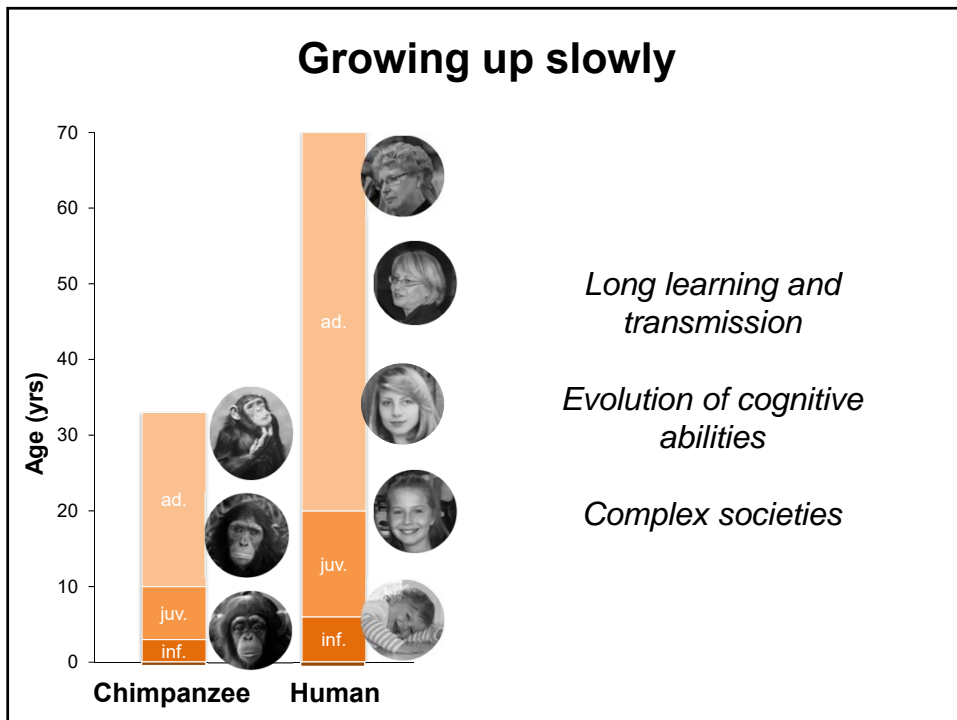
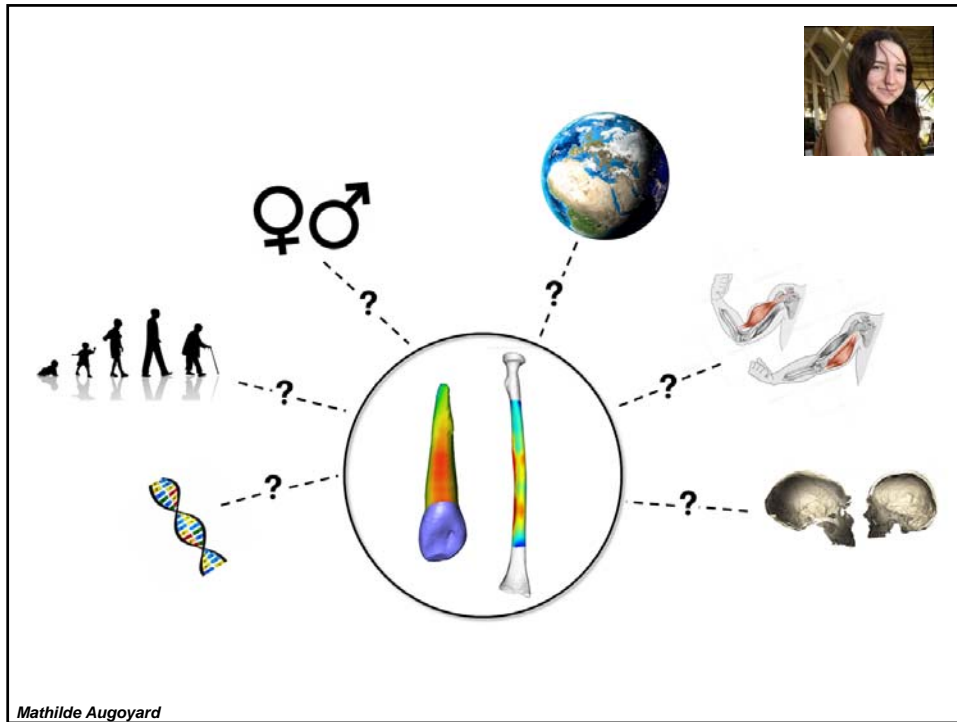


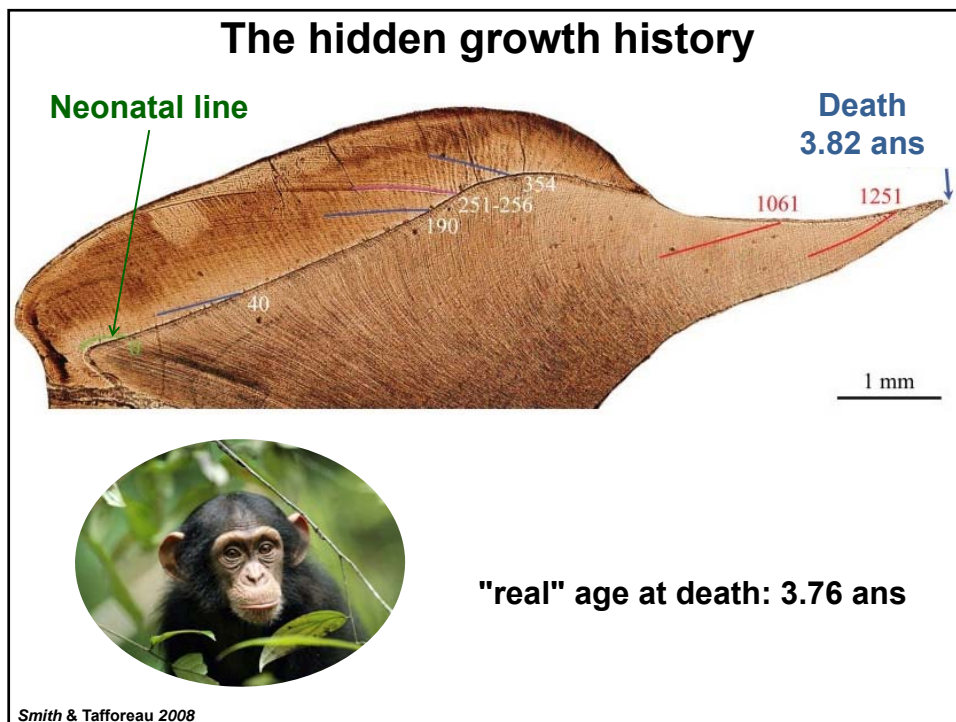
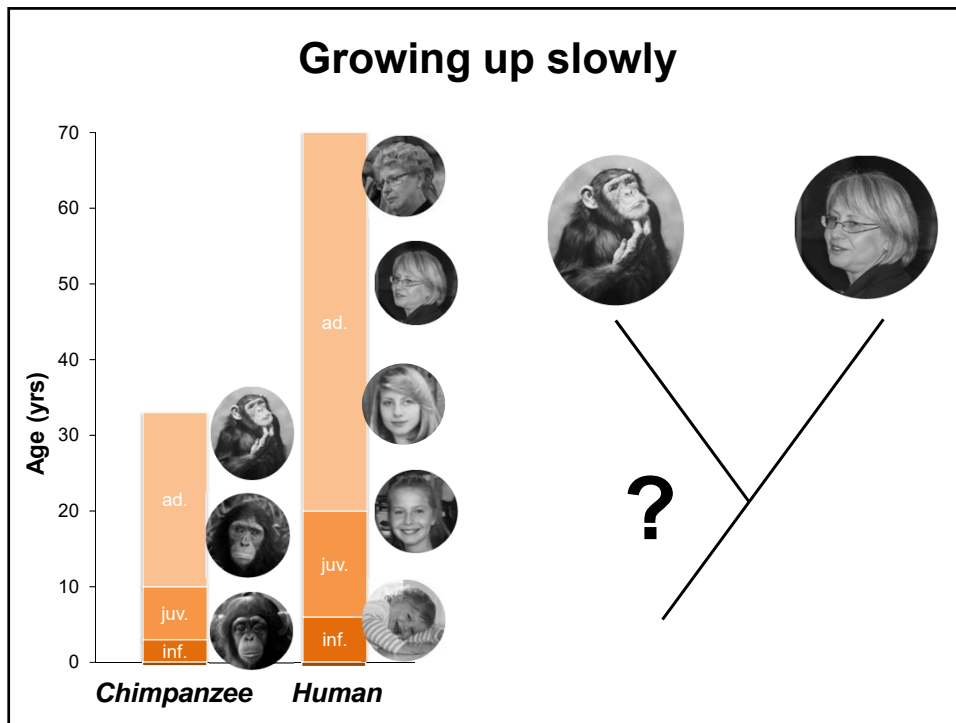












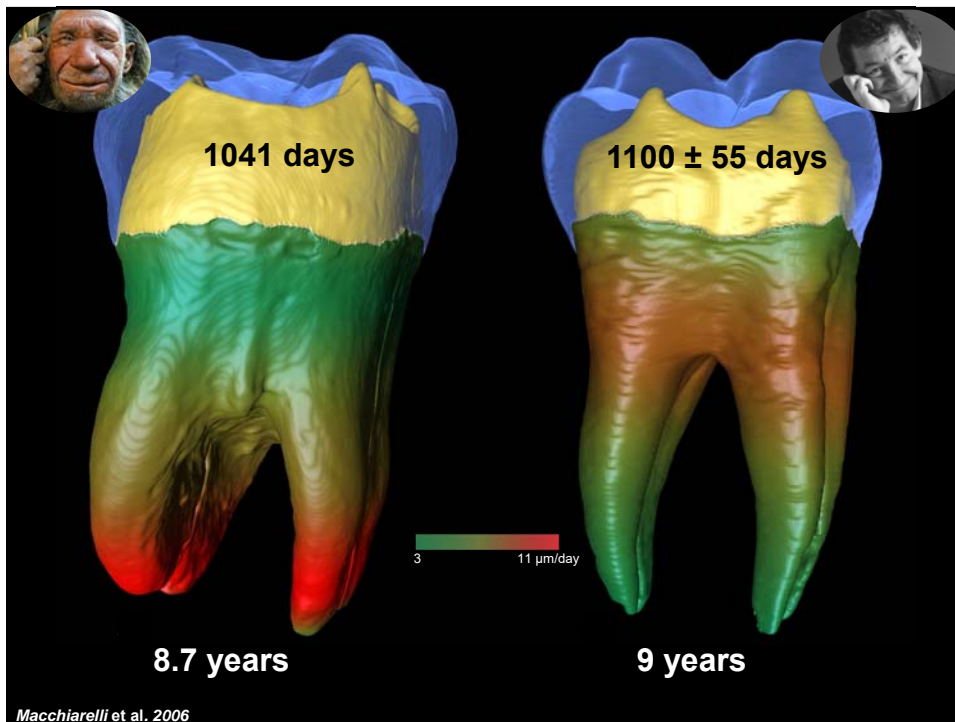
Is extended growth specific to modern humans?

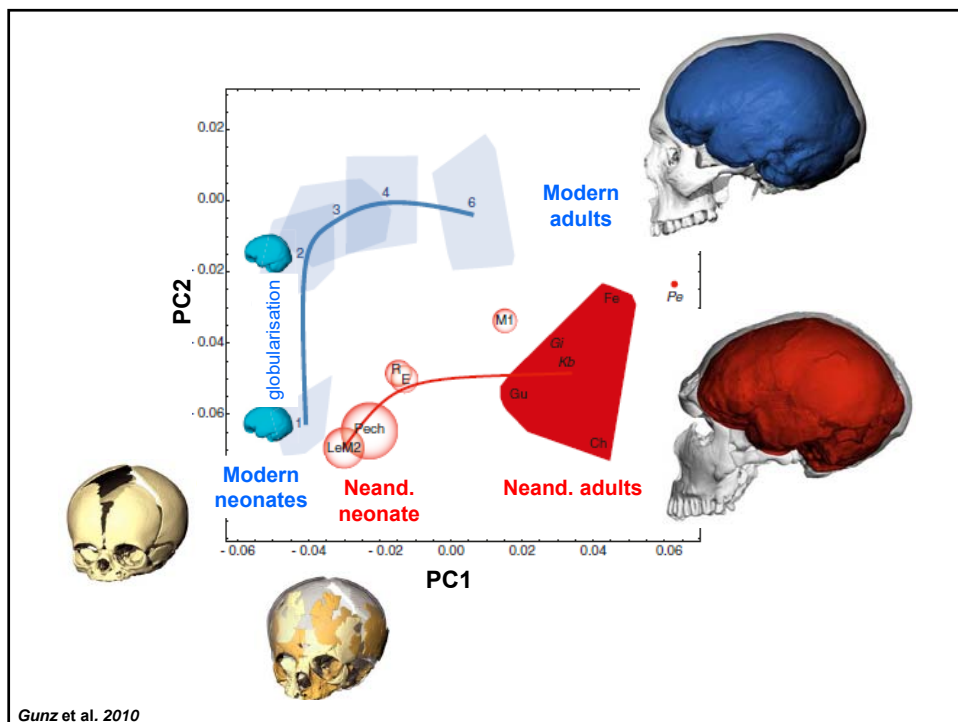
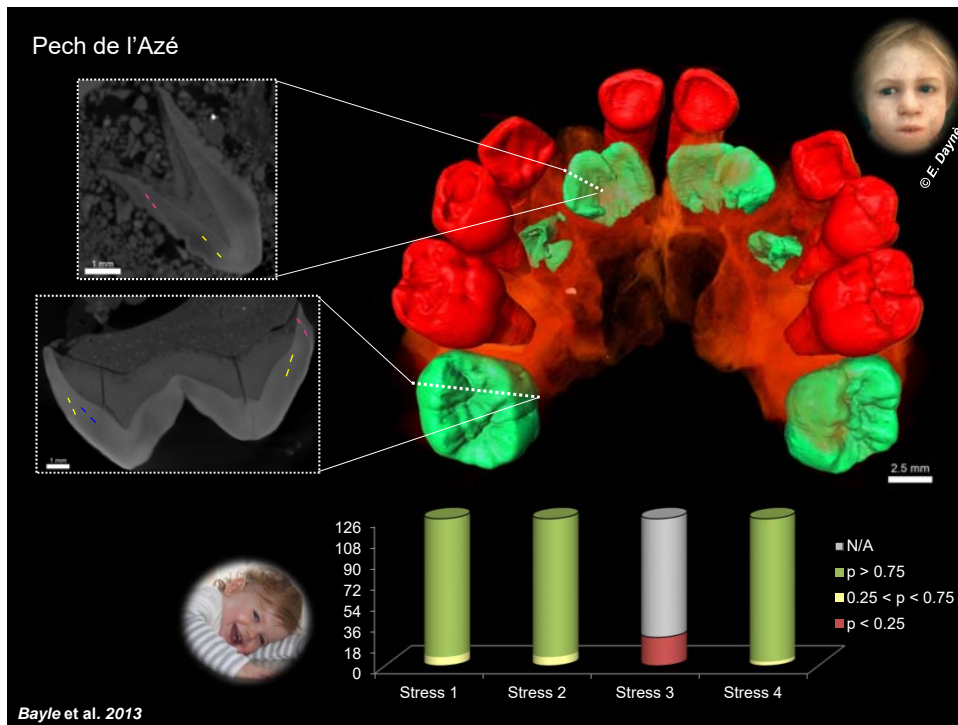
What about Neandertals?



© E. Daynes

The image contains two photographs. The top-left photograph shows three modern humans (a woman, a young man, and an older man) sitting on a bed. The bottom-right photograph is a painting of a Neanderthal family in a cave, with a young child in the foreground. The text '© E. Daynes' is located at the bottom of the painting.





La Ferrassie

The plan shows a yellow area labeled 'enfants' (children) containing burials n°3, n°4, n°5, and n°6. A blue area labeled 'adultes' (adults) contains burials n°1 and n°2. Fosses n°10 and n°11 are also marked. A legend identifies excavation areas by date (1907-1922, 1924-1925, 1927-1928), stratigraphic levels, human remains, and site layout.

A black and white photograph showing skeletal remains in a pit, corresponding to the 'adultes' area of the plan.

La Chapelle-aux-Saints

A color photograph of a complete adult skeleton lying on the ground, corresponding to the 'enfants' area of the plan.

© D. Laville & A.-m. Tillier; Rendu et al. 2011

Bruniquel ~ 176 500 yrs

A 3D reconstruction of the Bruniquel site showing several structures labeled A, B, C, D, E, and F. A scale bar indicates 5 meters and a north arrow is present.

Jaubert et al. 2016





Thank you for your attention!

