

Teeth & Identity

Social & Cultural habits



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George
CLOONEY

Julia
ROBERTS

TICKET
to
PARADISE

In Cinemas October 5



Dental Modifications

I. Intentional: require forethought & desire to change the look or presence of teeth in the jaws

II. Unintentional: through repetitious motions related to occupation, accidental fractures, etc.



I. **Intentional** dental modifications

- Meant to be flashy and/or noticed → isolated to incisors & canines
- Different types:

1. Inlays



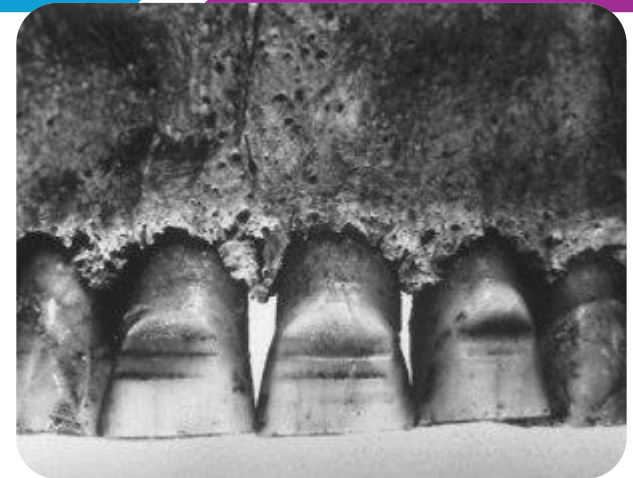
1. Incisor teeth inlaid with gold (Source: Ancient-Origins.net)

2. Removal



2. Dental Cutting/Filing (Source: University of Minnesota-Duluth)

3. Cutting



3. Incised teeth (Source: Forsyth Gallery)

4. Incising

1. Inlays

- ruled over an empire that now includes Mexico & parts of Central America
- leaders in **cosmetic dentistry** in their day
- highly developed dental skills, not necessarily for oral health but mostly for **ritual & religious purposes**



The earliest: The Mayan



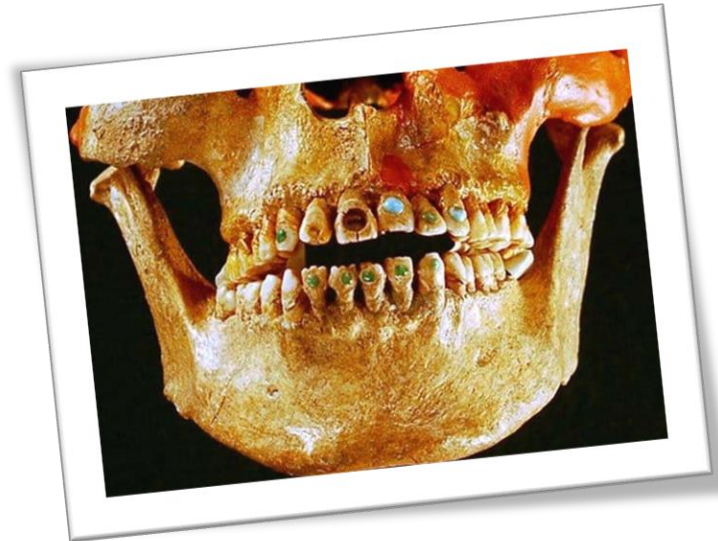
1. Inlays

- Between **250 - 900 CE** Mayan royalty would decorate their teeth with pieces of Turquoise, Quartz, Pyrite, Jade and other precious stones
- The lighter the **Jade** the wealthier the wearer was

Jade was:

- a very special stone to them
- worn as a statement that they were responsible for life-giving rain, fertile crops & ensuring their people were well fed and prosperous

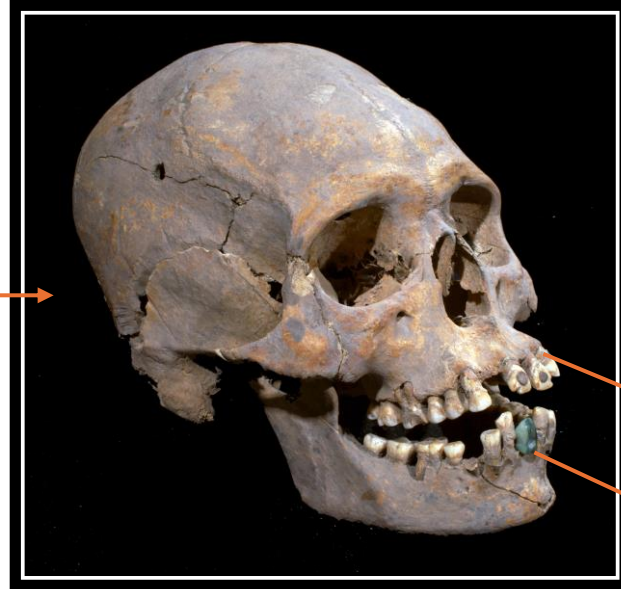
The Mayan



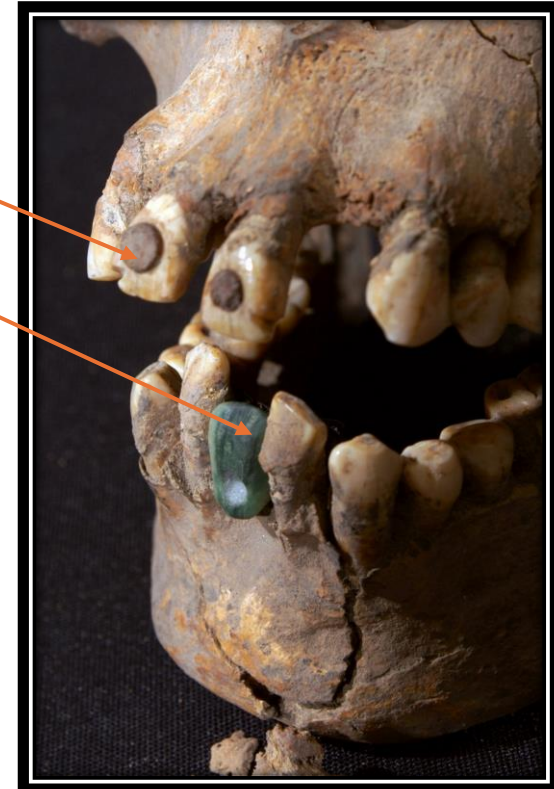
1. Inlays



- a cist, a rectangular dugout
- articulated skeleton of a woman 35-40 yrs
- 19 vessels stratigraphy indicate (350-400 A.D.)



- Elongated cranial modification
- Fronto-occipital compression



The Mayan

1. Inlays



- embedded with round pyrite stones
By cutting a hole in the enamel & inserting the decorative stones



- replaced with a prosthetic carved in the shape of a tooth
- not of local manufacture
- Years of use (signs of dental wear & calculus)

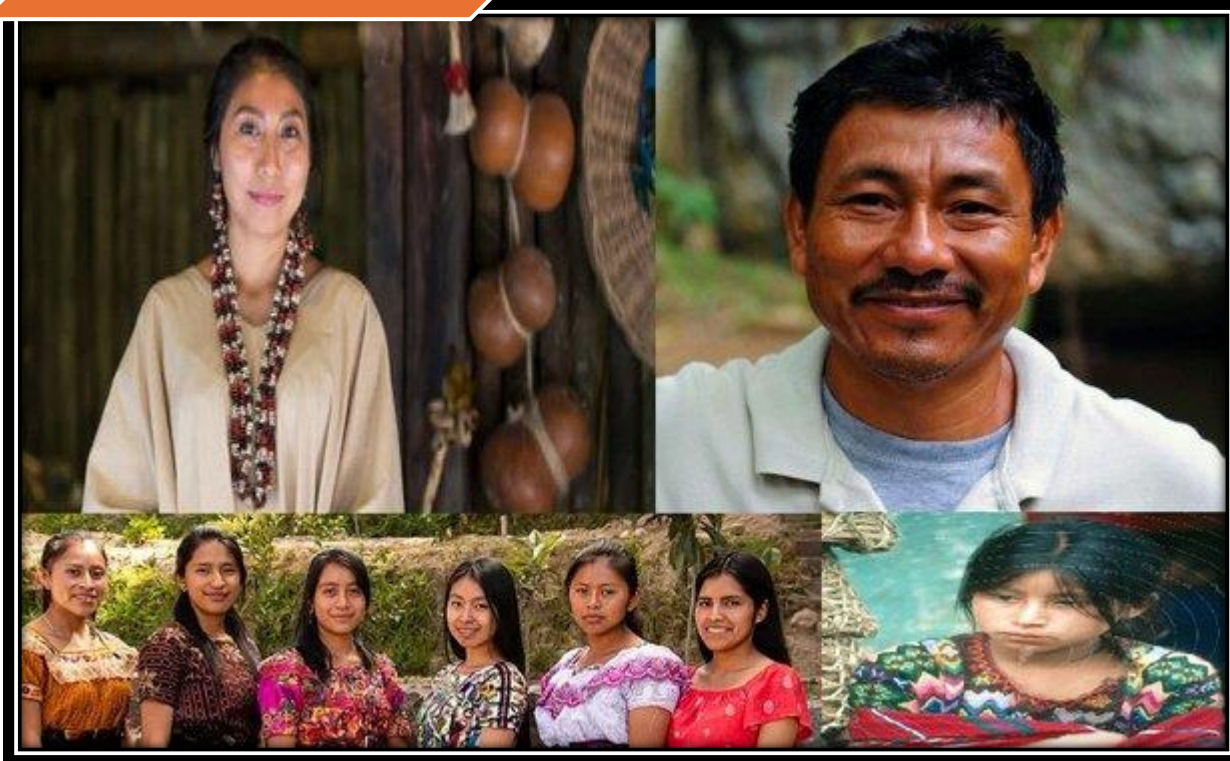
The Mayan

modifications reserved for the Maya elites



residents of Tlailotlacan not only labourers who were brought to or moved to the big city for work, but people of wealth & status as well

1. Inlays

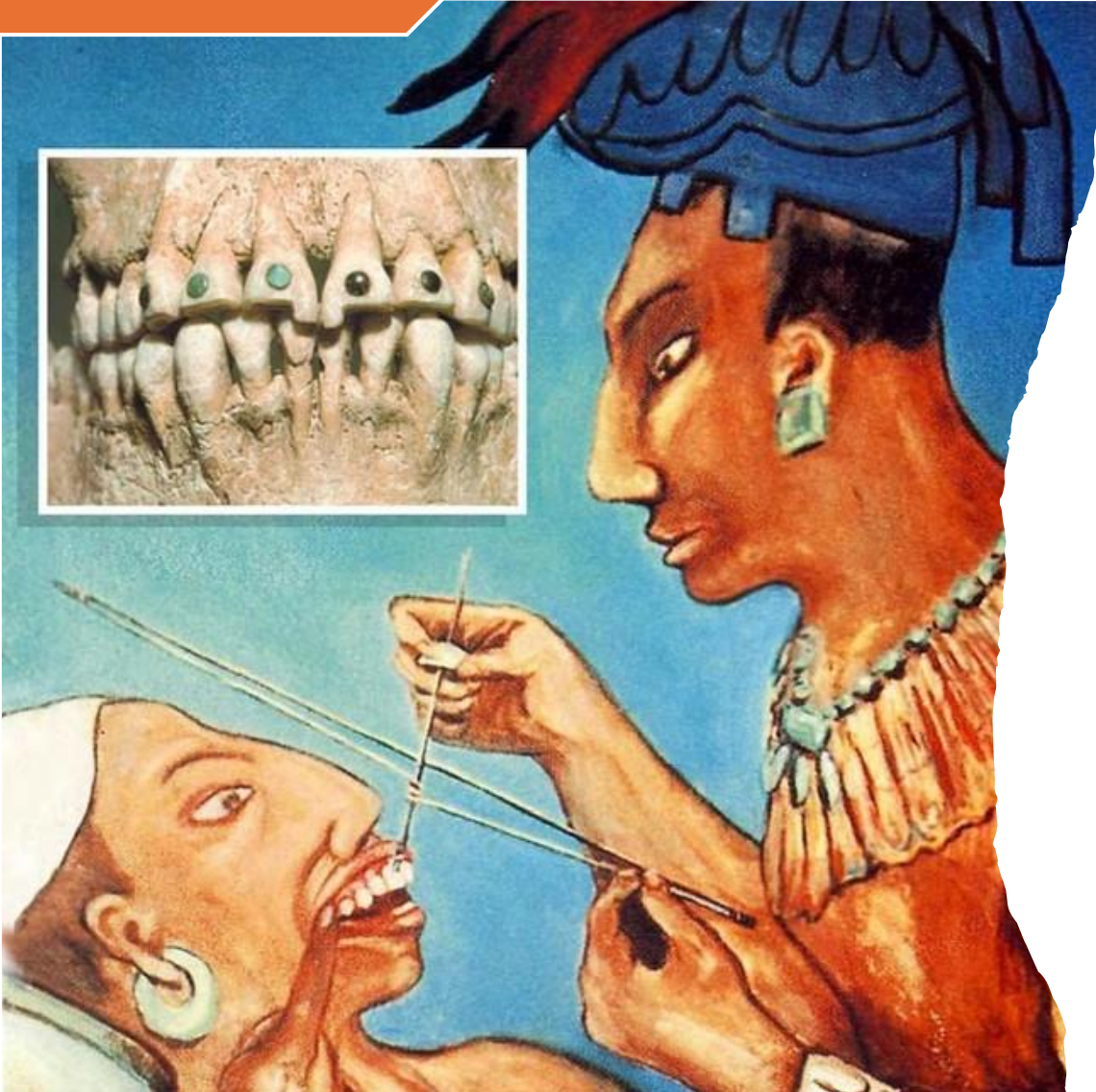


The Mayan



Ancestors of the Mayan living in Southeast Mexico, Belize, Honduras & Guatemala still carry on the tradition of tooth adornment

1. Inlays



Work the stone and create the ornaments

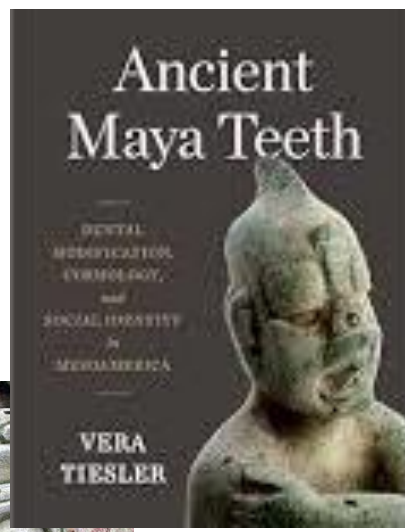
Spun a straw like tube (made from copper) between the hand or in a bow/rope drill

Cut a round hole through the enamel using an abrasive slurry of powdered quartz & water

Occasionally, use a thin, sharpened animal bone hardened by fire

Cement the gemstones in place using an adhesive (made from plant sap & crushed bones)

1. Inlays

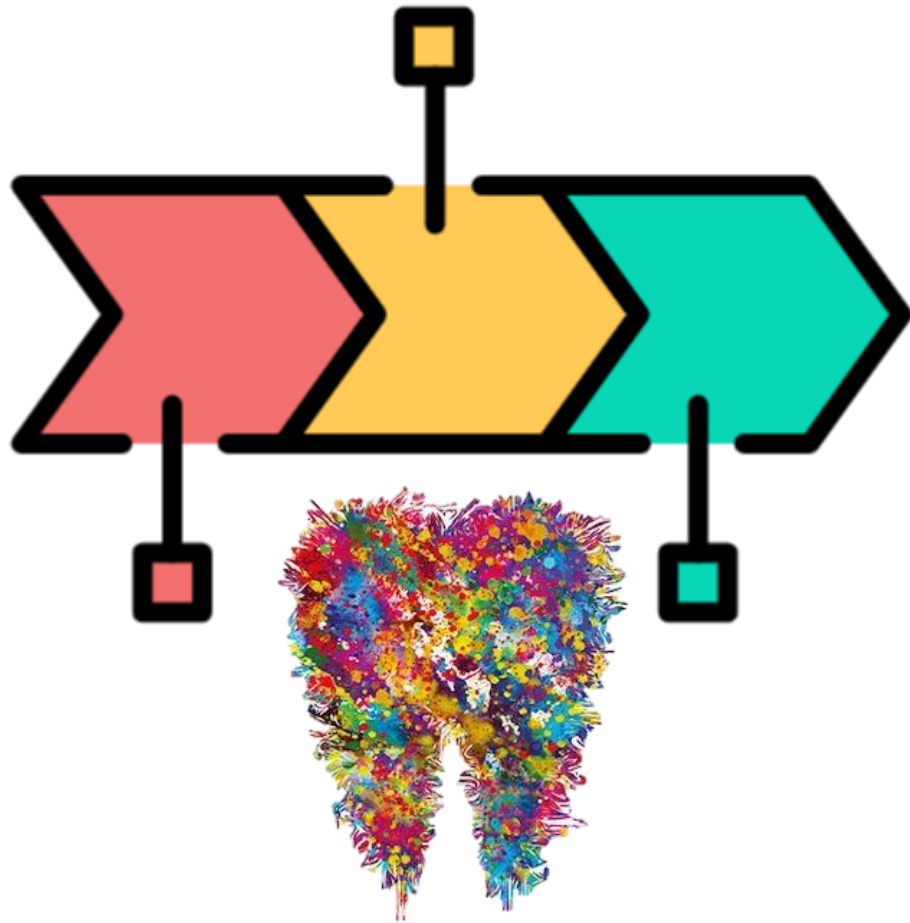


The Mayan



- not only for aesthetic purposes
- also as a symbol of social status, wealth, & spiritual meaning.
- Mayans believed that adorning their teeth with gems brought them closer to their gods & enhanced their physical appearance.

1. Inlays



Moving forward in history



1. Inlays

Southeast Asia (14th – 16th cent.)

- common practice among pre-colonial Philippines
- According to Ancient Philippines mythology the creator of the world, **Melu** had solid gold teeth

Fill down & decorate their teeth with gold

Cover their front teeth with fitted gold bands



1. Inlays

- The bands made it impossible to speak but were removed to eat
- They were worn for rituals & passed down for generations



Southeast Asia (14th – 16th cent.)



1. Inlays



Bolinao

(14th – 15th cent.)

- Considered to be a one-of-a-kind find due to its gold dental decorations that resemble fish scales.
- The dental ornaments measure approximately 10x11.5 mm (width – height).

1. Inlays



Bolinao (14th – 15th cent.)

- holes drilled in teeth
- then filled by gold disks, plugs, pegs, or wire
- each type of gold ornament has a unique look

1. Inlays

- traditional brides have been known to wear gold or silver tooth jewellery as part of their bridal adornment
- these pieces often reflect intricate designs and are considered symbols of marital prosperity
- gained popularity during the Mughal period

India
(16th – 18th cent.)



1. Inlays

India (16th – 18th cent.)

The Mughal emperors & nobility adorned their teeth with diamonds, pearls, and other gemstones as a symbol of power, beauty, and luxury



Chataignier lith.

Imp. Firmin Didot. C^o Paris

2. Removal



South Africa

Now days

- the practice of ritual avulsion still abounds
- since at least 60 years
- often as a rite of passage for teenagers
- almost exclusively belonging to low socio-economic status families.



2. Rimoval

Other reasons behind:

- fashion,
- peer pressure,
- Gangsterism

Increasing in the last few years

dentists are bound to their ethical code and not allowed to remove healthy teeth



South Africa

Now days



2. Removal

Dinka, Nuer and Maban tribes

especially in the rural villages of South-Saharan regions,

extract the lower incisors (and sometimes also the canines),

shortly after their eruption,

Sudan Now days



2. Removal

as a rite of passage, to:

- enhance beauty,
- show their tribal identity,
- allow the emission of specific linguistic sounds
- facilitate oral sex

Sudan Now days



2. Rimoval

aboriginal tribes

- a rite of passage (puberty: Australian boys have a tooth knocked out)
- a sign of mourning



Australia

Now days



3. Cutting

Different cultures Different places

Table 2

Tribes and geographical areas where filing and sharp modifications of teeth are widespread

Filing and sharp modifications	Filing of maxillary central incisors (like piranha)	Teeth sharpened (like crocodiles)	Chipping of upper and lower incisors (peg-shaped)	Not specified filing	Pointed teeth	Thinned down and shortened incisors (pointed)
South American Indians (Amazon Valley)	x					
Cameron		x				
Congo		x				
Guinea		x				
Zaire		x				
Uganda		x				
Makonde people (Tanzania)			x			
Malay races				X		
Mentawai islands (Indonesia)					x	
Java						X
Sumatra						x
Borneo						x



imitating the piranha fish which they greatly fear



3. Cutting



Different cultures Different places

- Cameroon, Congo, Guinea, Zaire and Uganda
- teeth are sharpened to resemble those of a crocodile:
- this practice is named akuha

3. Cutting

Tanzania

still exists

among Makonde tribes

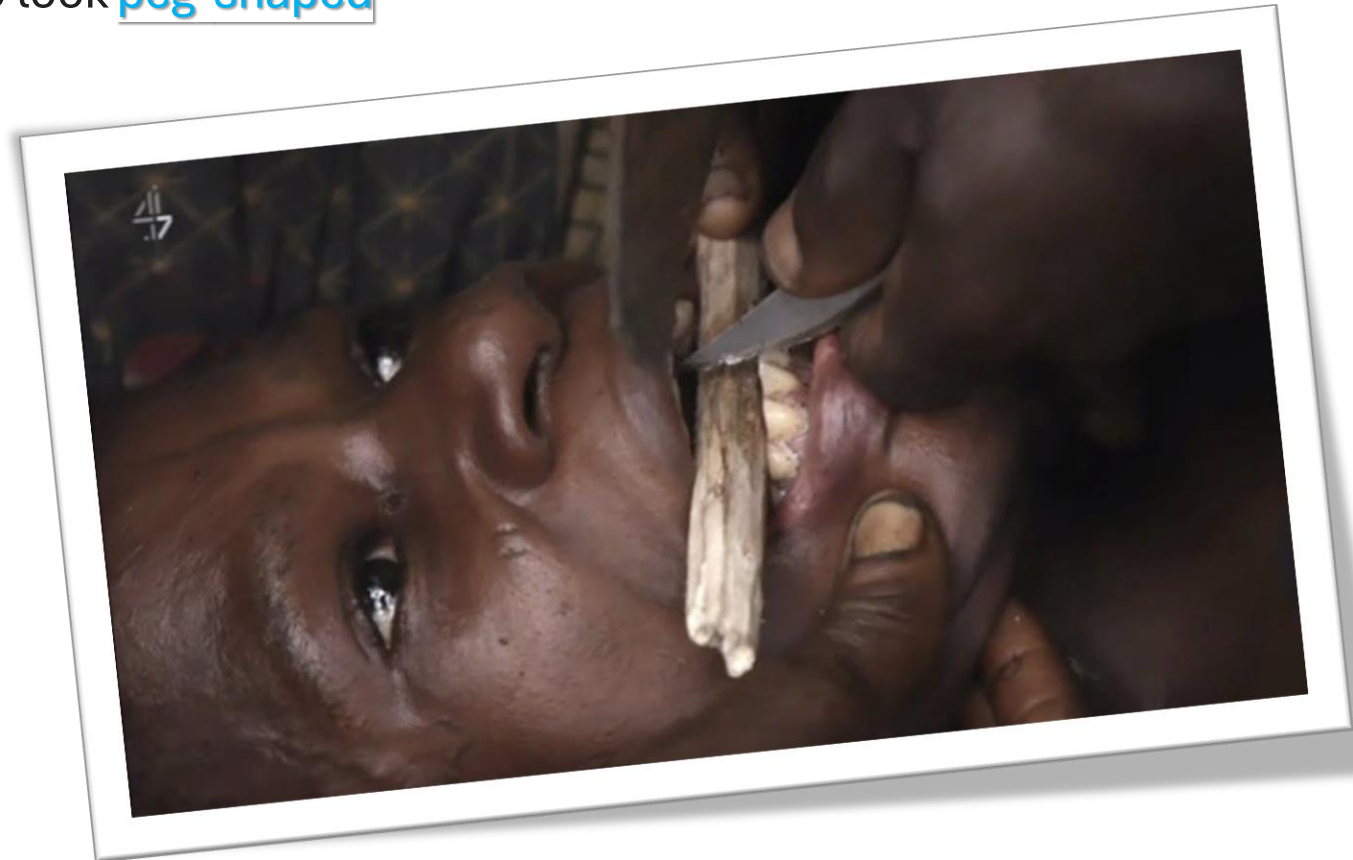


3. Cutting

Tanzania still exists

the ritual of chipping off part of the incisors to look peg-shaped

- for decorative purposes,
- esthetic reasons,
- signs of strength,
- passage from teenage to adulthood



3. Cutting



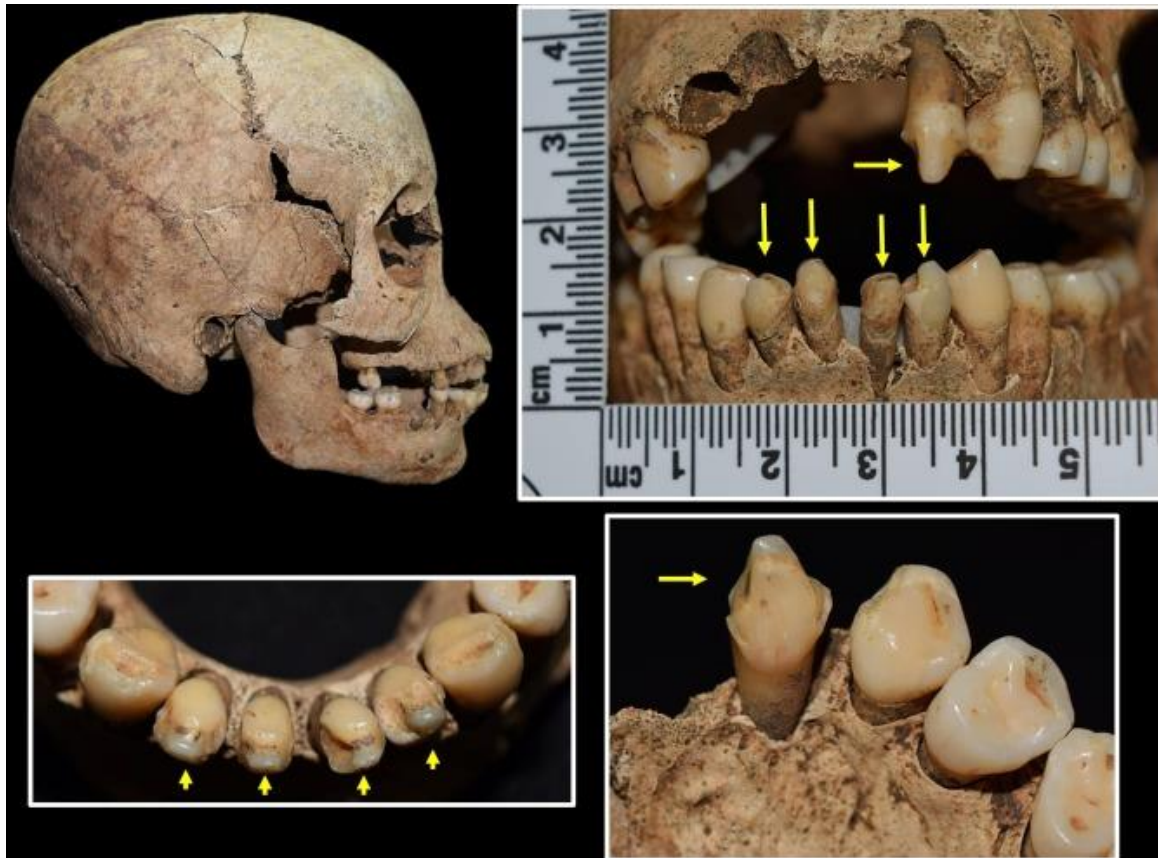
3. Cutting



Intentional dental modification in Panamá: New support for a late introduction of African origin

Nicole E. Smith-Guzmán ^a, Javier Rivera-Sandoval ^b, Corina Knipper ^c,
Ginés Alberto Sánchez Arias ^d

Panama African origin



3. Cutting



Mentawai Islands

they believe that *if a soul is not satisfied by the appearance of its owner's body, the person dies.*

to get more beautiful, young Mentawaiian females (when reached puberty)

They sharpen their teeth with a rock and a chisel and reduce them to a point

Indonesia



3. Cutting



Indonesia



3. Cutting

Late Postclassic Mayapan



Late Postclassic Mayapan burials exhibiting pattern of tooth filing: (A) Maxillary incisors of young adult female burial 09-01; (B) Middle adult female burial 21

Late Postclassic artistic depictions of personages with pointed teeth

4. Incising

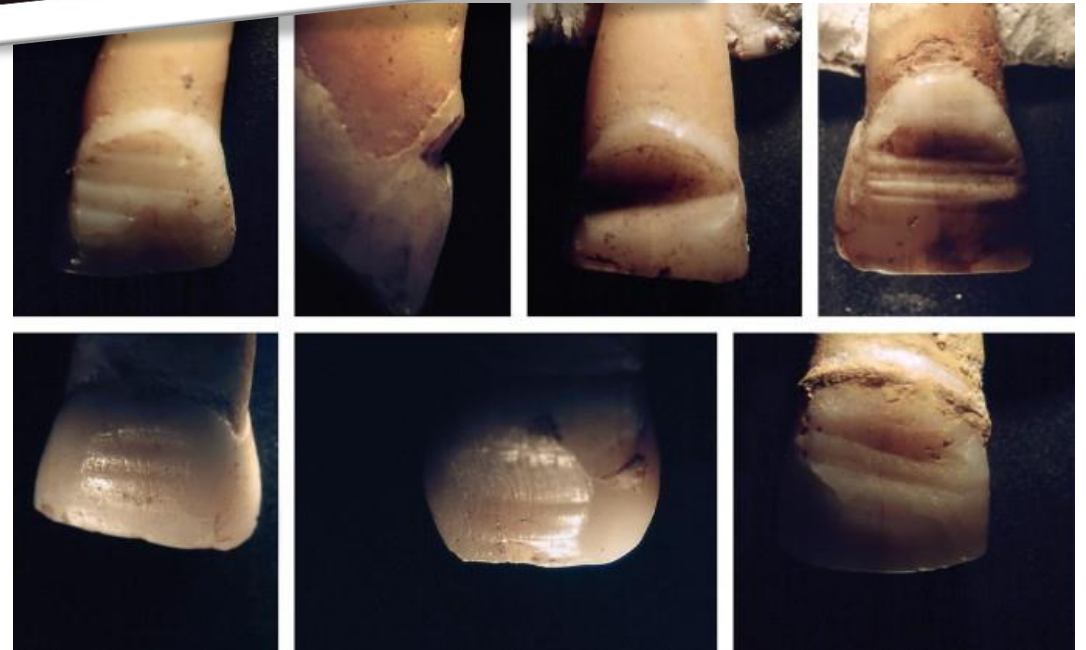
probably marked some type of achievement.

both a symbol of pride & a way to scare enemies

likely dyed (probably with red)



Viking



4. Incising



Viking



Take-home message



- Some scholars have debated if **gender** was a motivating factor in completing dental modifications, but this does not seem to be the case
- The most common motivation cited in the literature is **social status**, though, which is not too far off from modern motivations for intentional dental modifications



rites of passage



ethnicity



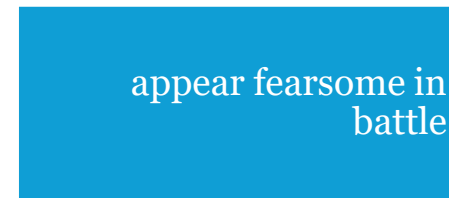
aesthetics



mourning the loss of a loved one



fighting off evil spirits

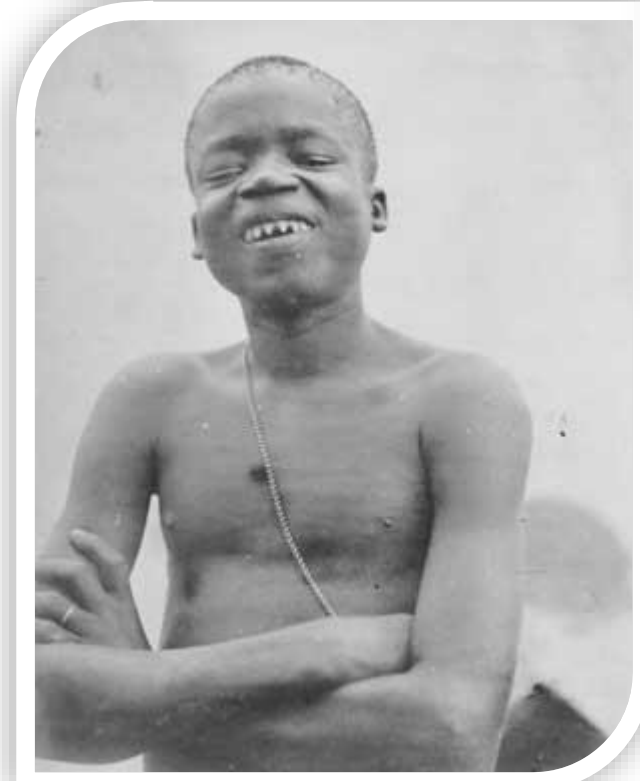


appear fearsome in battle

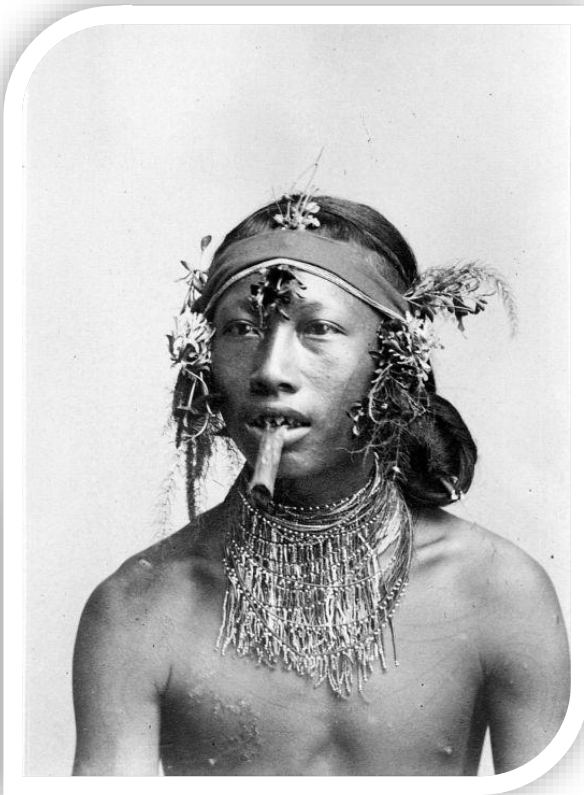


Social Anthropology for more data?

- Through **participant observation**, perhaps a dental modification ceremony can be witnessed so that the process can be fully documented
- Also, **interviews** with people who have had their dentition modified could help shed light onto reasons why filing and ablation are still occurring



Ota Benga, a famous Congolese pygmy, shows off his sharpened teeth



A man with filed teeth (probably Mentawai) smokes in a photograph by Dutch photographer Christiaan Benjamin Nieuwenhuis who worked in Sumatra

Coloring

•
The intentional dying of teeth

- a habit with strong roots in the past
- documented in societies from all around the world
- Such dying of the whole or just the visible surfaces of the teeth



Coloring

Tooth staining occurred through the habitual chewing of specific plants:



Betel leaves



Tobacco



Coca

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Name

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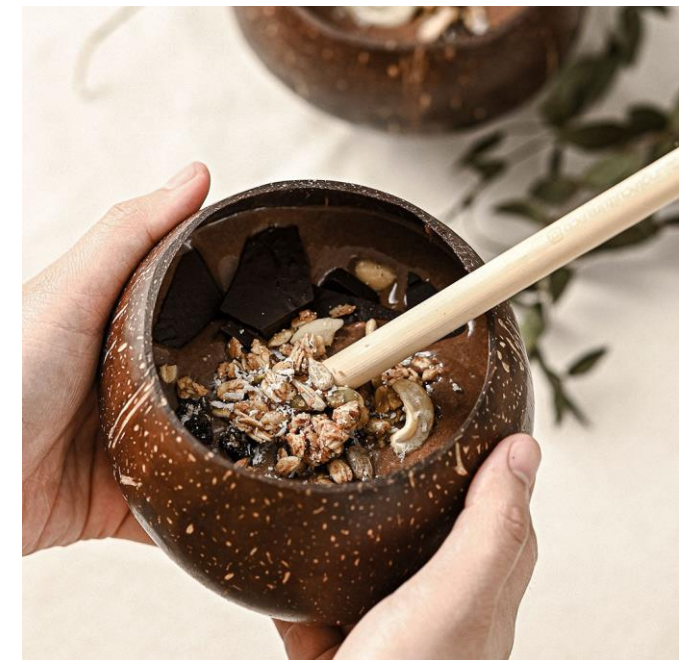
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Coloring/Teeth blackening

- colored in black
- a mixture of burnt coconut shells & oil
- Sometimes the tooth surface is abraded or etched with ginger or mango fruits
- The mixture is applied on the tooth surface giving the impression of a black varnish
- The practice lies in the conviction that white teeth are characteristic of animals & European people



Borneo



Coloring/Teeth blackening

Borneo



Coloring/Teeth blackening



Epipremnum pinnatum



Fruit of *Paederia foetida* L. at a stage of maturation in which it might be chewed. Subsequently, the fruit dries up completely and eventually has a thin, brown pericarp.


Southeast Asia



A dried piece of guava wood is lit in the fire and the exuded black tarry liquid, called tubug, drips onto a metal shaft, landuc, from which it is dabbed onto the teeth.

Coloring/Teeth blackening

Other places



Place	Reason behind the practice
Jivaro Indian people of Northern Peru and Ecuadorians	could prevent dental caries
Vietnam, Laos, Thailand, Indonesia and Philippines	related to sexual maturation and full membership in society
Indo-China	mouth is considered the evil's door

Coloring/Teeth blackening

- aristocratic Japanese dyed their teeth black when they reached puberty,
- as a symbol of health, beauty and status. But also to preserve teeth, protecting them from yellowing and decay
- Made by dissolving iron filings in vinegar
- popularized during the 8th through 12th cent.,
- banned in 1870 by the Meiji government.

“ohaguro,”
250 - 1870



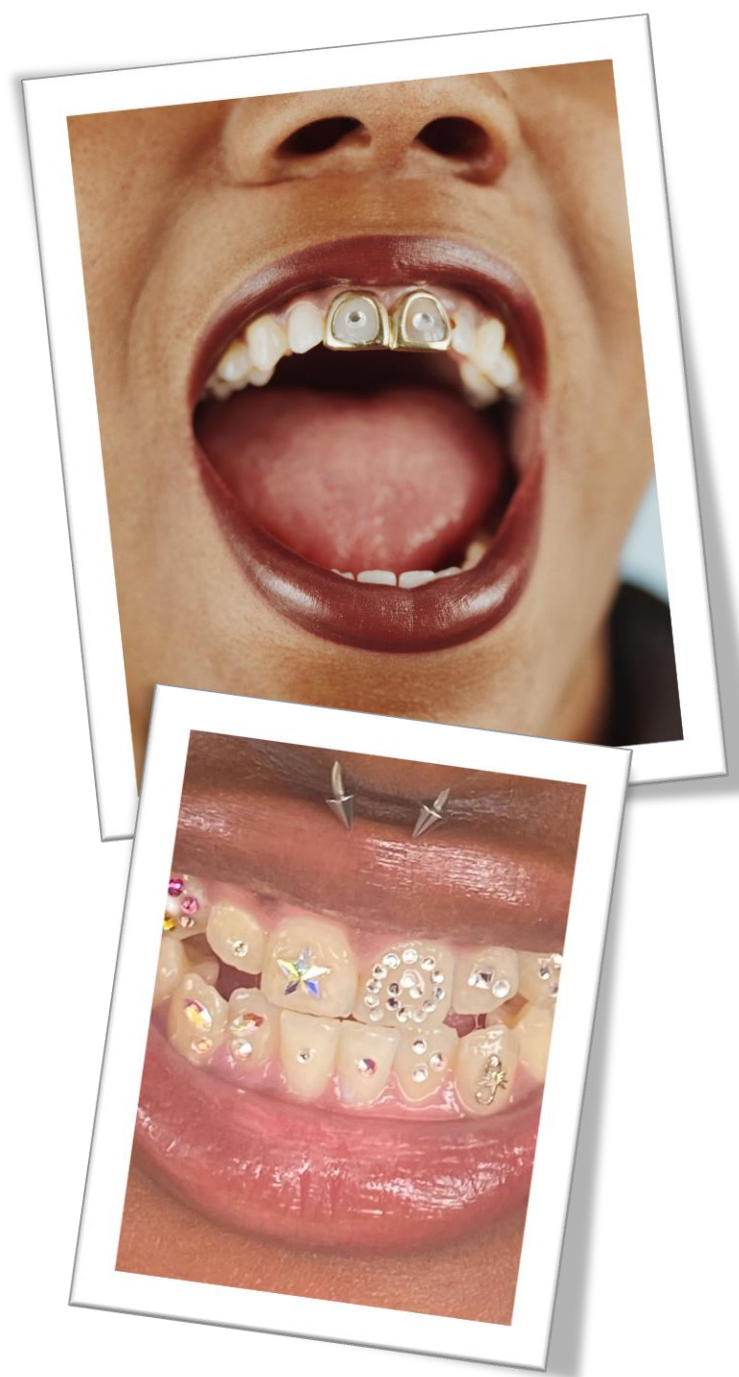
Editorial
julianne.
Shutters



Today

- grills
- tooth jewelry
- tooth tattoos

Despite their enduring popularity, tooth embellishments often lead to painful and costly oral health



The Oldest Toothpicks



The Oldest Toothpicks

- Hominid remains
- Dating to about 1.8 million years ago
- Dmanisi (Republic of Georgia)
- Scratch marks on the root of a tooth in one jawbone reflecting the shape of the **toothpick**.
- Repeated tooth-picking caused inflammation in the area



Casting of a Homo Georgicus skull, found at Dmanisi, Georgia.

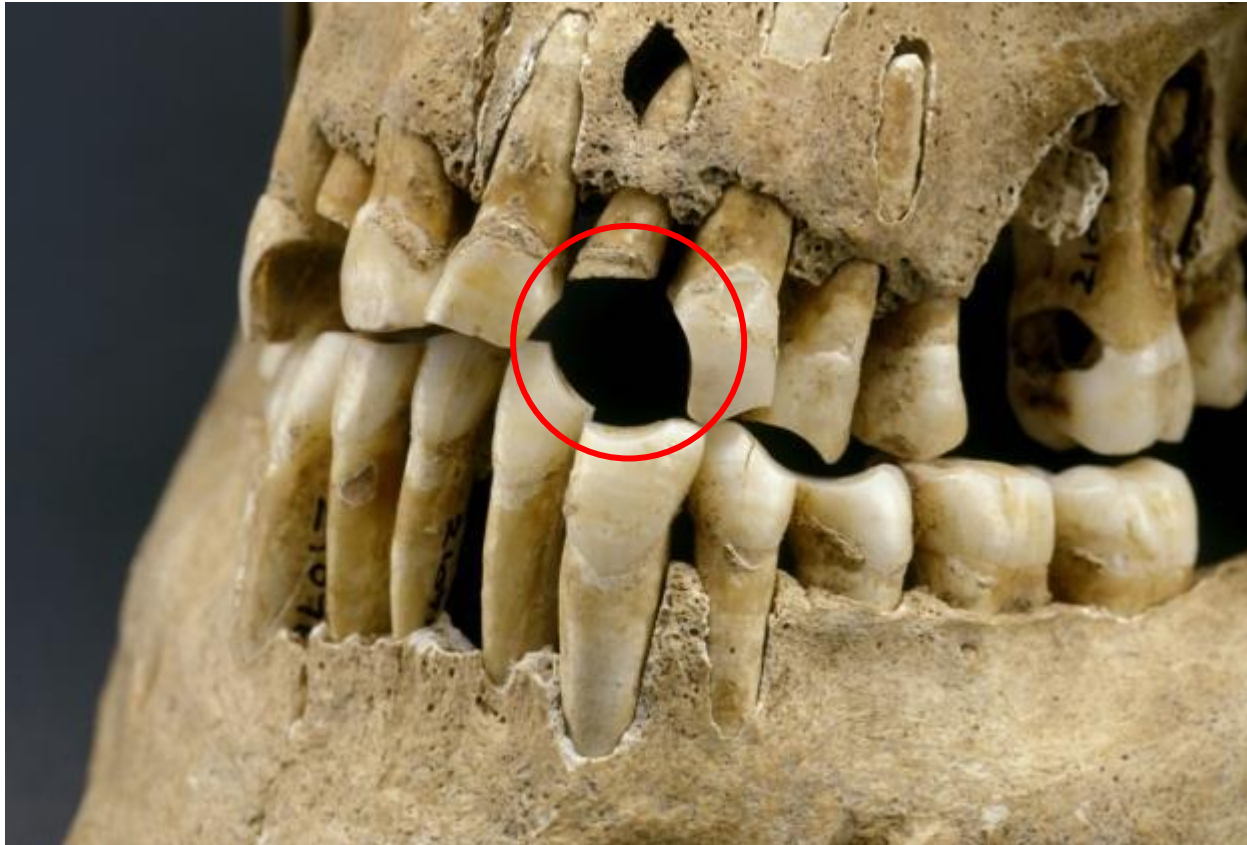
Shanidar 1 (Iraqi Kurdistan)



©: Erik Trinkaus, Washington University in St. Louis

- A male Neanderthal
- Unusually worn down front teeth
- Lost his right arm at the elbow (a congenital or childhood disease or an amputation?)
- Used his teeth as a compensatory mechanism

Long-term pipe smoking



- Adult male skeleton
- showing wear pattern to teeth
- resulting from long-term pipe smoking, c.1660.
- Patuxent Point site, Calvert County,



The earliest dental modification

- Move over pearly whites and golden grills!
- Not a recent phenomenon but one that started several millennia ago
- 7th century BC among the Etruscans

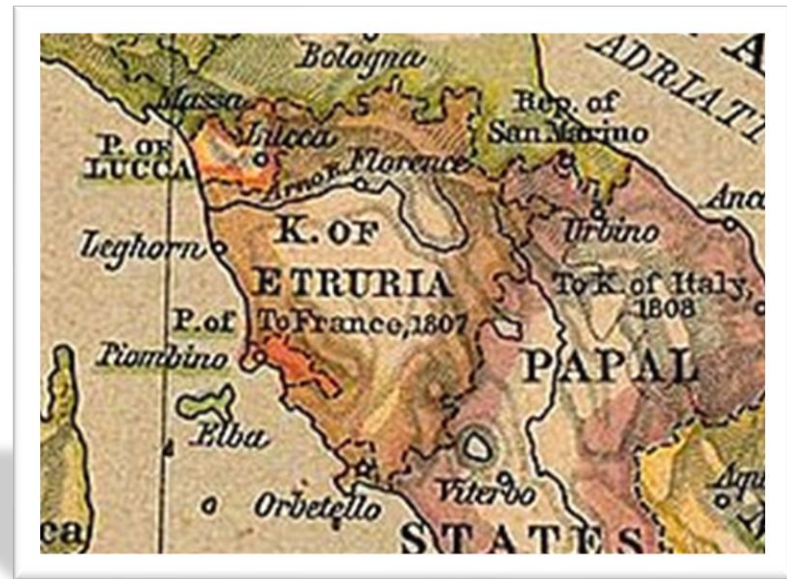


The earliest dental modification

- 2 teeth fixed within a gold band by 2 fastenings
- Both teeth have been shaped, filed down to the same size to create clean, square edges.
- The spaces on either side of the two fixed teeth suggest how the device might have been worn, with the gold bands fitted around living teeth.



And more



- 20 devices have been found from Etruria
- All with pure gold bands
- The purity of the metal lends it a high malleability, enabling the wearer to mould the band in the mouth to secure its position

-
- The Wellcome Collection, a London museum that explores the crossover between medicine and the arts, looks at the history of dentistry in a new exhibition. Credit...Wellcome Collection; Utrecht University Museum Collection; Museum of London





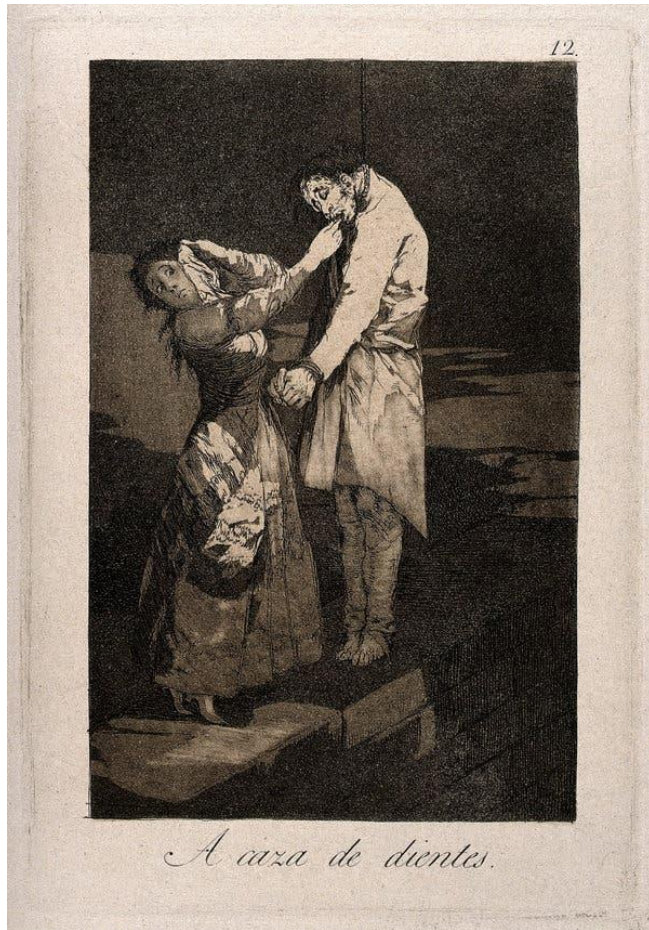
Carved ivory upper and lower dentures (18th century)



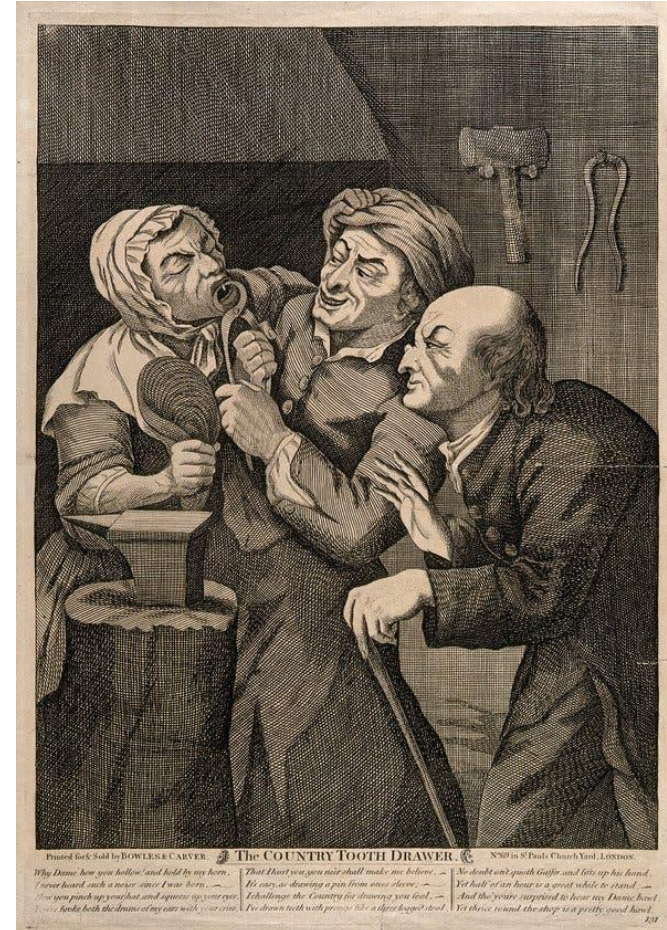
Woman's skull with dental bridge (1870)



Mayan tooth inlaid with jade



“A Woman Covers Her Eyes as She Steals the Teeth of a Hanged Man” by Goya



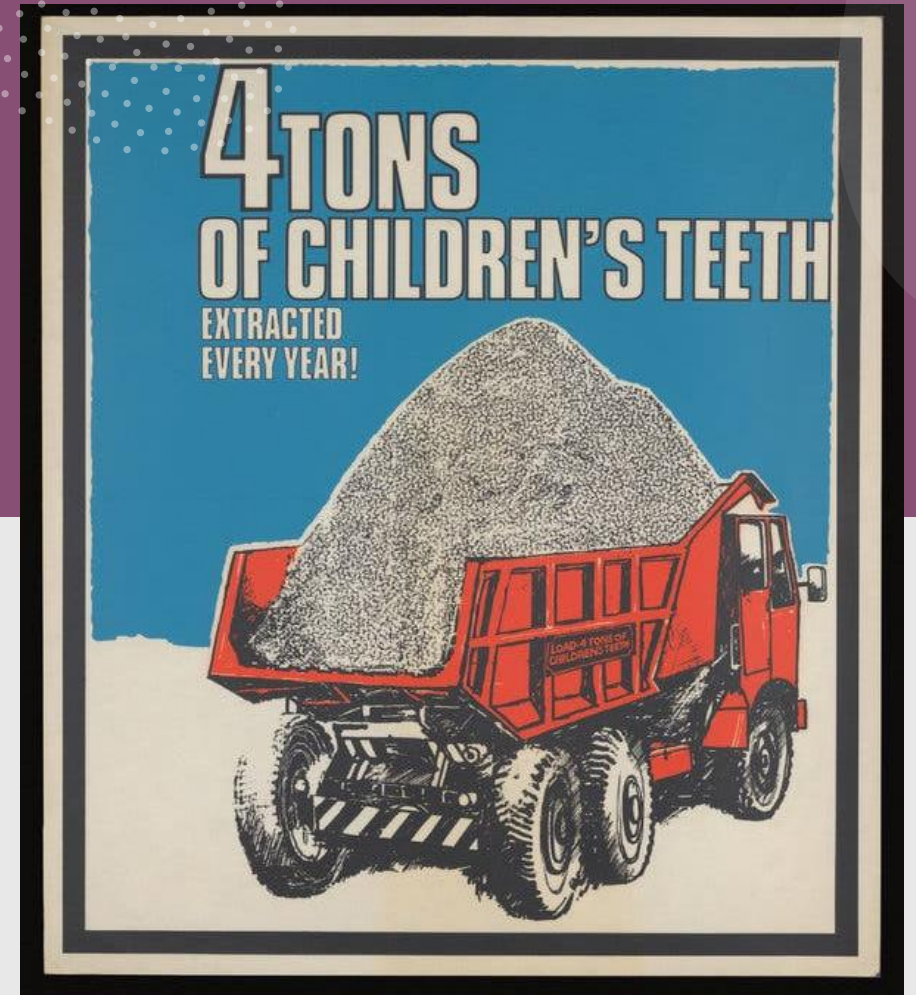
“Blacksmith Removing Tooth” (1780)



Set of 19th-century dental instruments

- In 1960s... British Dental Association says that the figure is now around one ton
- There's still room for improvement
- And more to do about research on human teeth!

Thank you



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