

VUUR IN DE PREHISTORIE:

OOST-VLAAMSE VOORBEELDEN IN HUN RUIMERE ARCHEOLOGISCHE CONTEXT

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Arne Verbrugge

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Inhoudstafel

1. Gebruik van vuur in de prehistorie – chronologisch overzicht

2. Oost-Vlaamse sporen van verbranding in een bredere context

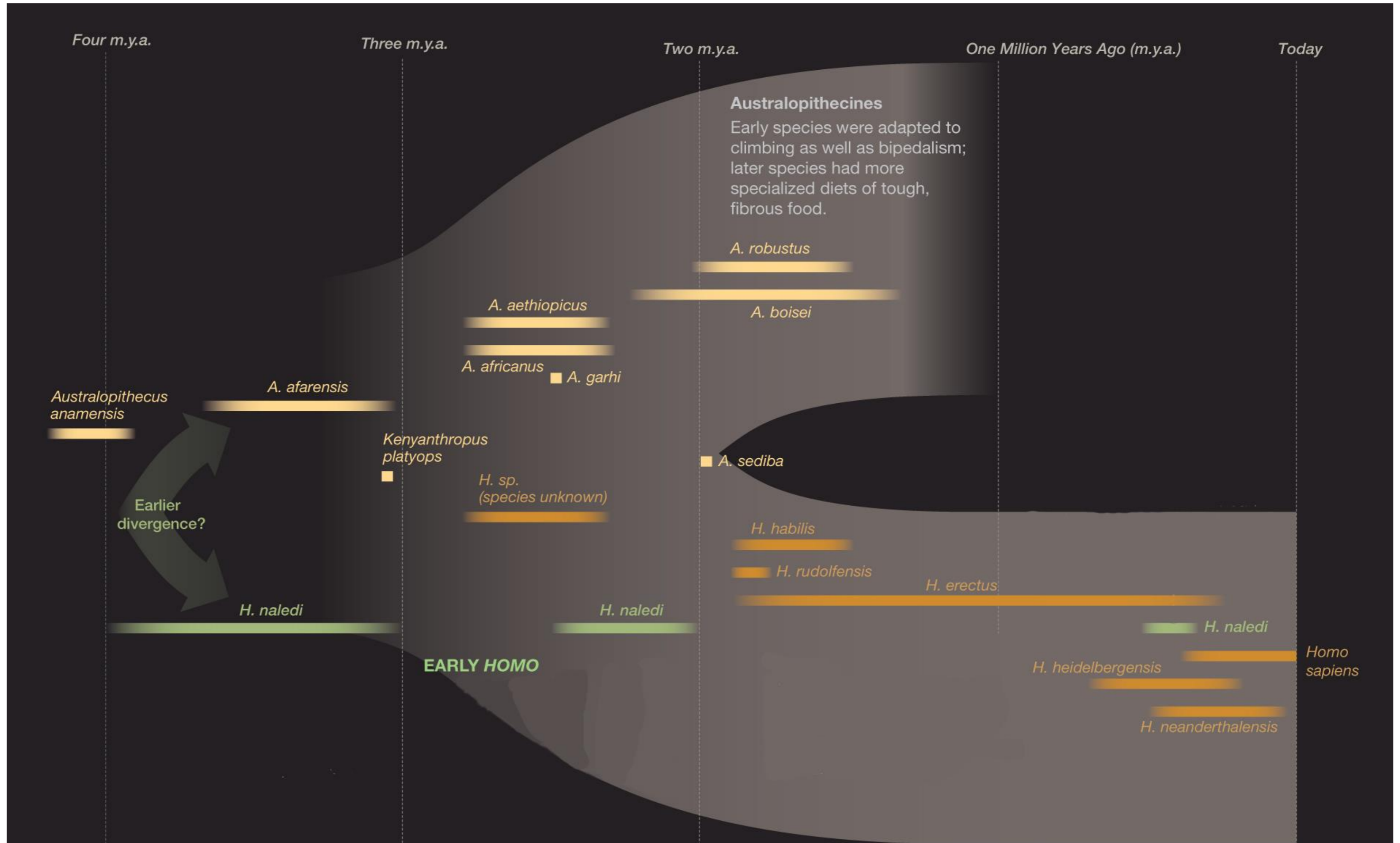
a. Haarden

- Finaal-Paleolithicum, Ruien – Rosalinde, stenen haarden
- Mesolithicum, vlakhaarden zonder stenen en haardkuilen
- Neolithicum, stenen haarden of ovens ??

b. Briquets (vuurstenen werktuigen die gebruikt werden om vuur te maken)

Vuur in de prehistorie: een chronologisch overzicht

VANAF WANNEER MAAKTE MEN GEBRUIK VAN VUUR ?



VANAF WANNEER MAAKTE MEN GEBRUIK VAN VUUR ?

Fase 1 – gewenning aan vuur en seizoenaal gebruik van vuur



“a long prehistory of fire” (Chazan 2017)



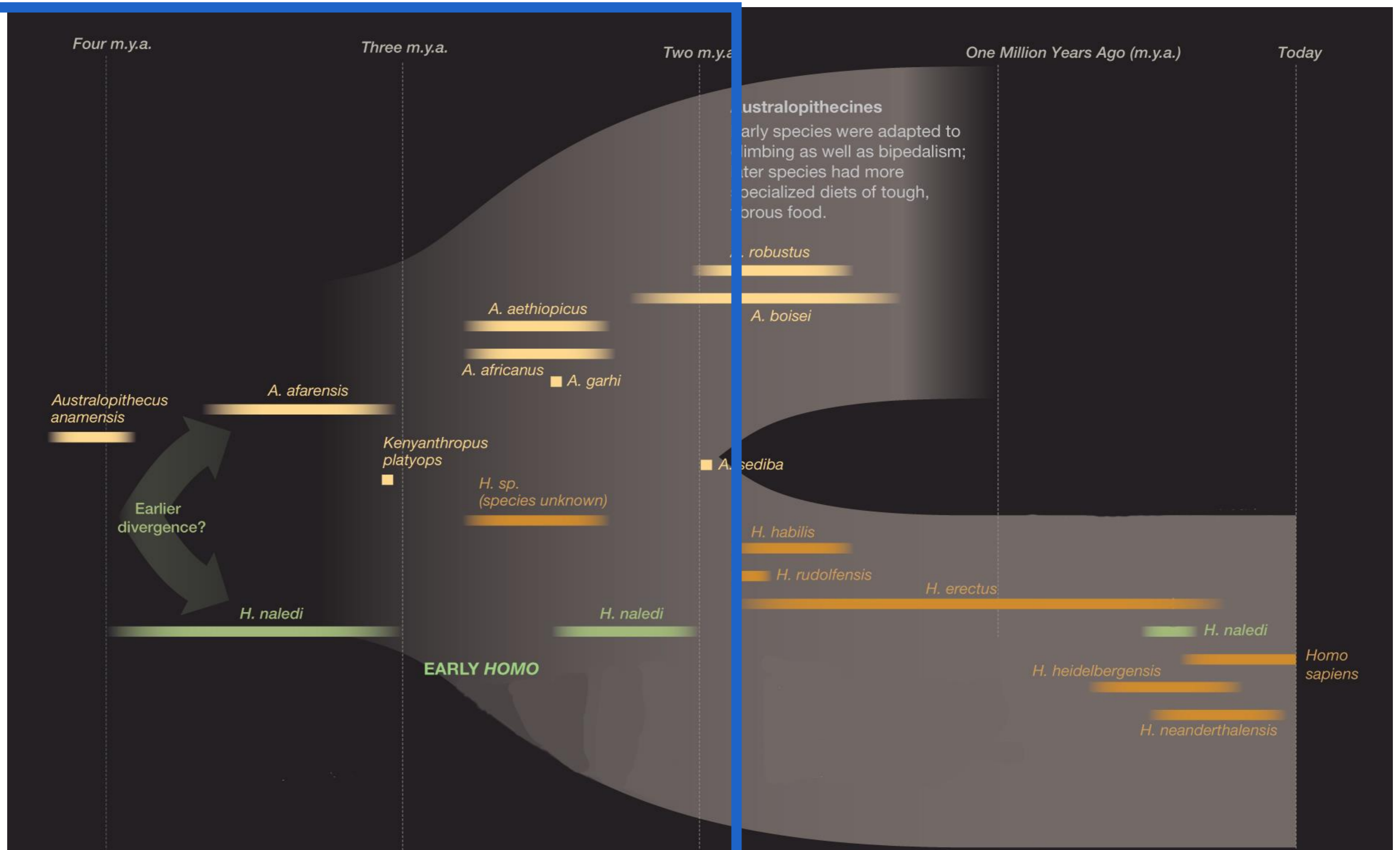
2 grote fasen in de domesticatie van vuur.

VANAF WANNEER MAAKTE MEN GEBRUIK VAN VUUR ?

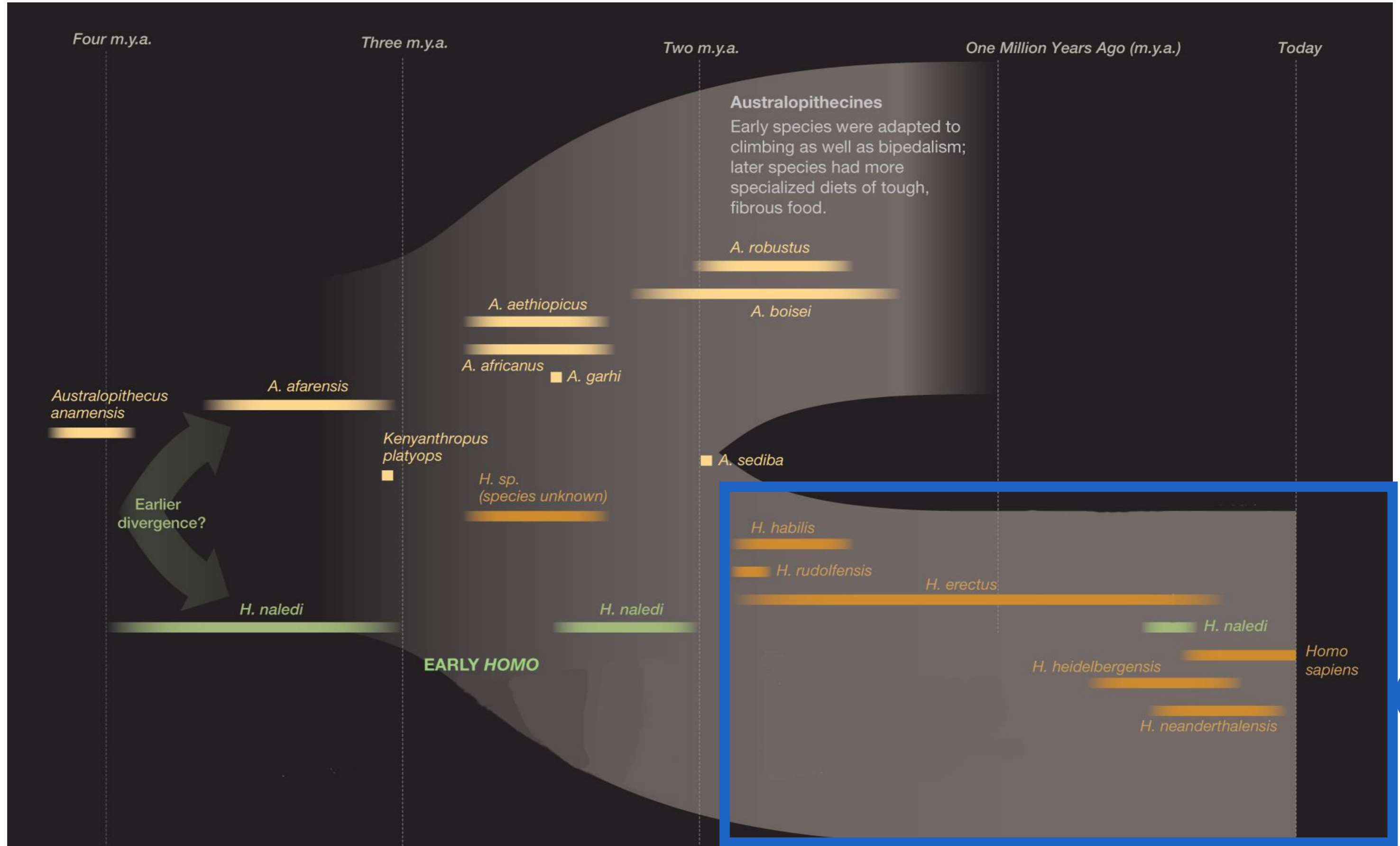
Fase 1 – gewenning aan vuur en seizoenaal gebruik van vuur



1



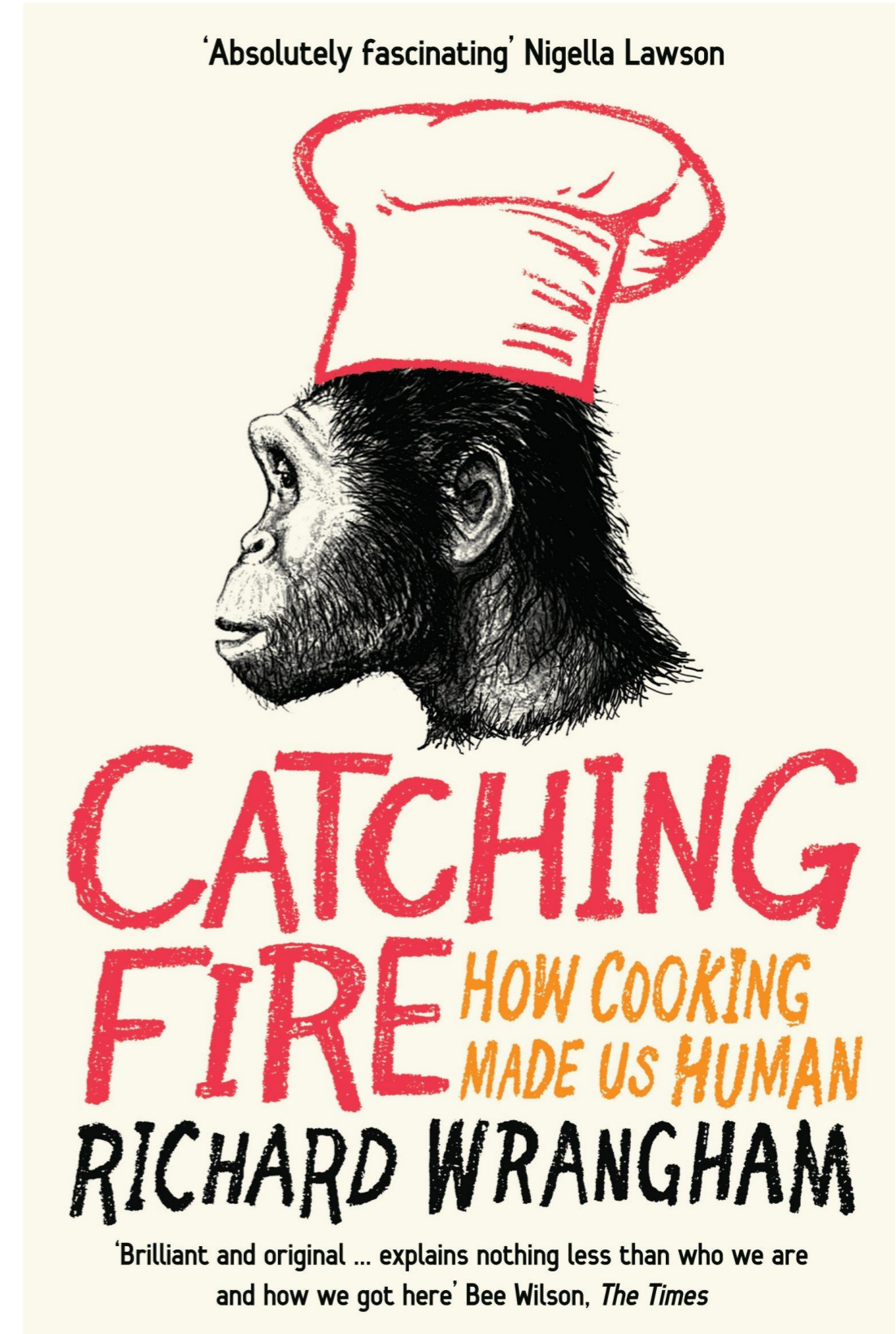
Fase 2 – de domesticatie van vuur



Homo Erectus ⇒ Zhoukoudian



⇒ The “*cooking hypothesis*” (R. Wrangham 2009)

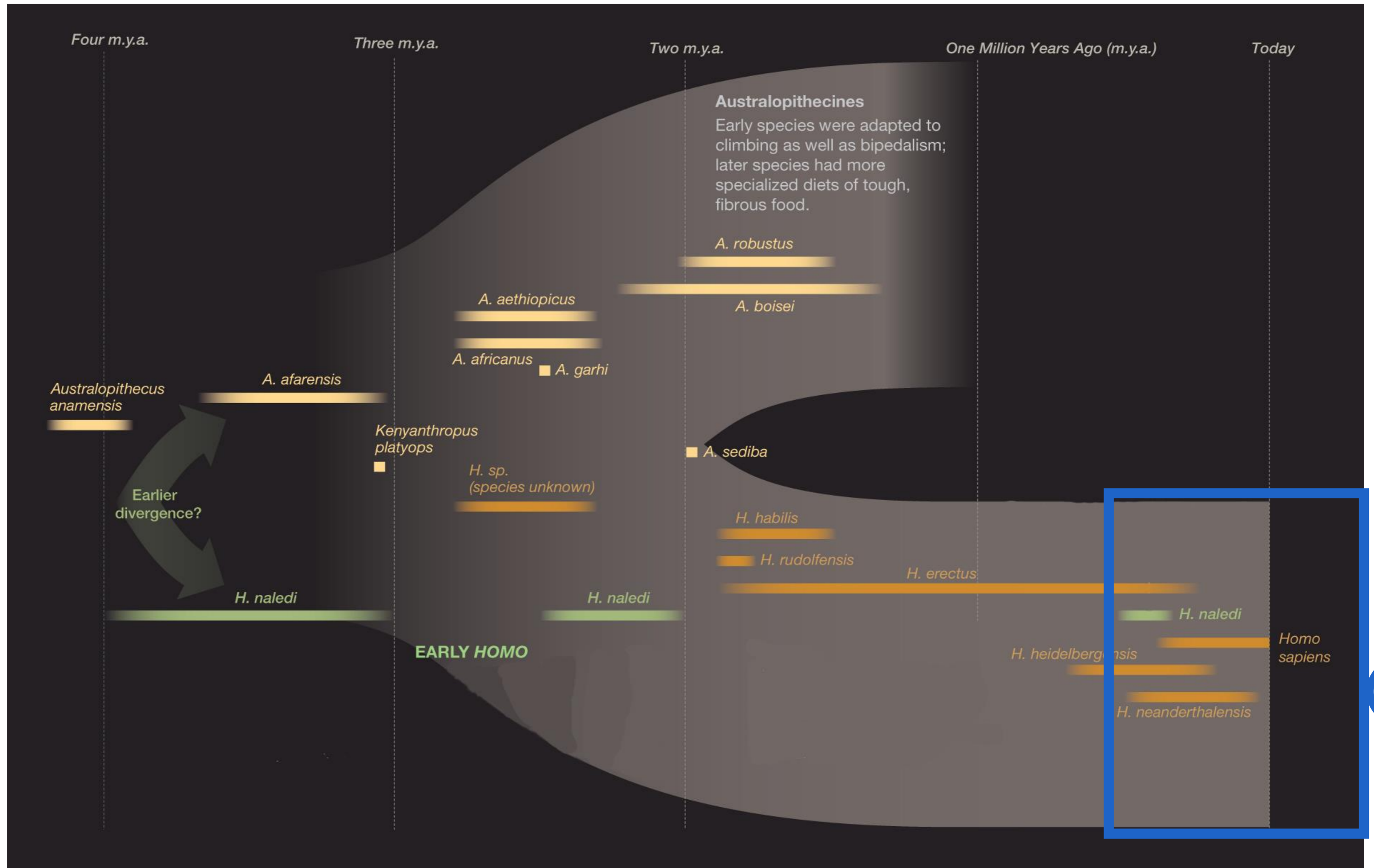


Oudste sites met sporen van vuur (periode > 400 000 jaar geleden)

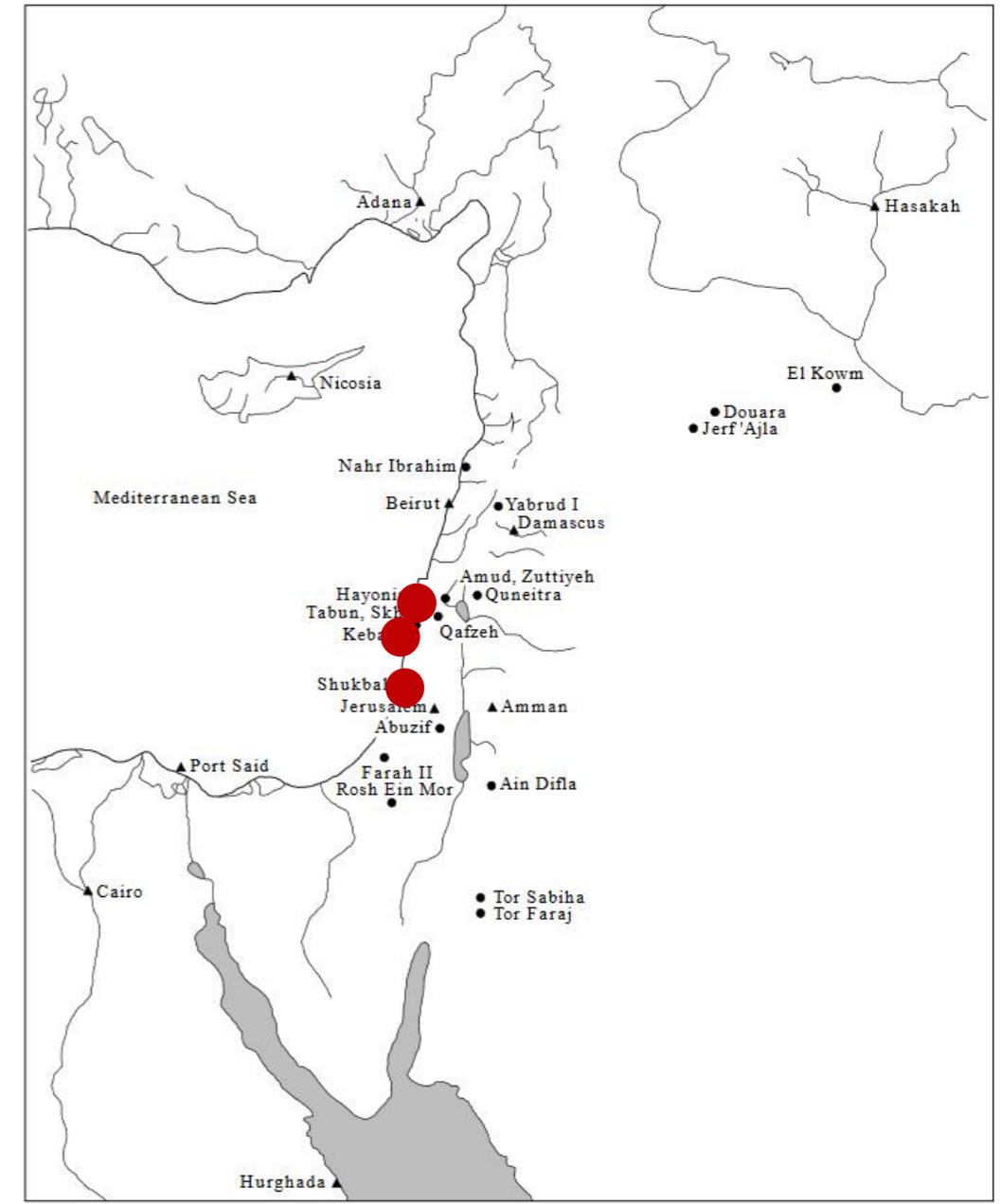
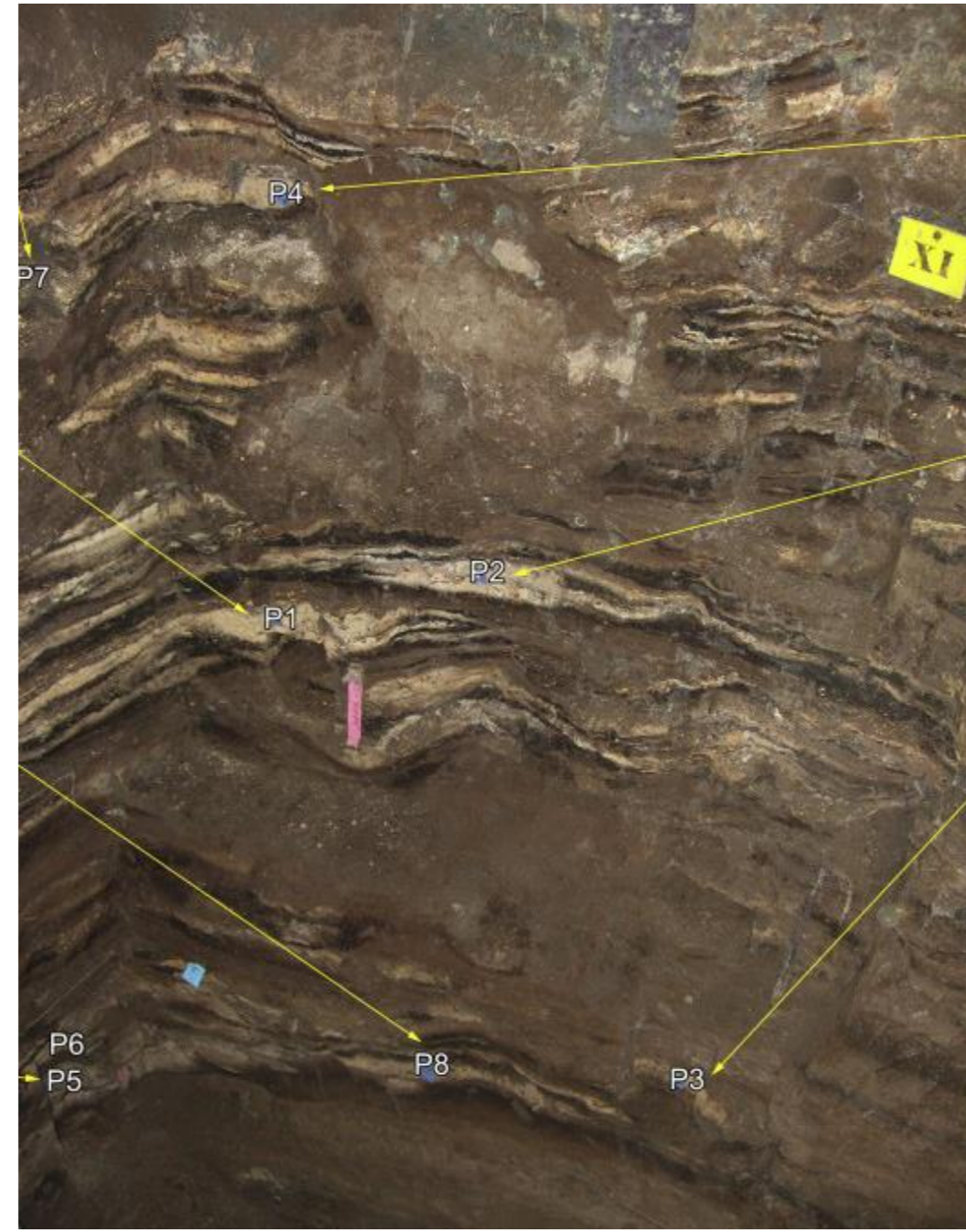
- Koobi Fora (Kenya)
- Chesowanja (Kenya)
- Swartkrans (Zuid-Afr)
- Wonderwerk (Zuid-Afr)
- Kalambo Falls (Zambia)
- Geshert Benot Ya'akov (Isr) (ca. 700 000)
- Zhoukoudian (China) (500 – 200 000)



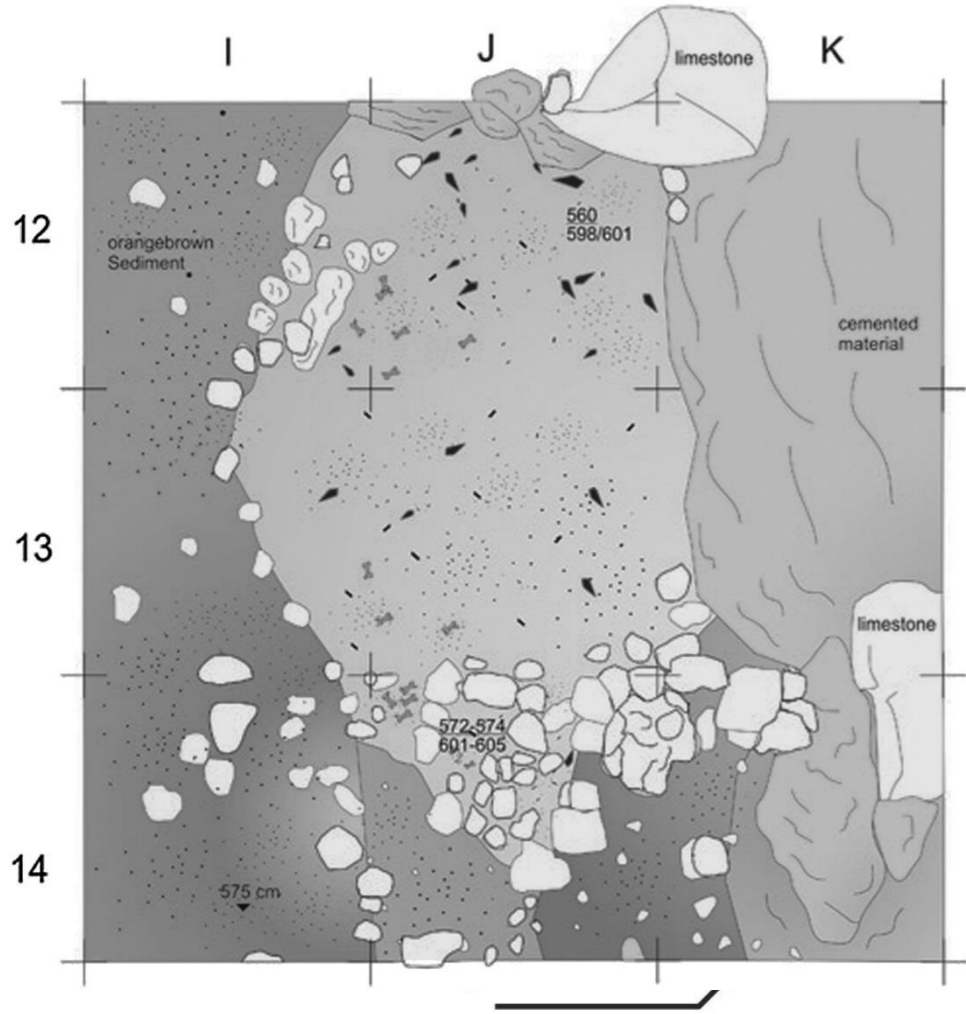
Fase 2 – de domesticatie van vuur (vanaf 300 000 BP)



Fase 2 – Midden-Palaeolithicum - Qesem, Kebara, Hayonim grotten



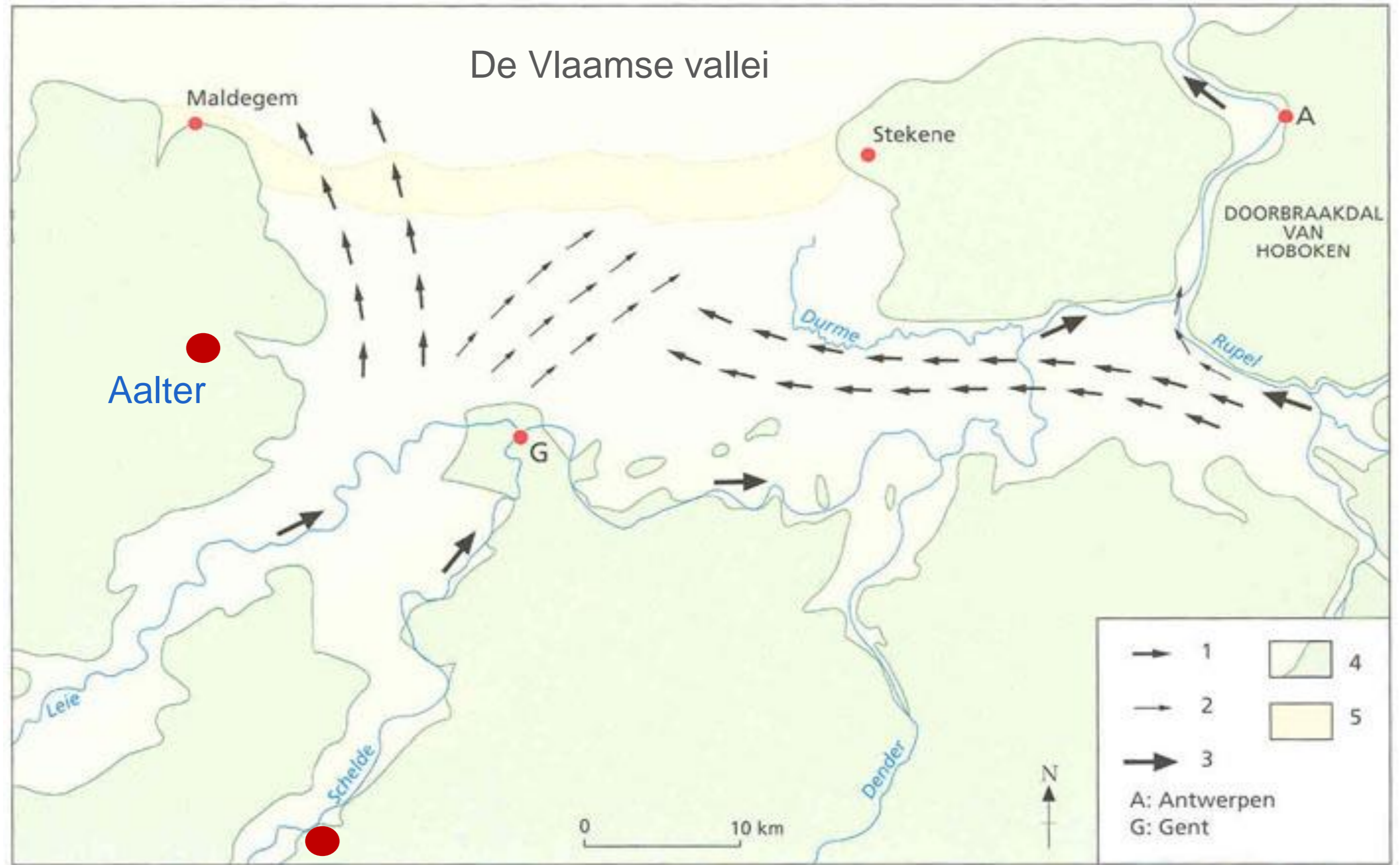
Schiegl et al. 1996



Shahack-Gross et al. 2014

Albert, Berna & Goldberg 2012

Fase 2 – Midden-Palaeolithicum – Oost-Vlaanderen



Kluisbergen/Amougies

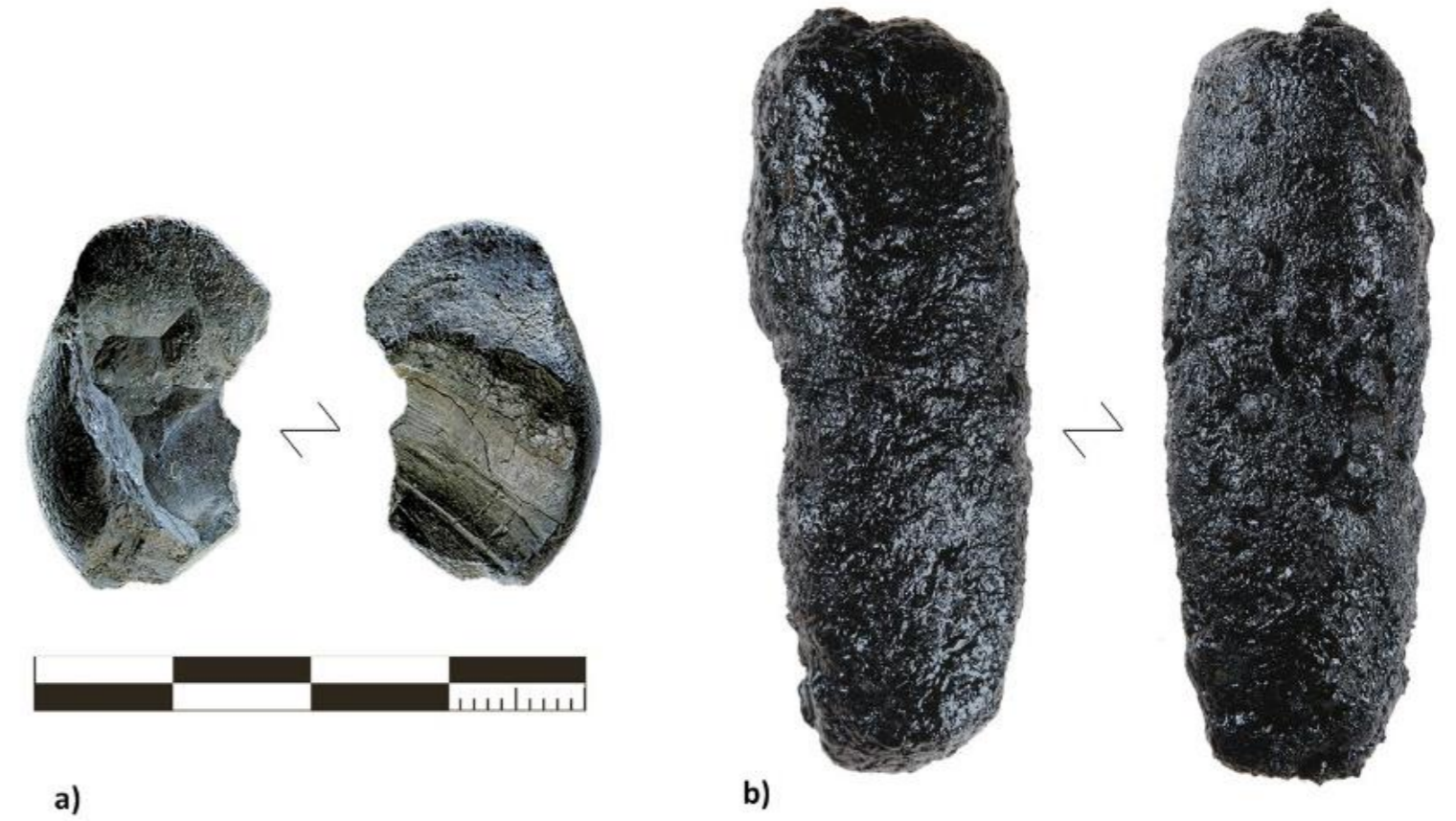
Fase 2 – de domesticatie van vuur - Berkenbast-teer!



0 2 cm

Campitello, ca. 200 000 BP (ITA)

Roebroeks & Villa 2011

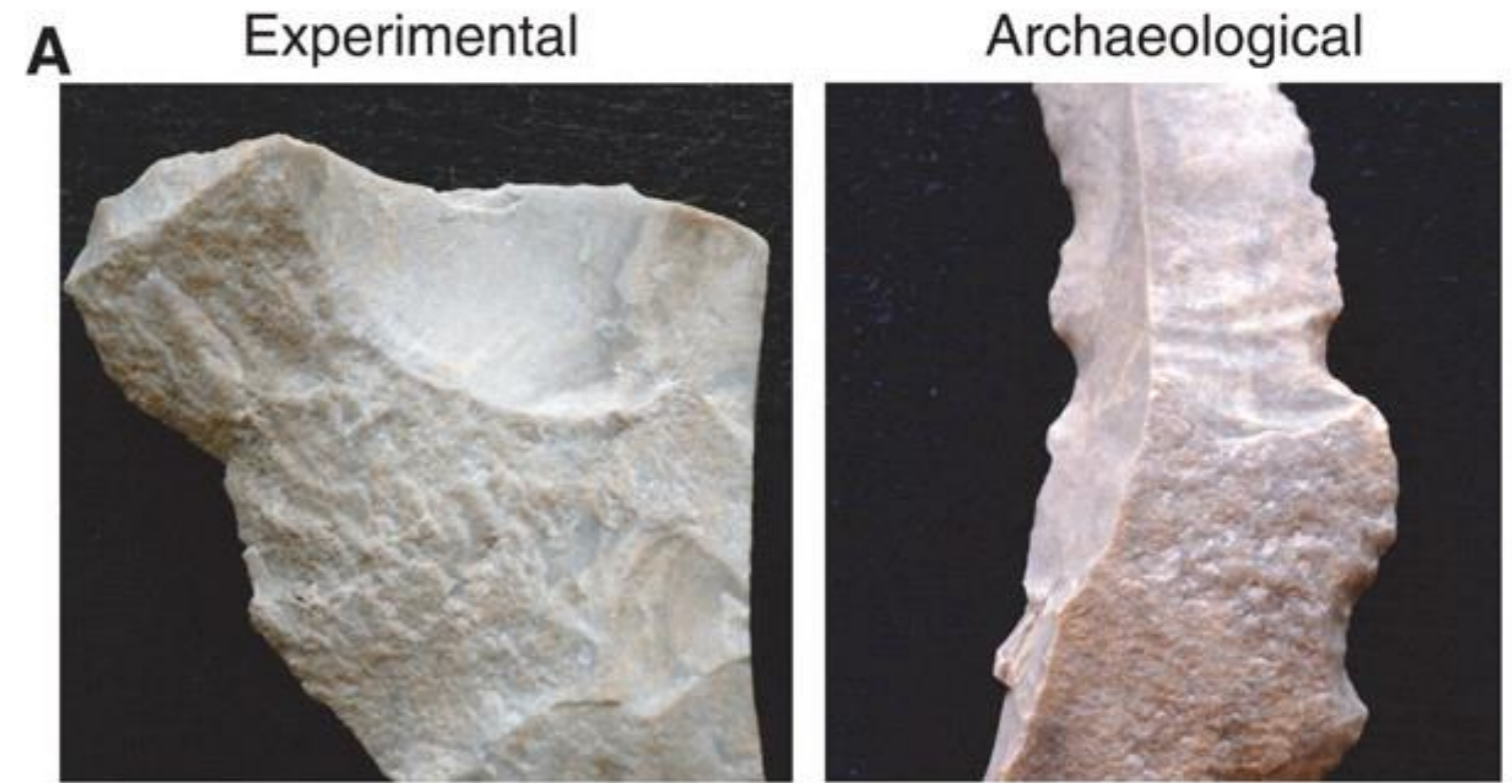


Königsau, ca. 120 à 70 000 BP (DUI)

Kozowyk et al. 2017

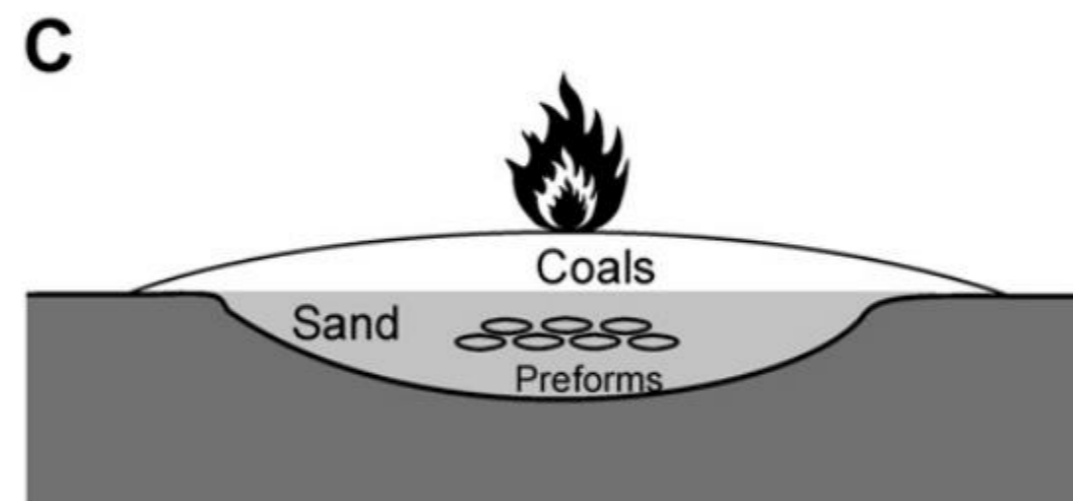
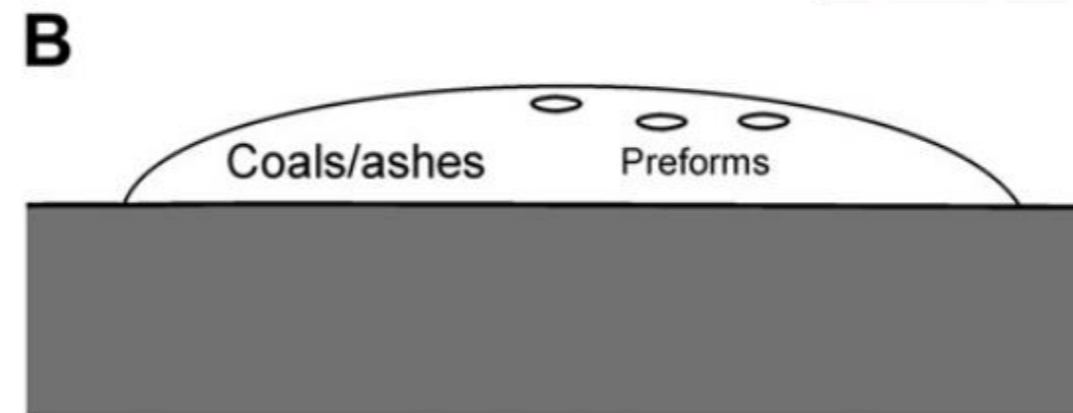
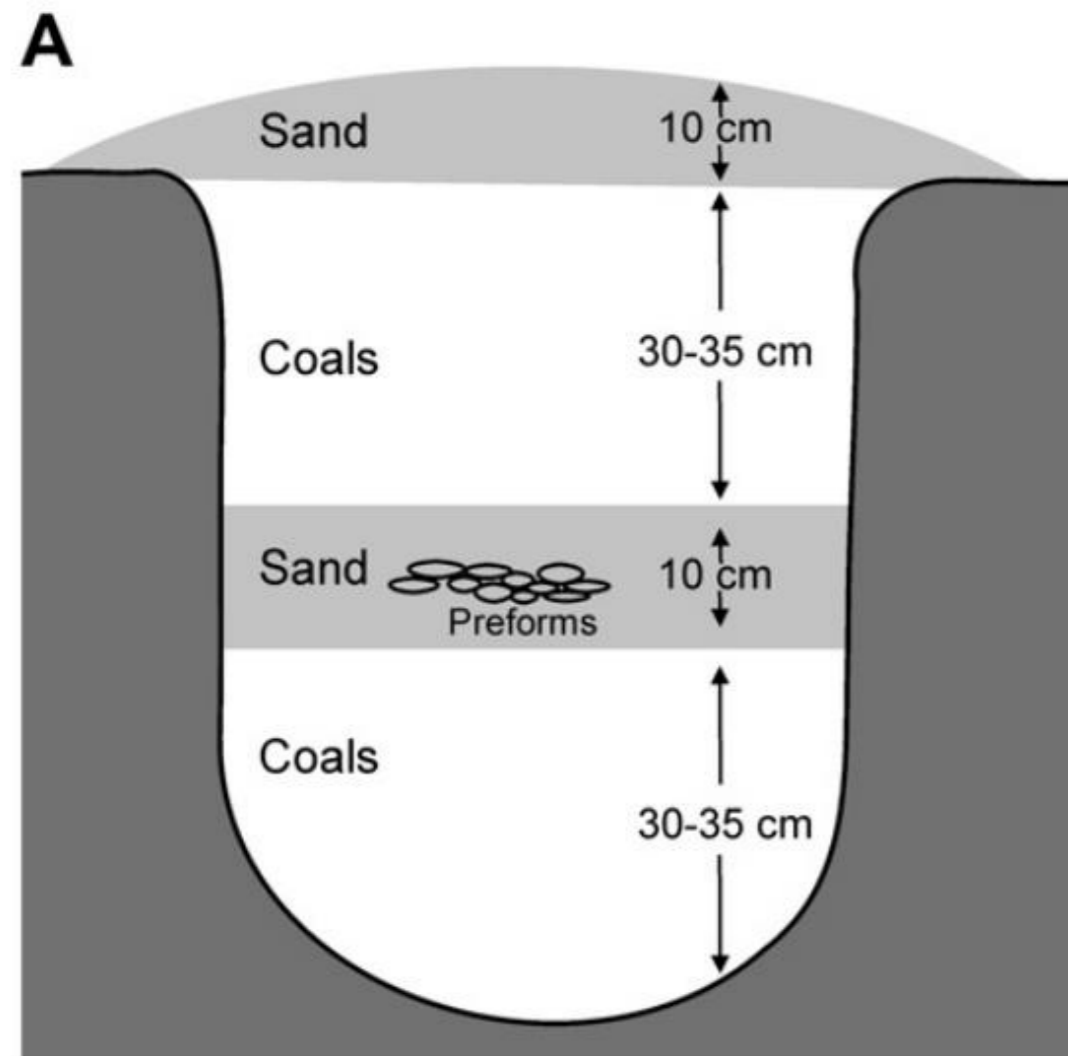


Fase 2 – de domesticatie van vuur – Heat treatment van vuursteen



Pinnacle Point (Z-AFR, 70 000 BP)

Brown et al. 2009



Mercieca & Hiscock 2008

Fase 2 – de domesticatie van vuur – Aardewerk & Metallurgie



Gelbert 2003

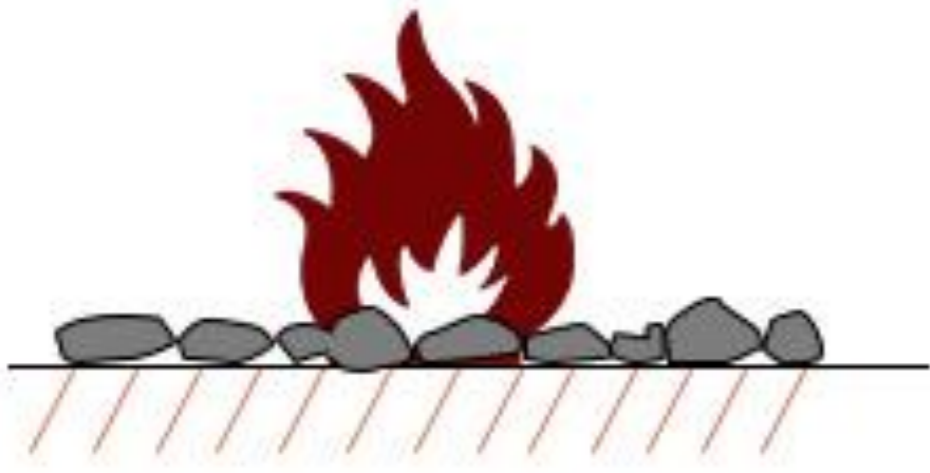


Senegal

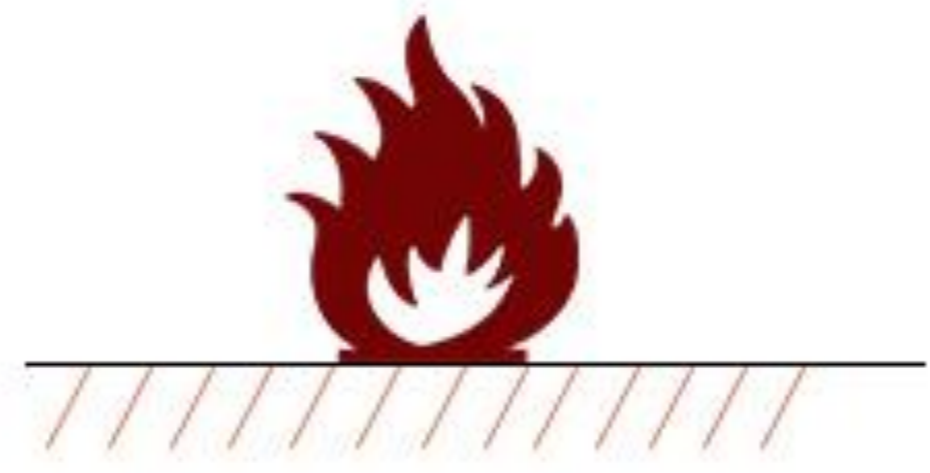
Oost-Vlaamse sporen – haarden

Haarden: 3 grote types

1



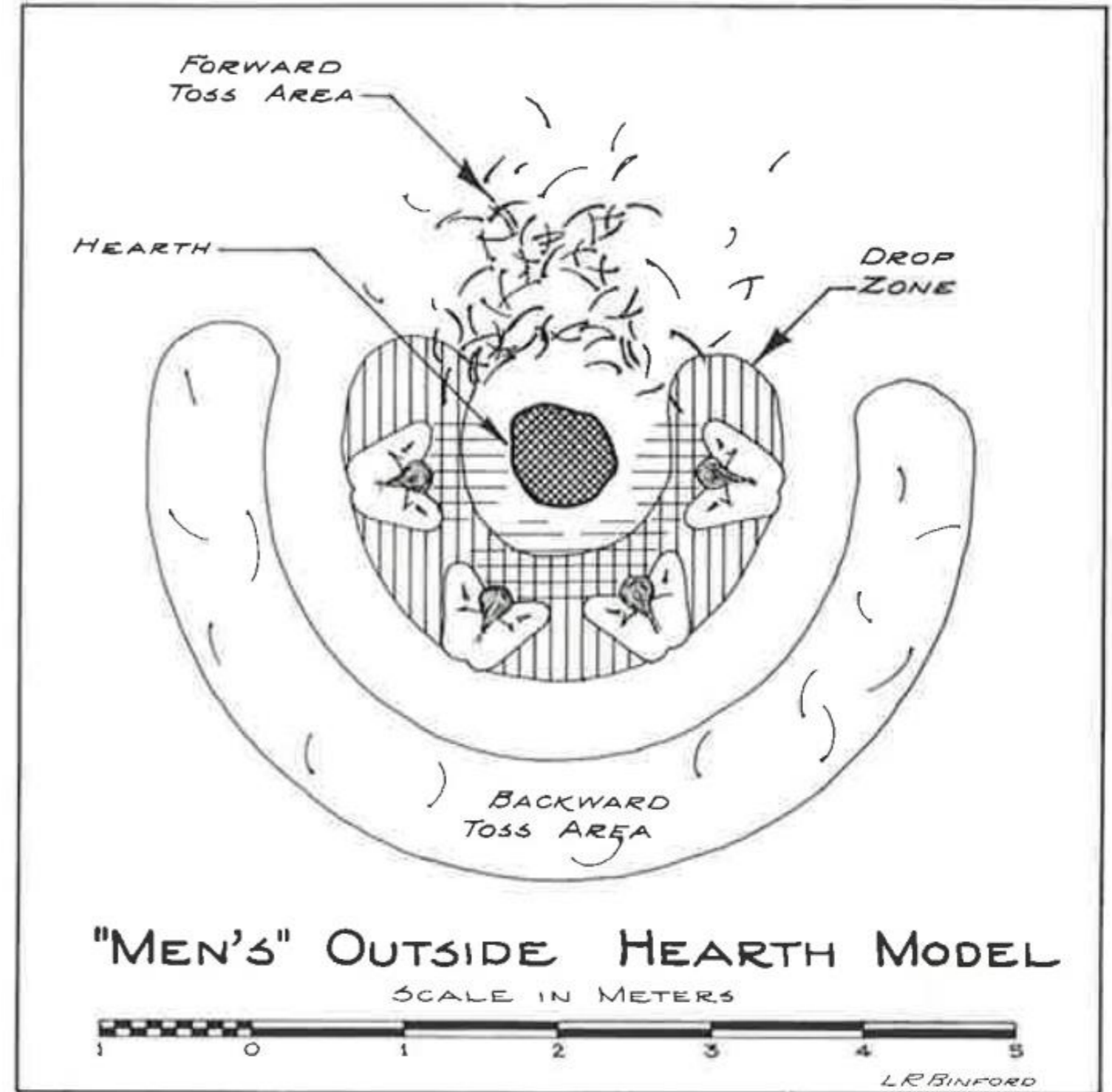
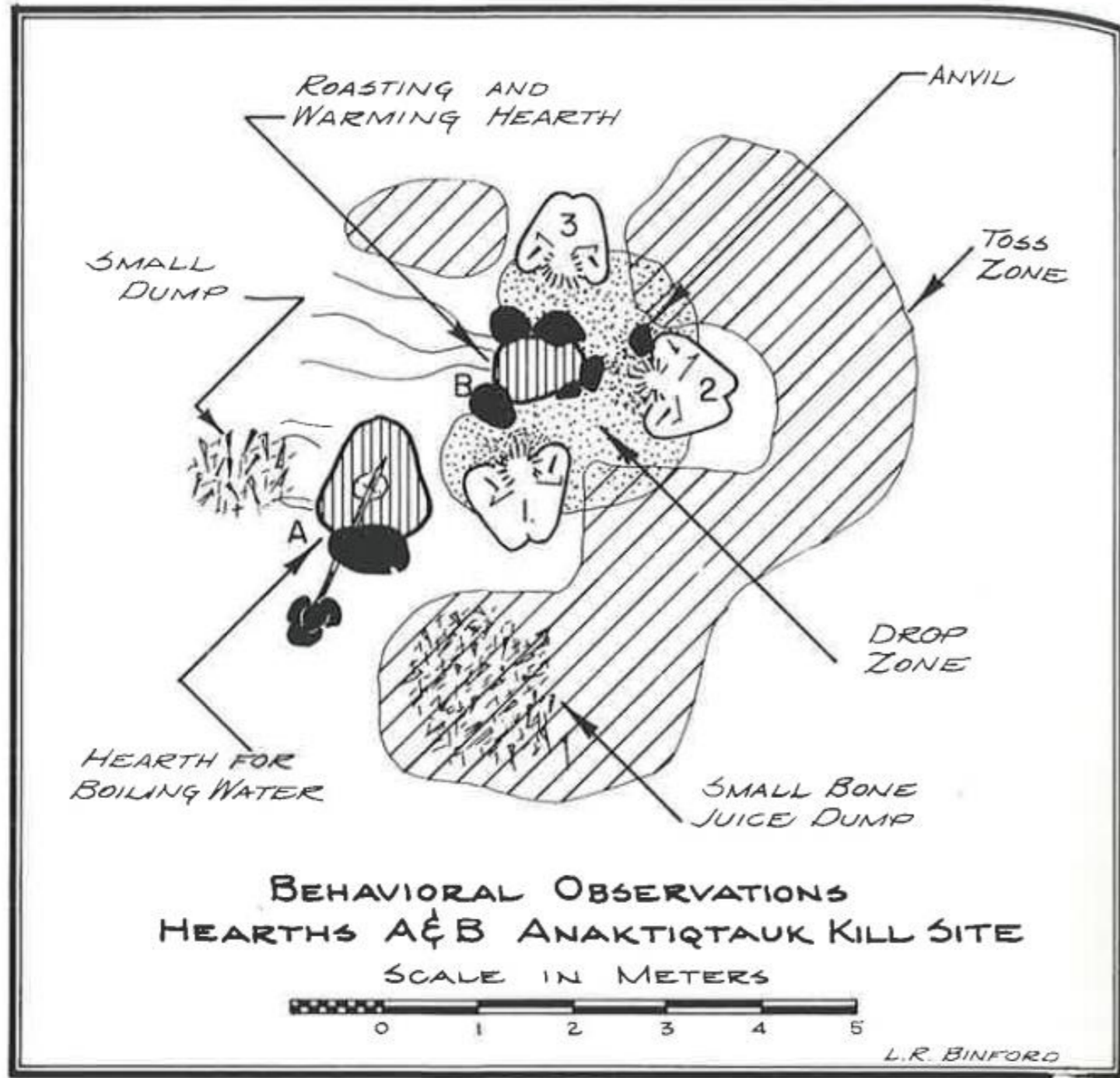
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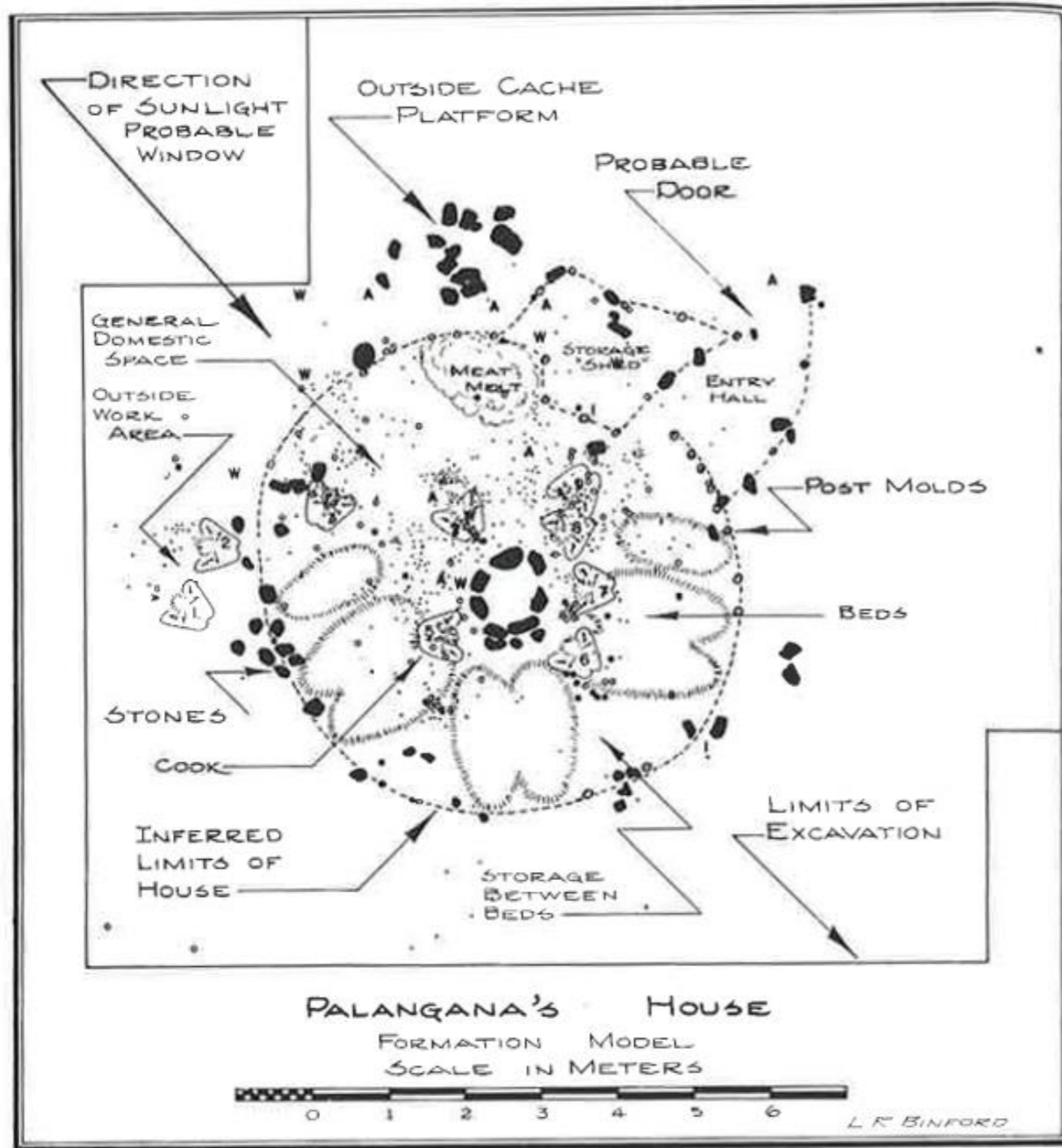
3



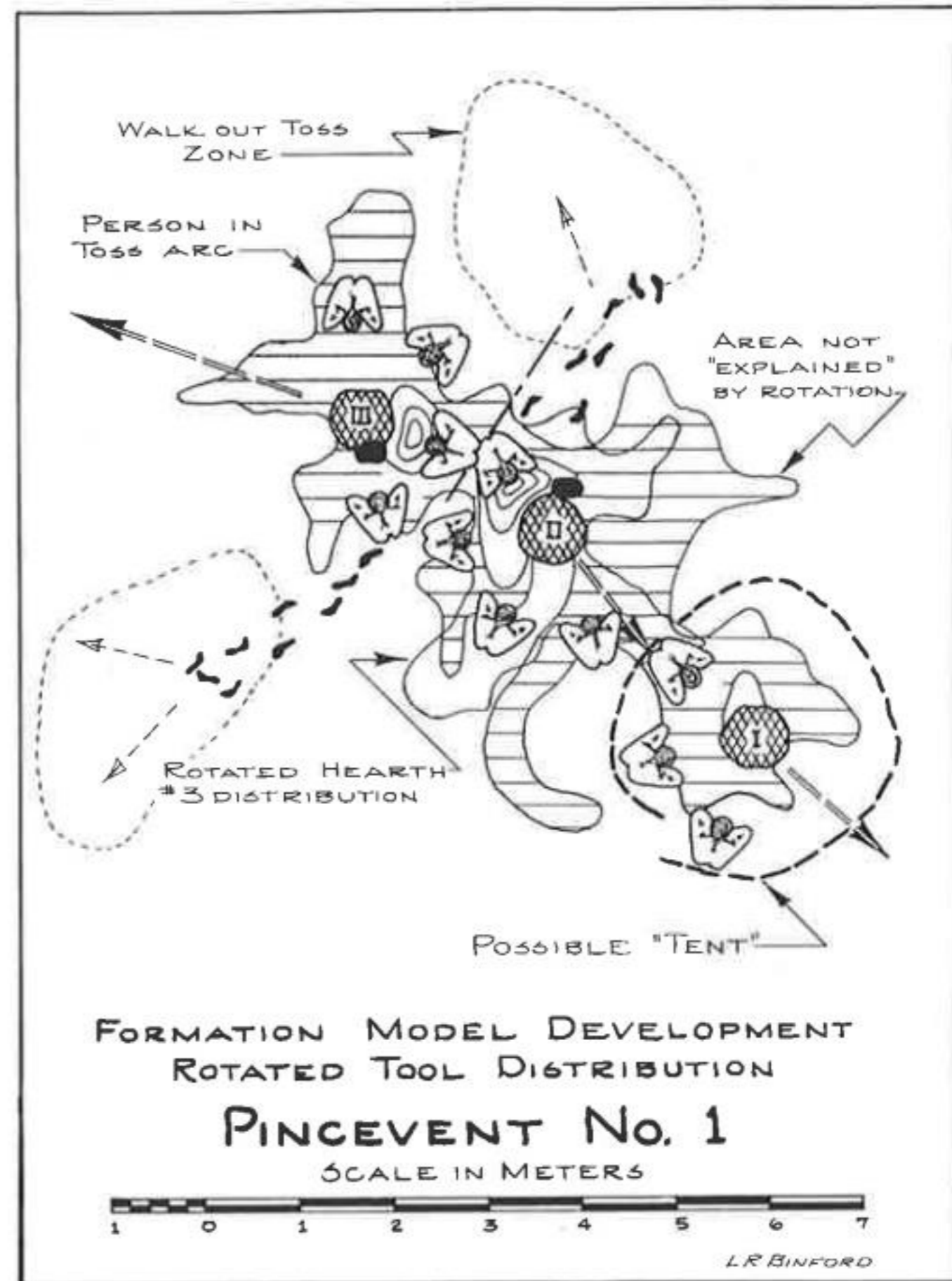
Fase 2 – Ethnografie - Lewis Binford!



Fase 2 – de domesticatie van vuur – Etnografie & Lewis Binford!



Binford 1983

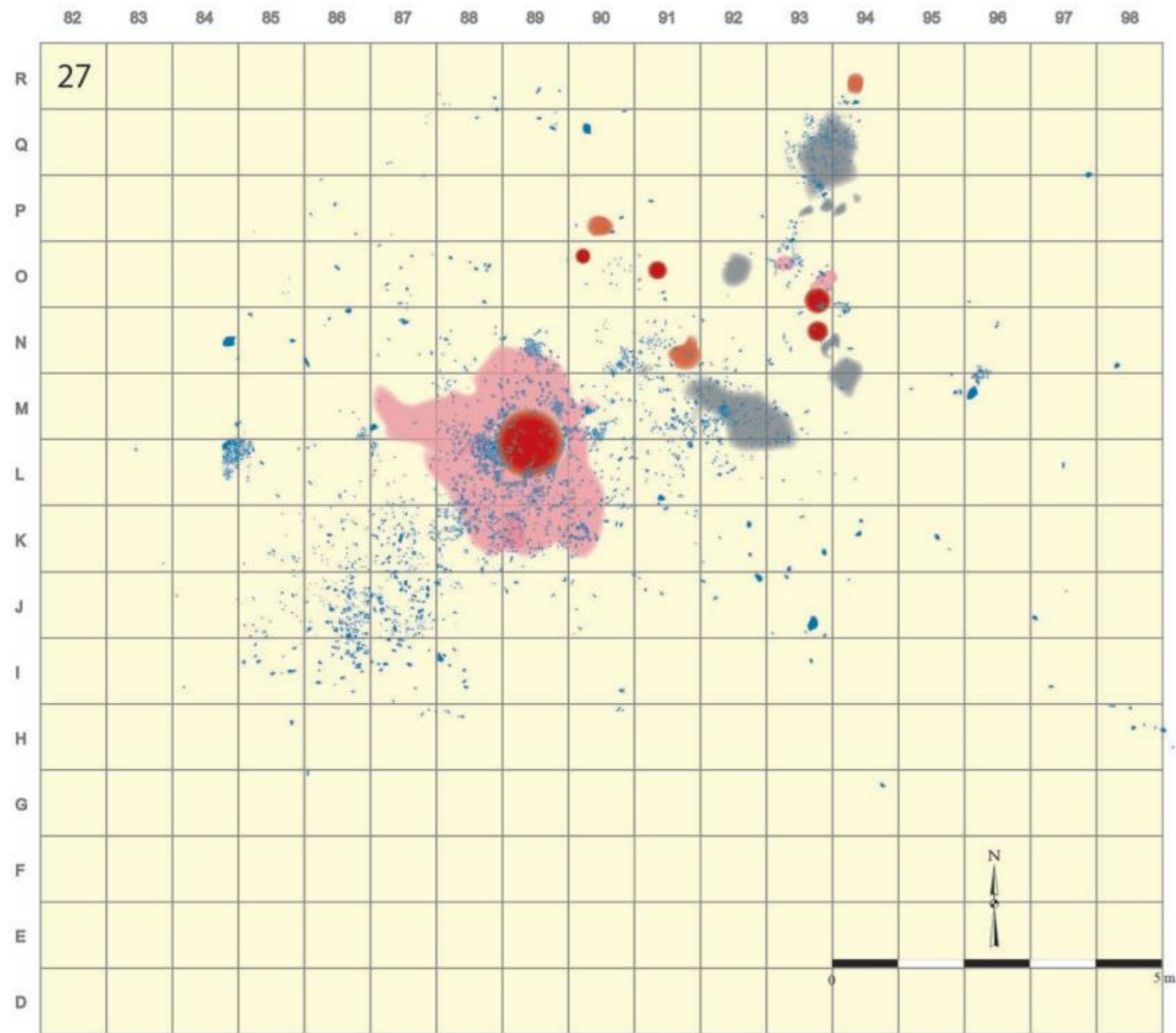


Finaal-Paleolithicum (ca. 18 000 – 9600 BP)

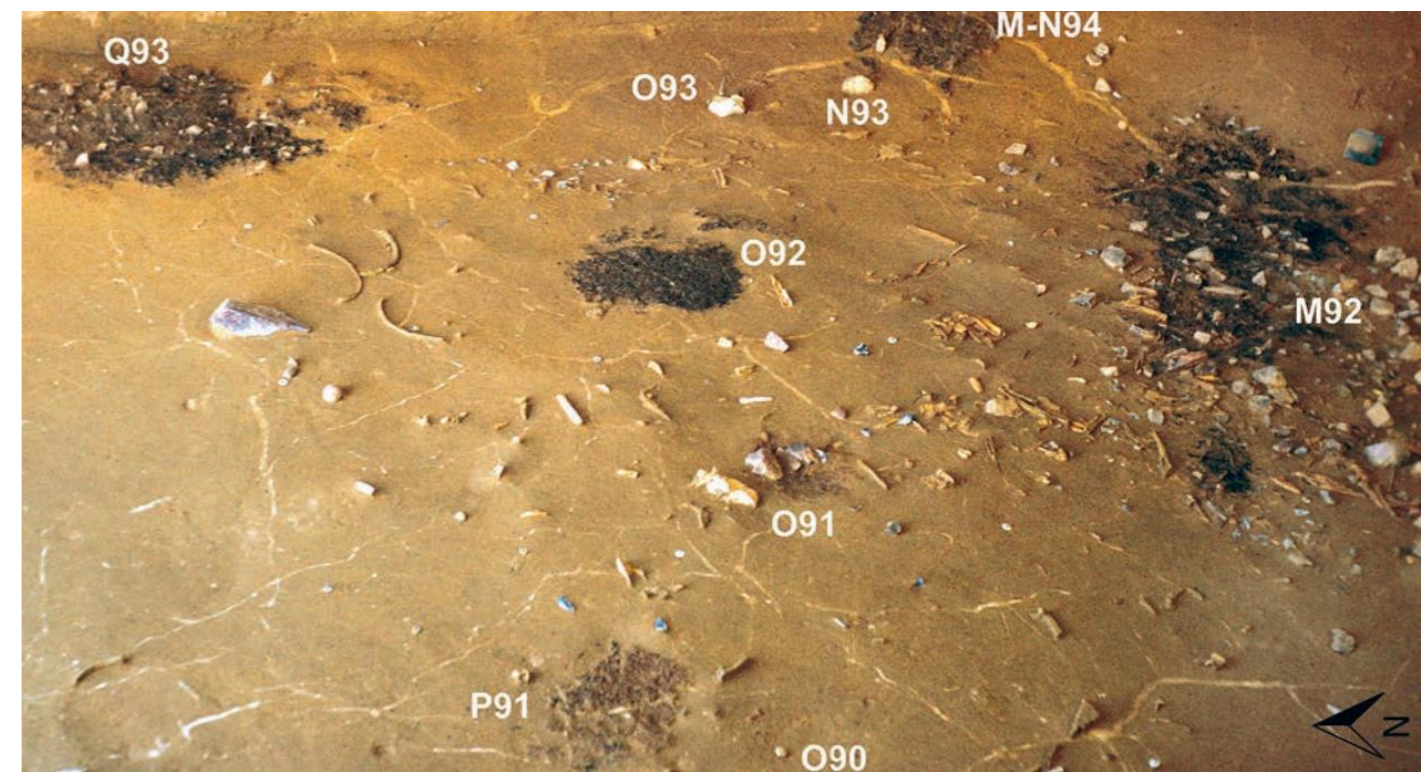
Finaal- Paleolithicum - Magdaleniaan – Pincevent



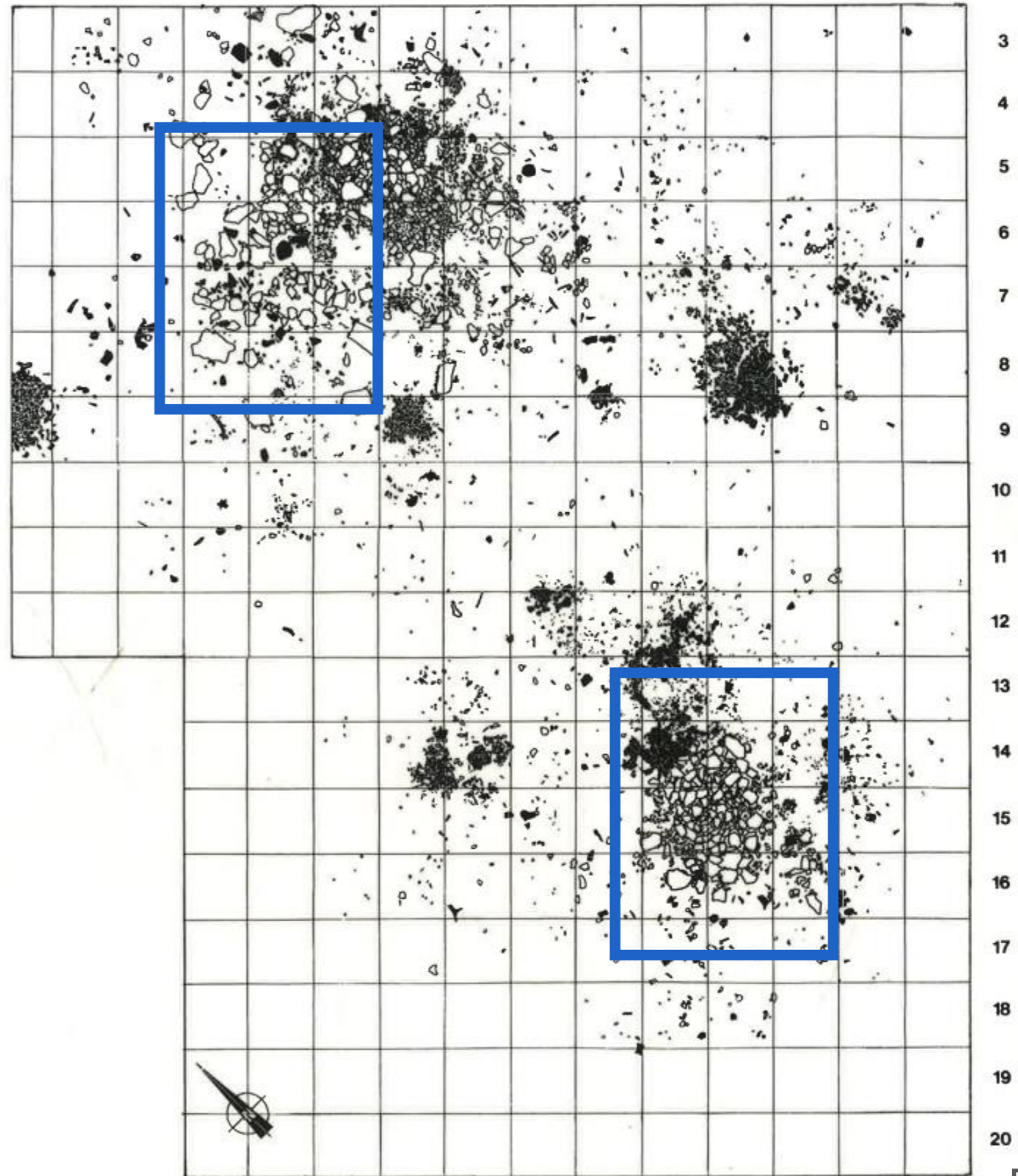
Finaal- Paleolithicum - Magdaleniaan – Pincevent



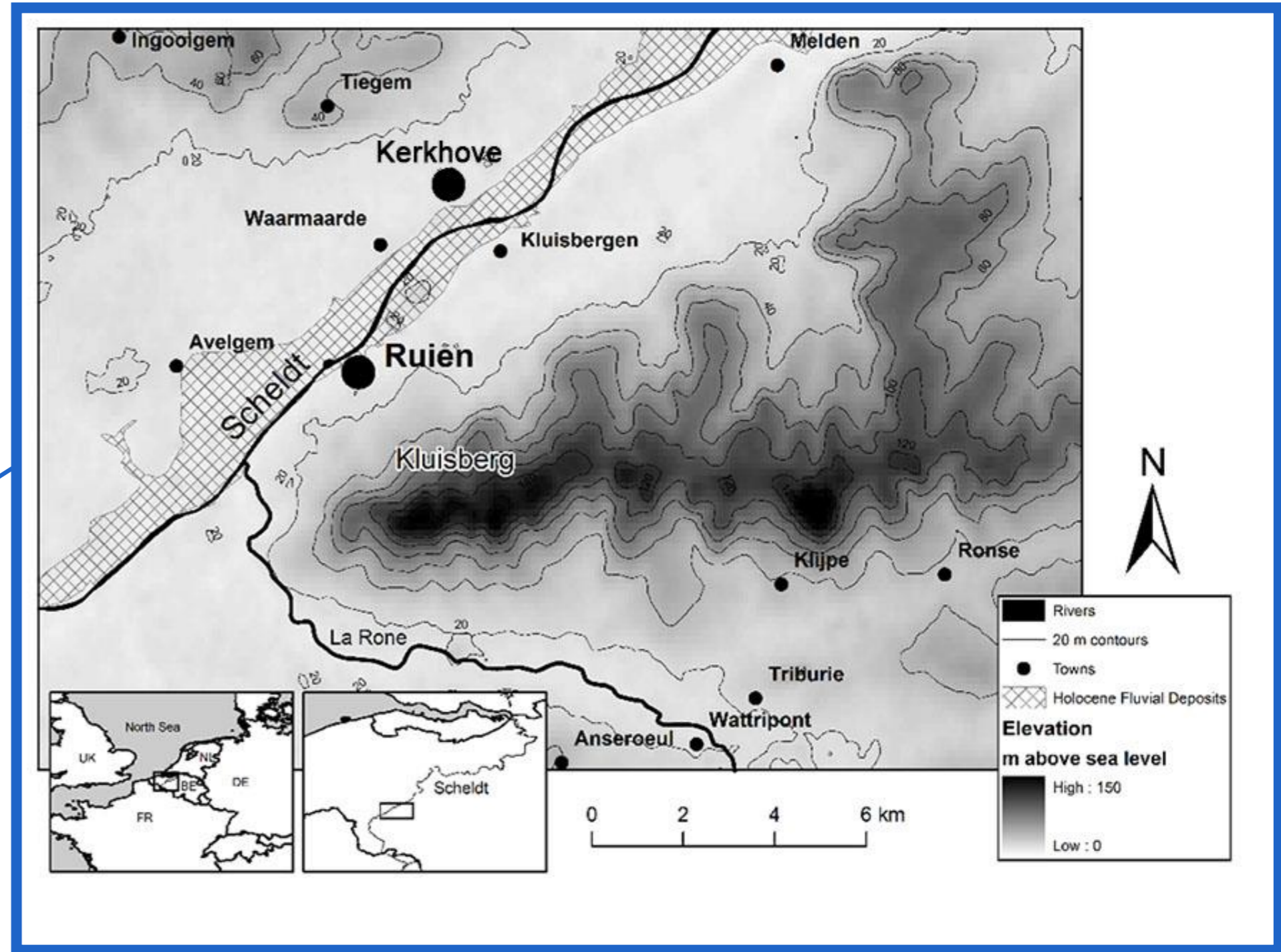
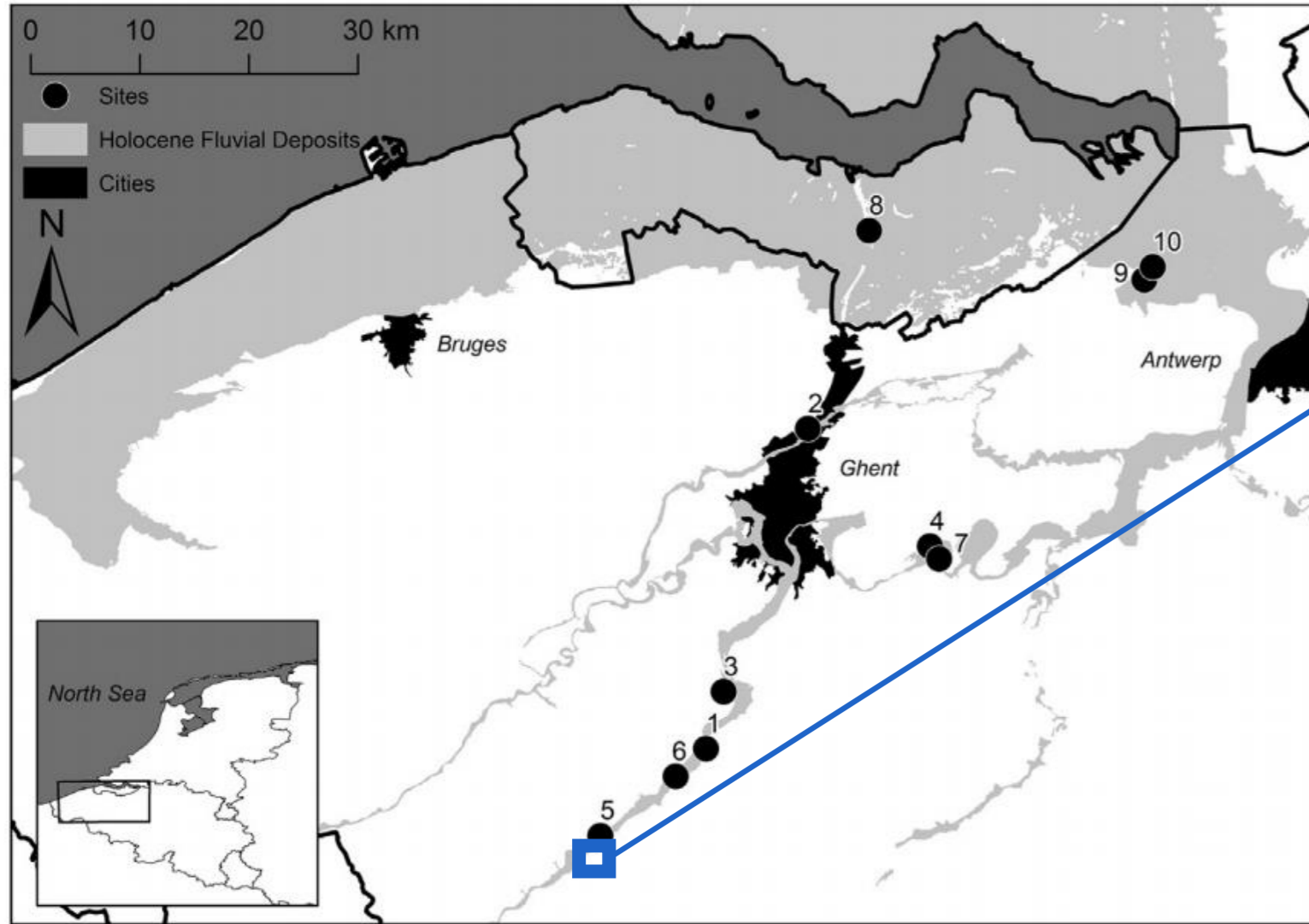
Julien & Karlin 2014



Finaal-Paleolithicum – Magdaleniaan – Etiolles



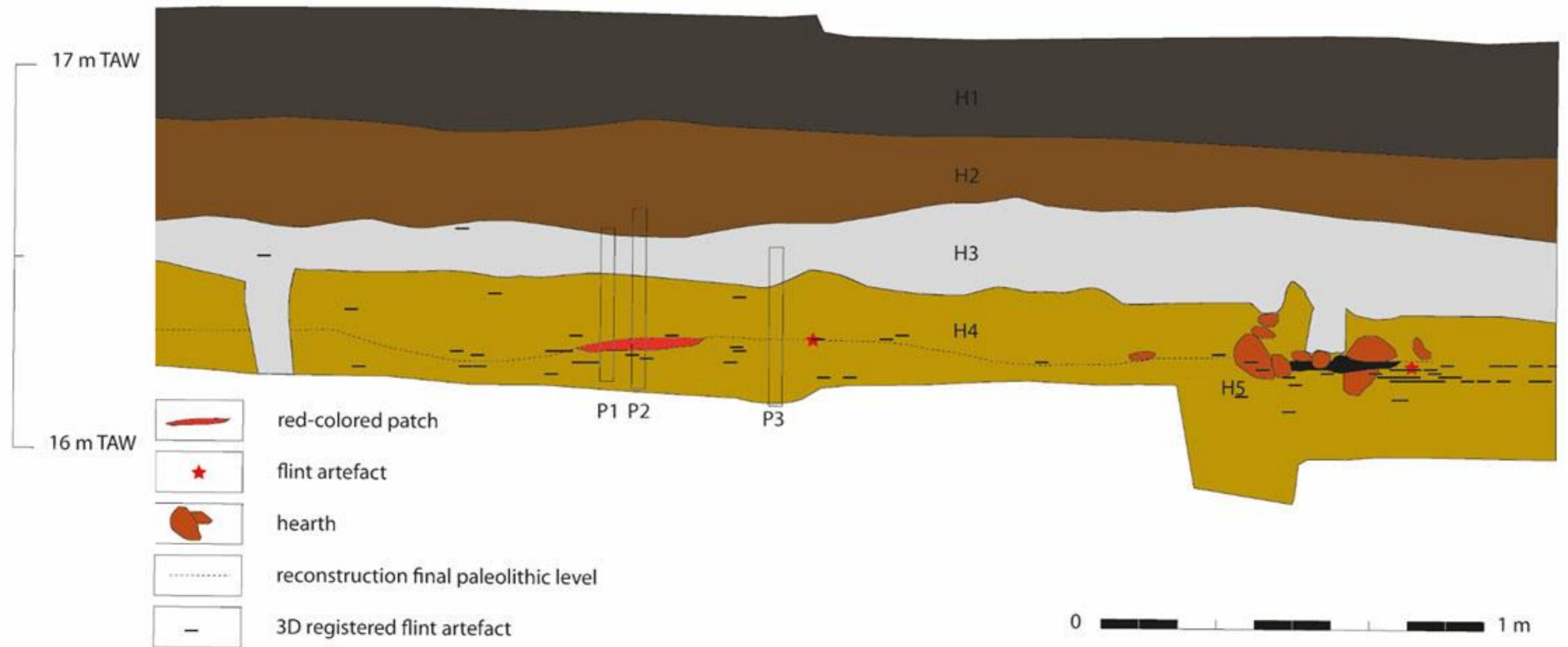
Finaal-Paleolithicum - Ruien-Rosalinde



Finaal-Paleolithicum - Ruien-Rosalinde

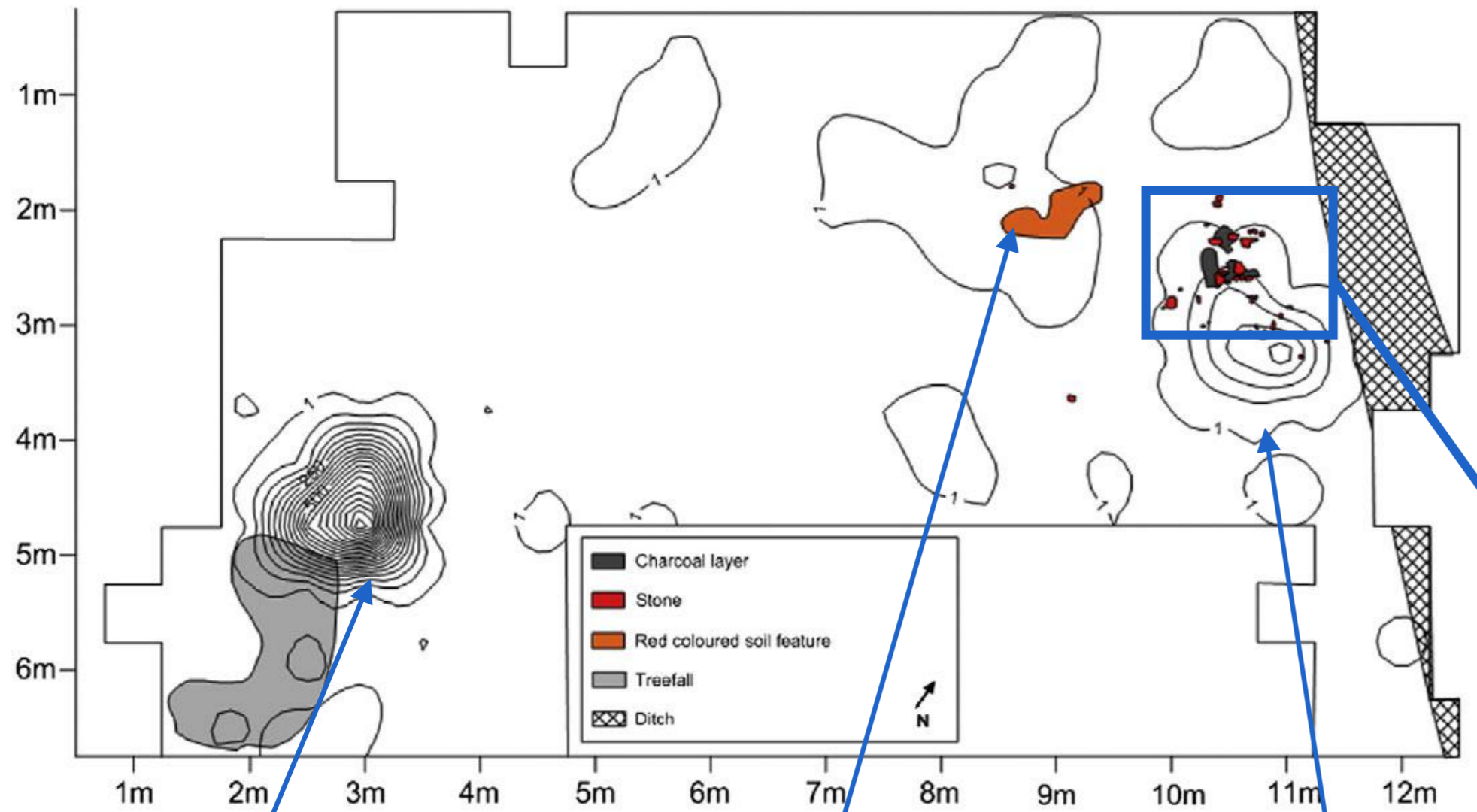


Finaal-Paleolithicum - Ruien-Rosalinde



Crombé et al. 2014

Finaal-Paleolithicum - Ruien-Rosalinde



Crombé et al. 2014

concentratie

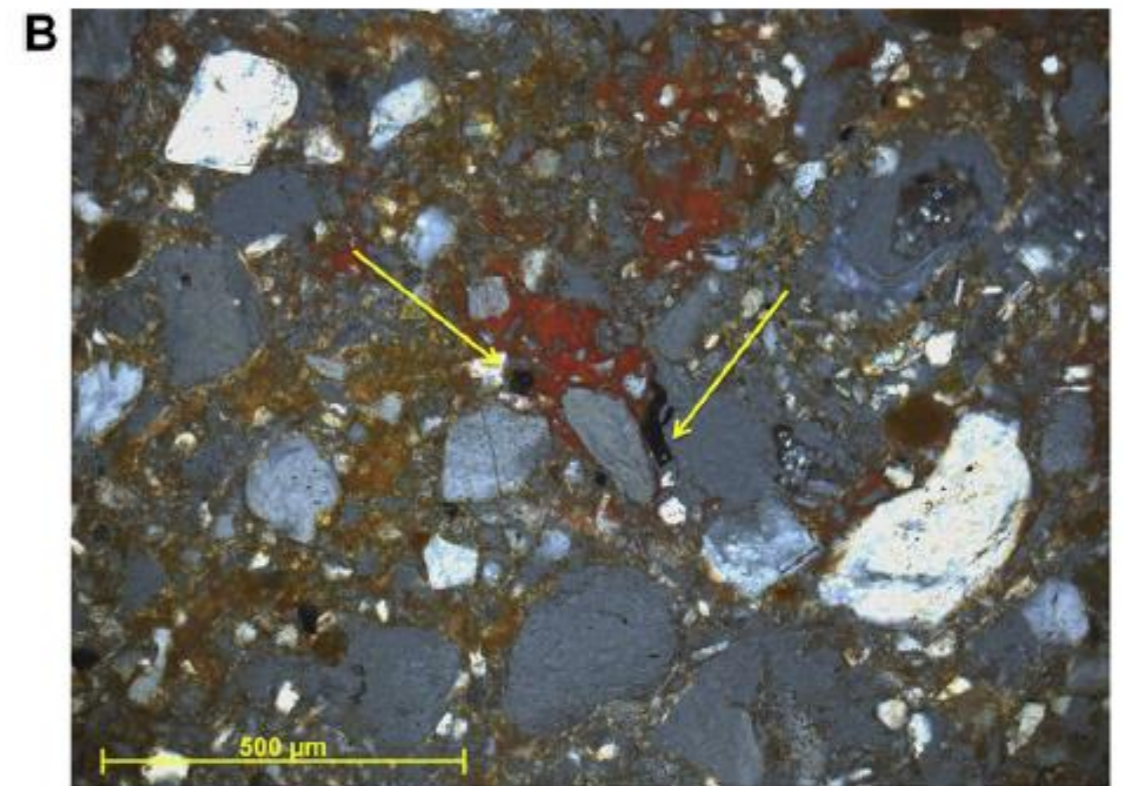
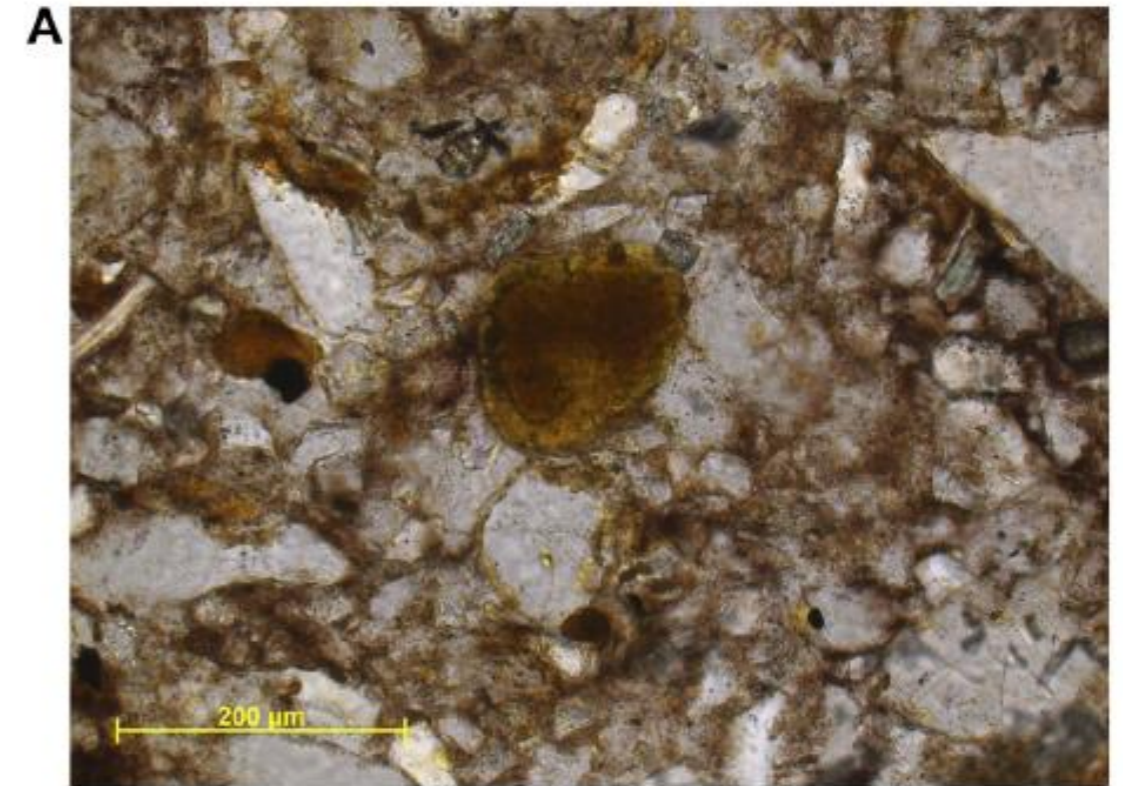
in situ verbranding

concentratie



Finaal-Paleolithicum - Ruien-Rosalinde

- **Materiaal** : ijzer- en glauconiethoudende zandstenen
- XRF-, XRD-, DSC- en CBD-analyses (onderzoek UGent)
 - Transformatie van bepaalde mineralen duiden op verhitting
 - Stenen zijn verbrand op temperatuur tussen 300 en 600 C°



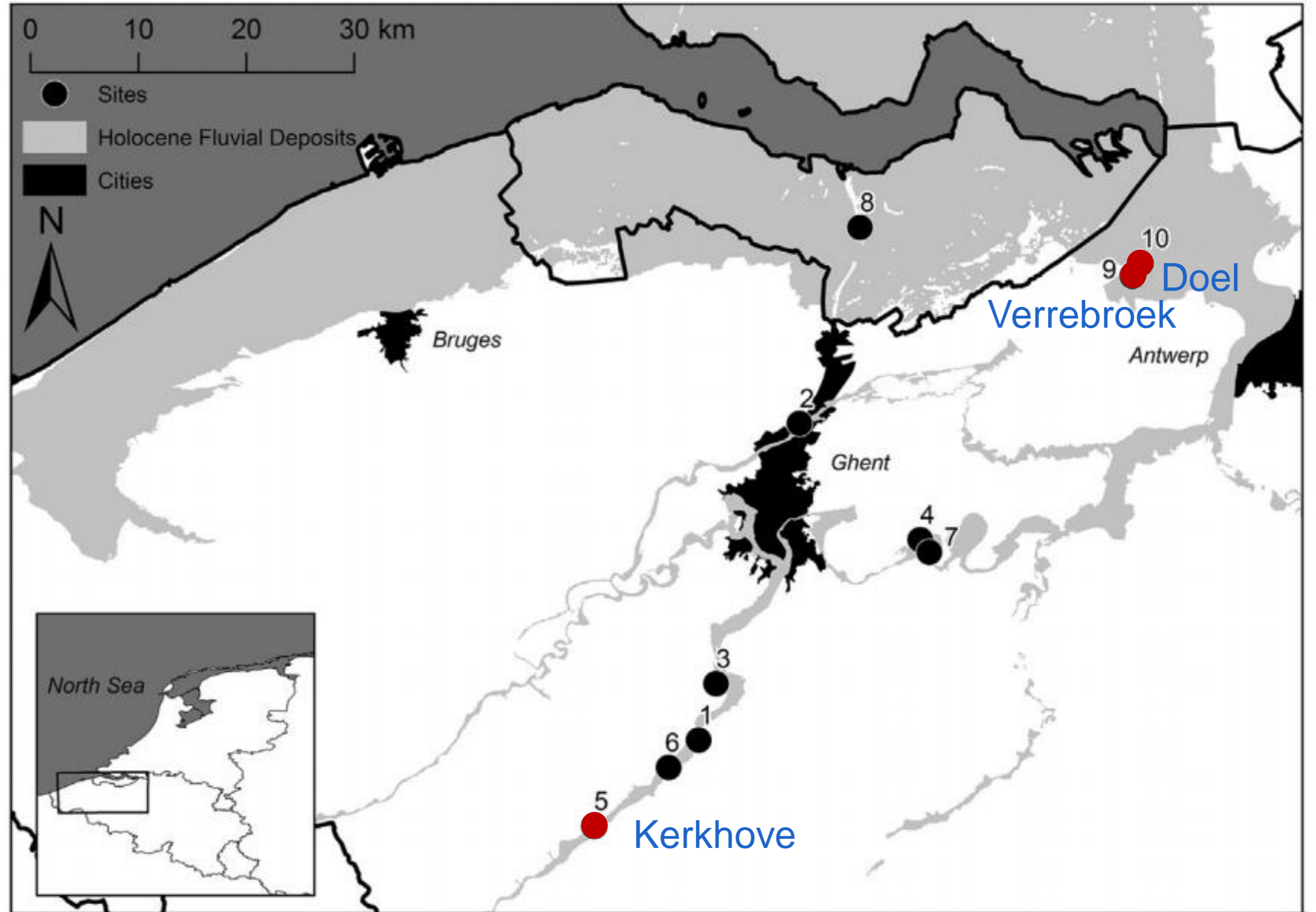
Mesolithicum (ca. 9000 – 4500 calBC)

Oost-Vlaamse voorbeelden – Mesolithicum

Verrebroek Dok 1

Doel Deurganckdok

Kerkhove Stuw

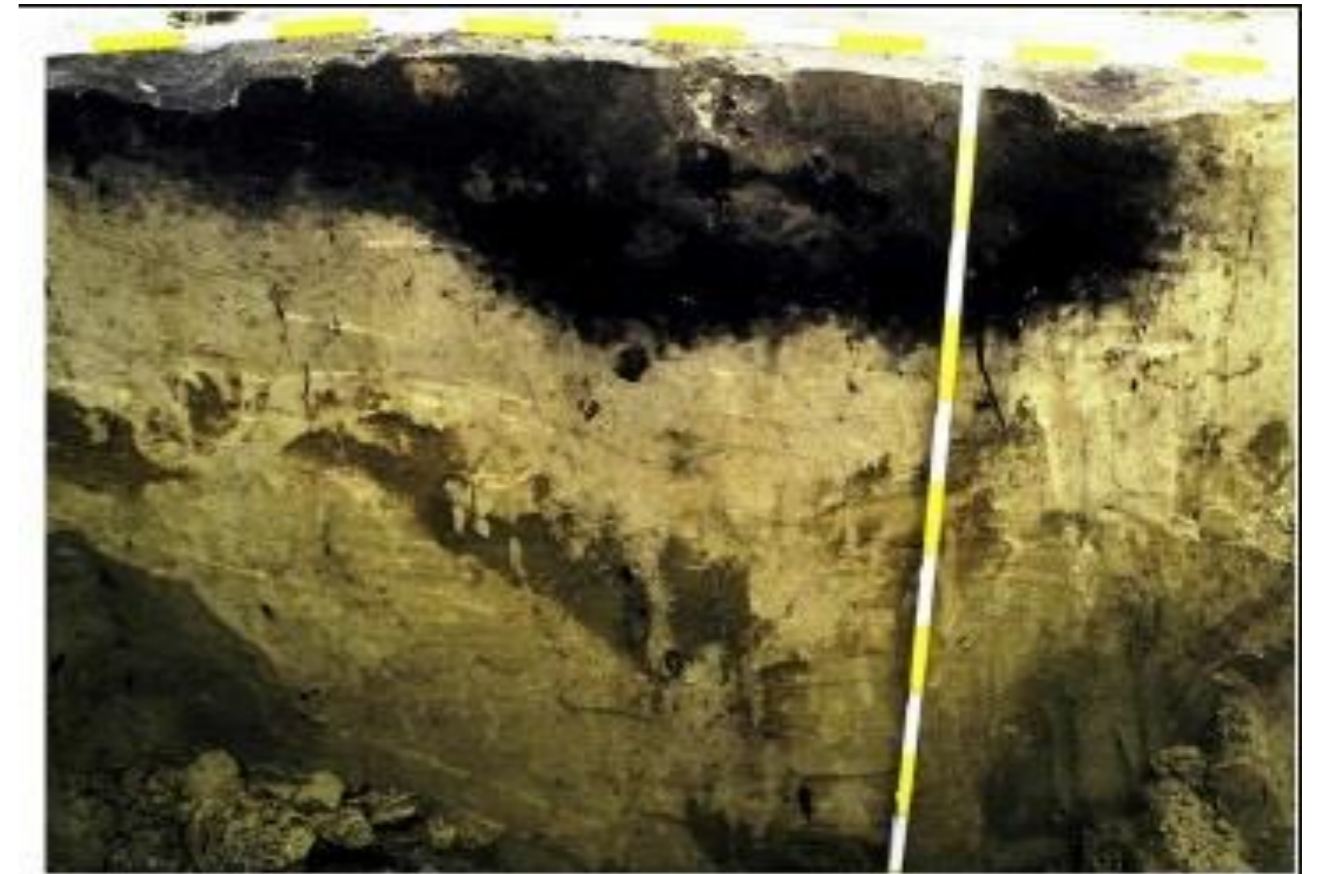


Mesolithicum – Verrebroek Dok en Doel - Deurganckdok



Kung San Bushmen, Kalahari

Vlakhaarden zonder stenen
&
Haardkuilen



Crombé 2015

Mesolithicum – vlakhaarden zonder stenen



Kung San Bushmen, Kalahari Woestijn

Bodemvorming



“invisible hearths” (Sergant, Crombé & Perdaen 2006)



Mesolithicum – vlakhaarden zonder stenen



Verkoolde hazelnoten (e.a. verkoolde zaden, vruchten, noten)



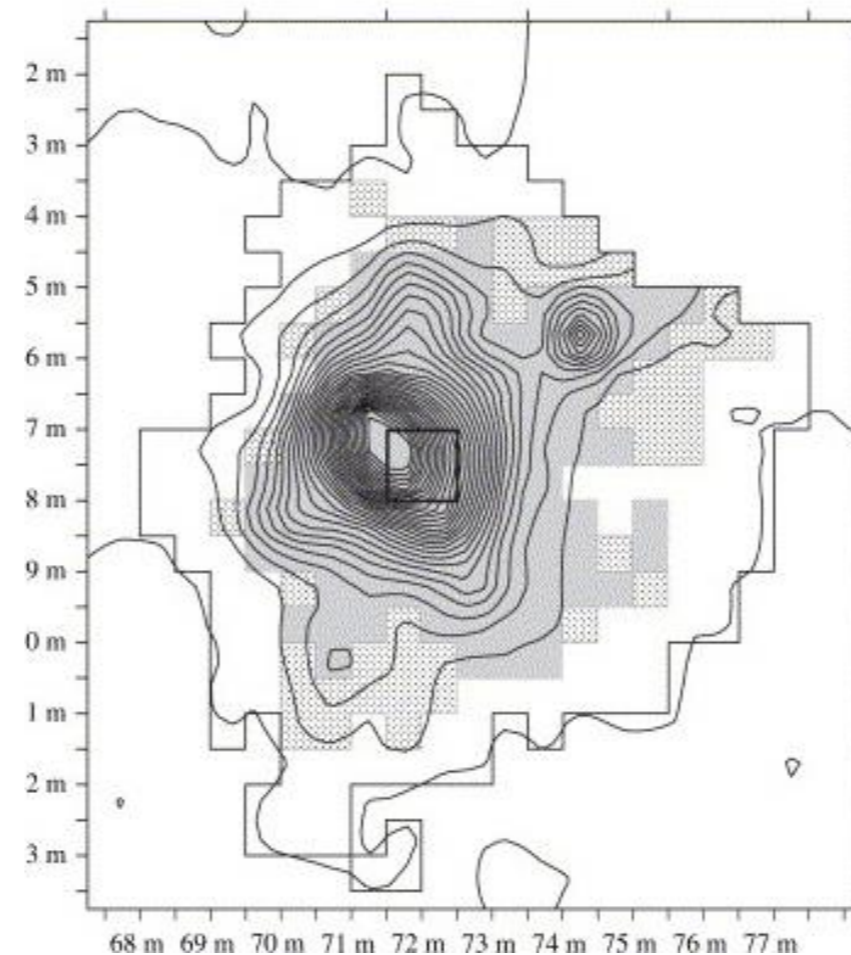
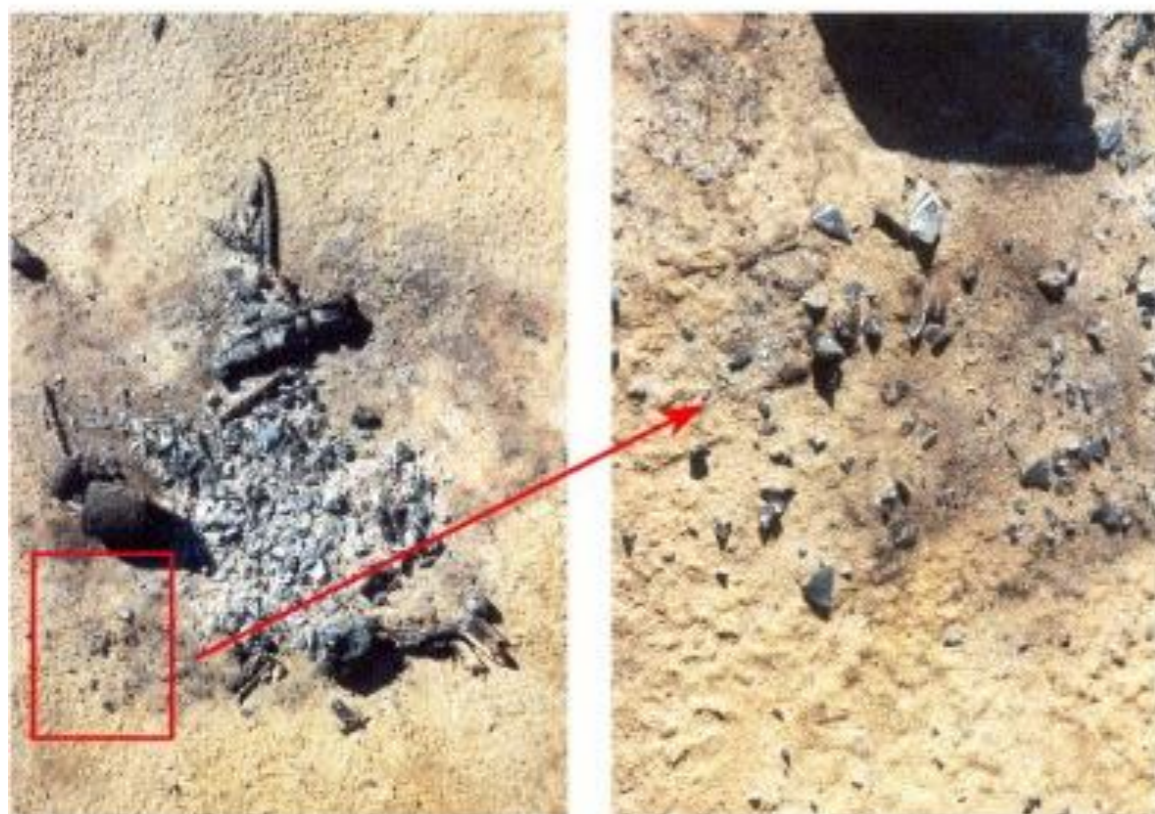
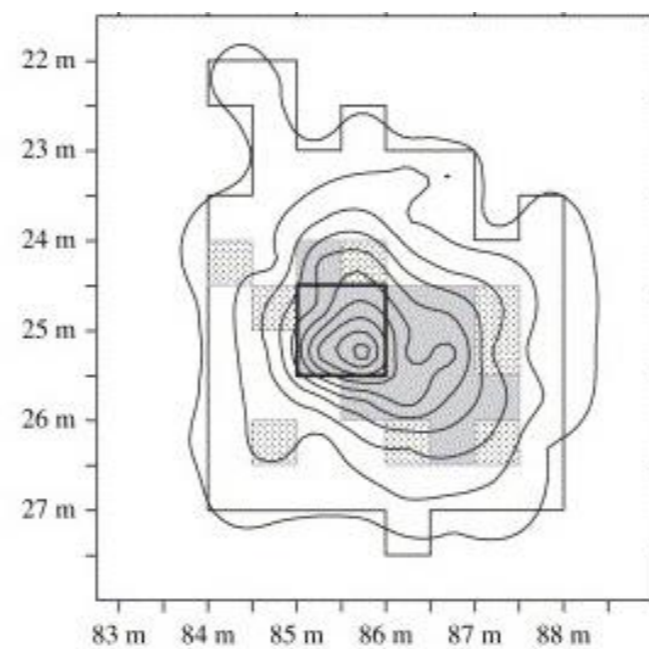
Verbrande botresten

Verbrande Vuursteen



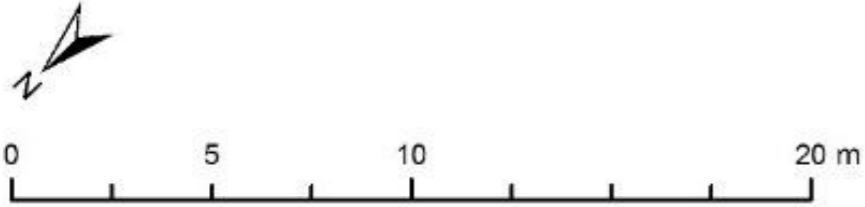
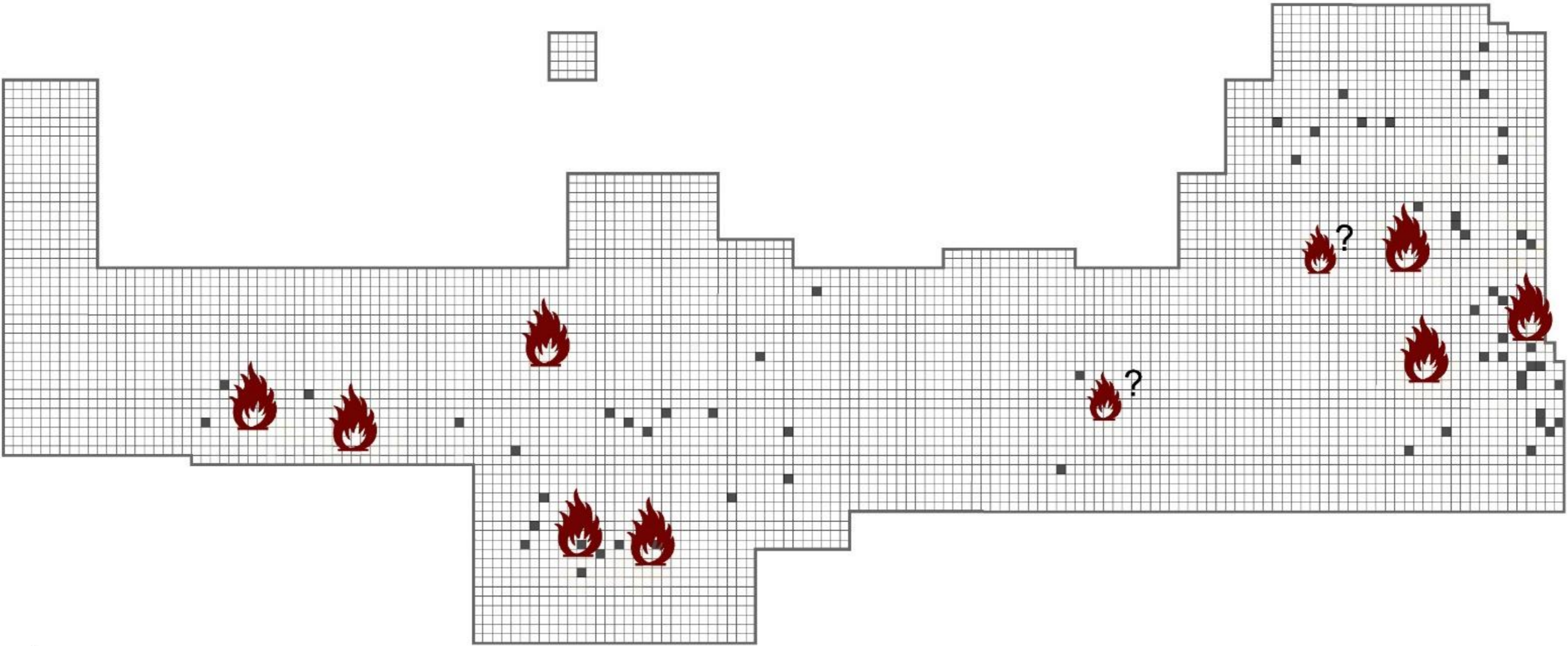
Mesolithicum – vlakhaarden zonder stenen

“invisible hearths” (Sergant, Crombé & Perdaen 2006)



zwaar verbrande vuursteen

Mesolithicum – Kerkhove Stuw



Reconstructie haarden   **Schrabber**

Mesolithicum – Verrebroek Dok en Doel - Deurganckdok



Kung San Bushmen, Kalahari

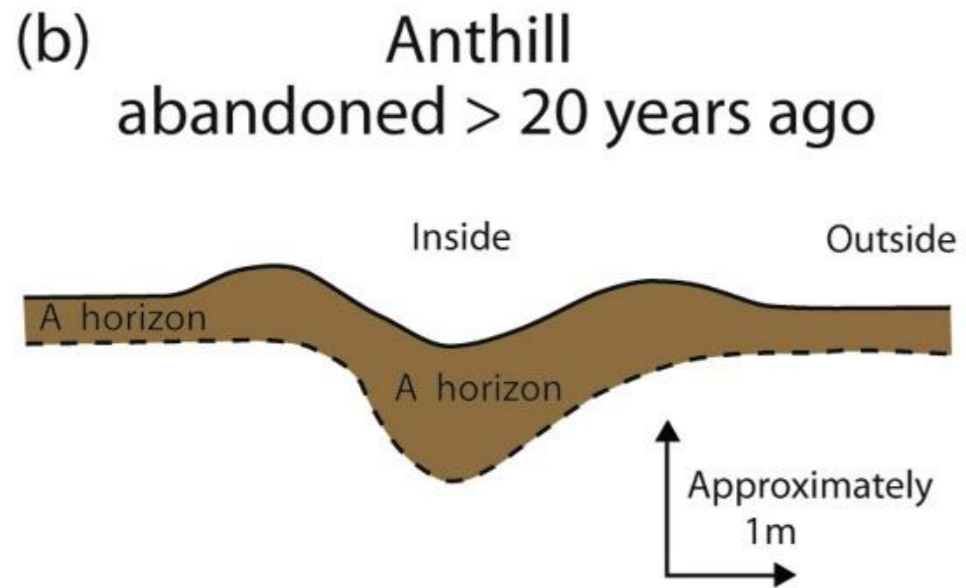
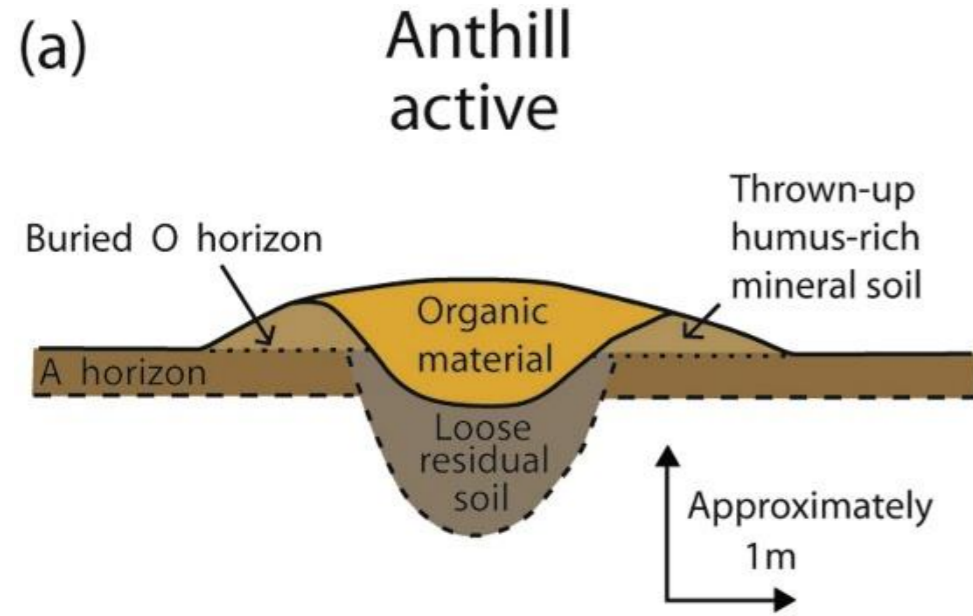
Oppervlaktehaarden & Haardkuilen



Mesolithicum – Doel - Deurganckdok



Mesolithicum – Verrebroek Dok en Doel - Deurganckdok



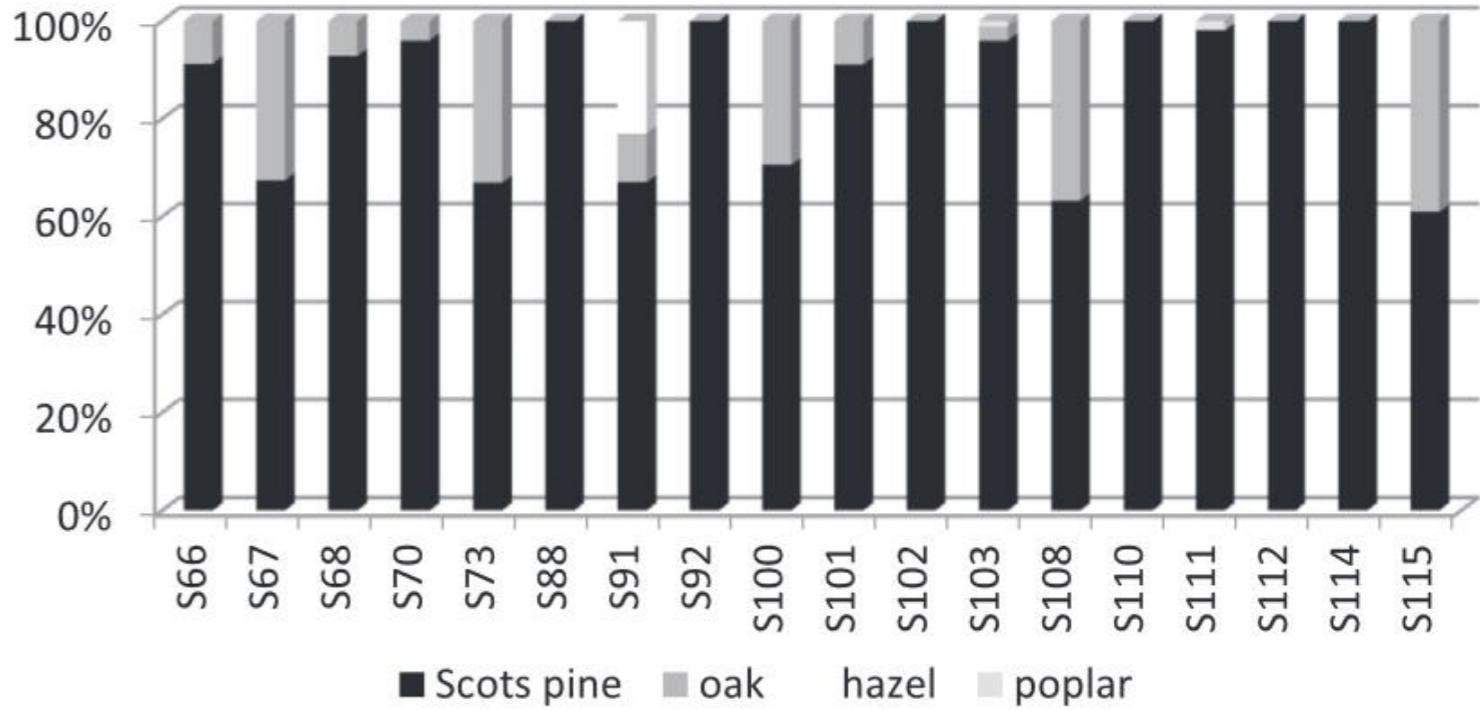
Louwagie 2015



Mesolithicum – Verrebroek Dok en Doel - Deurganckdok



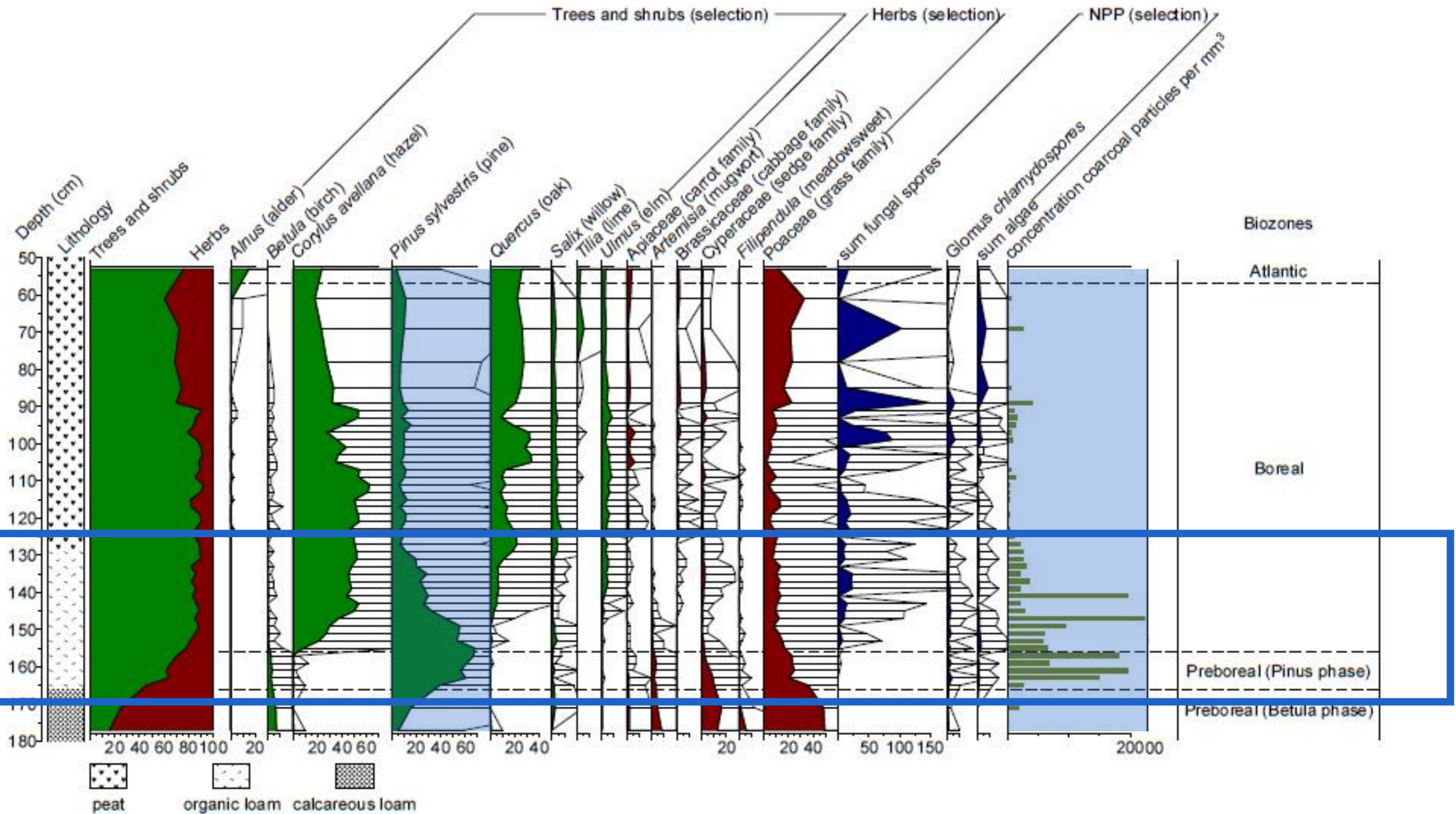
Verrebroek



Crombé 2015

Noorwegen

Mesolithicum – pollendiagram Kerkhove-Stuw

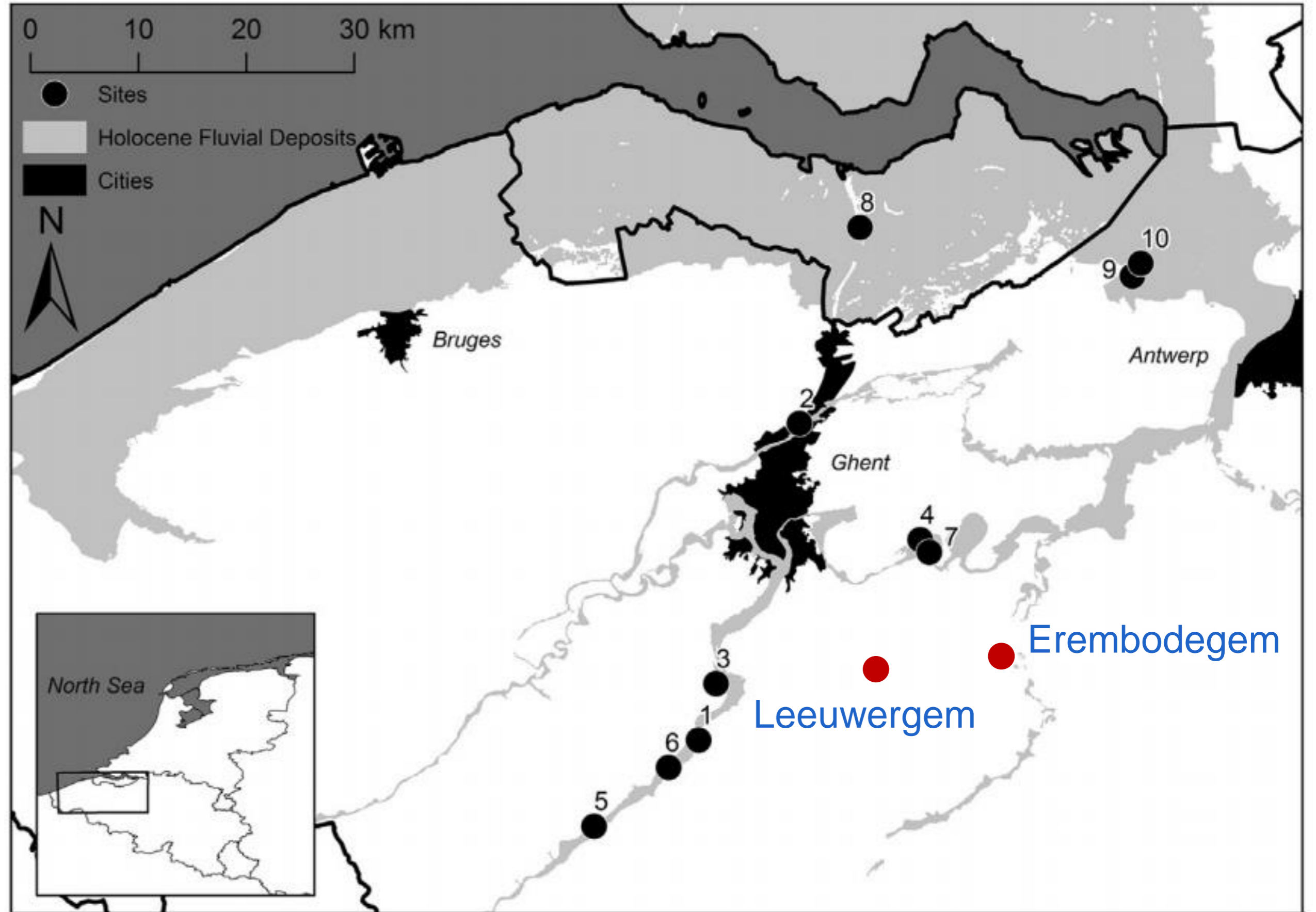


Neolithicum (ca. 6000 – 2000 calBC)

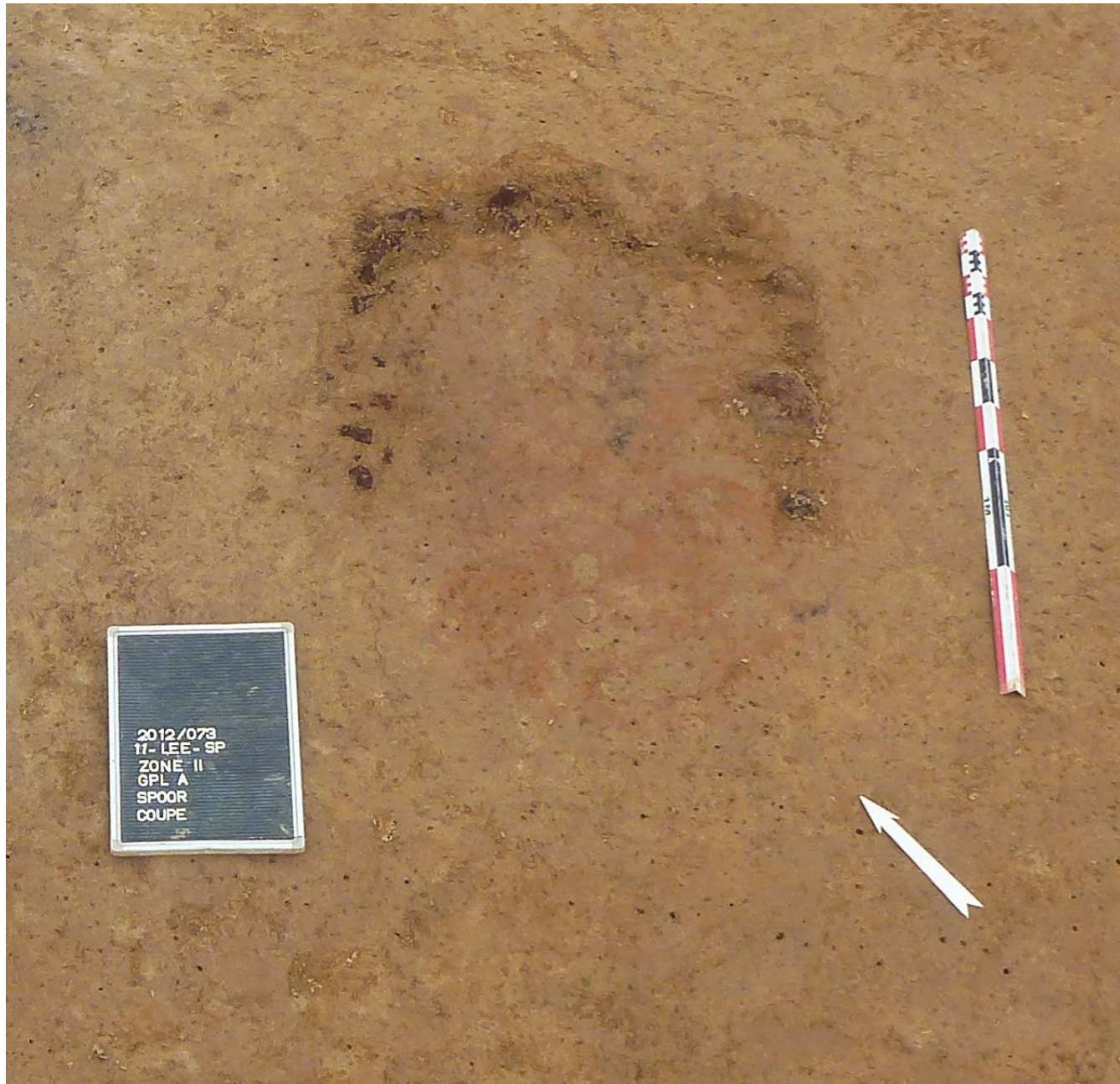
Neolithicum

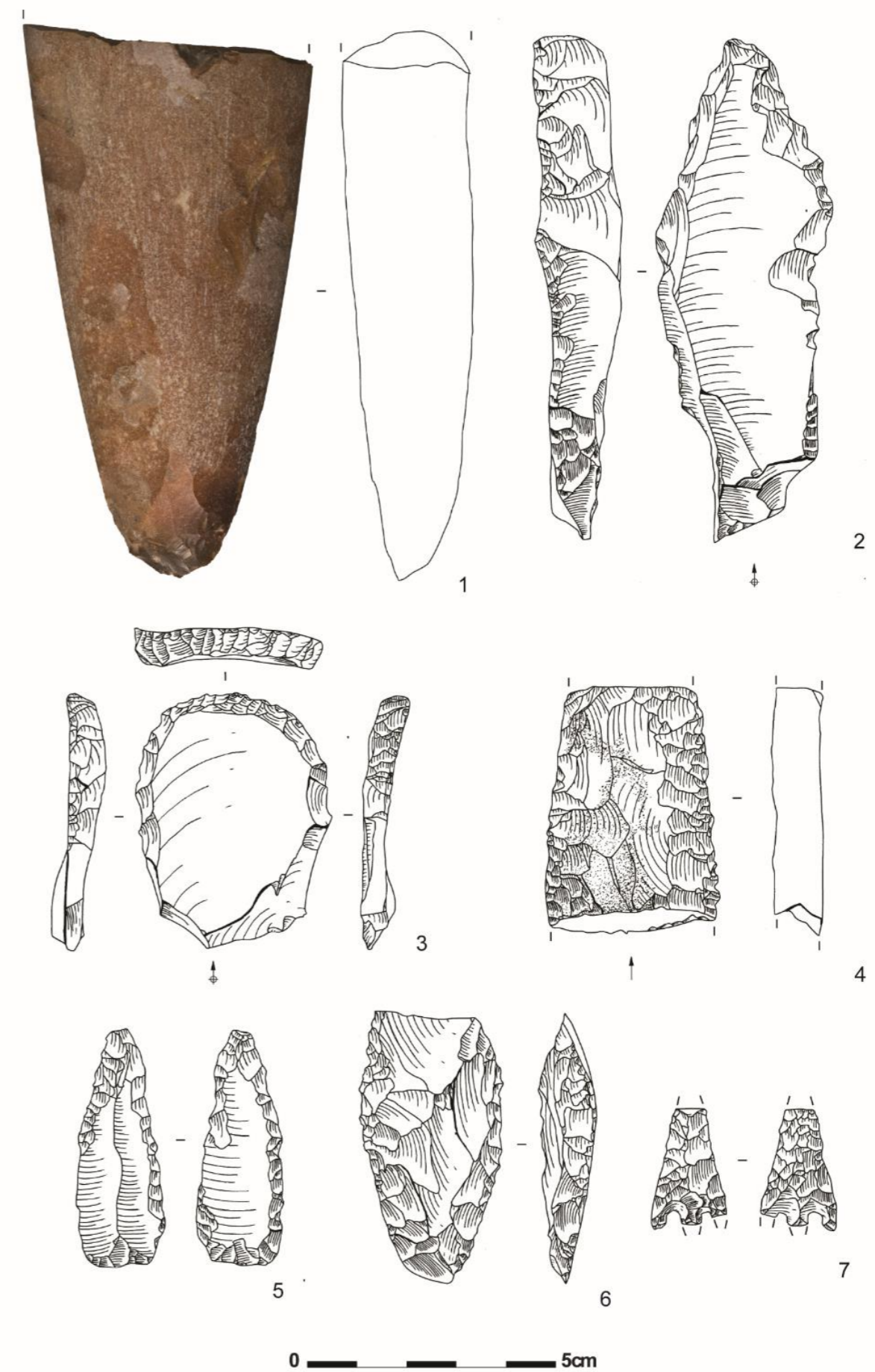
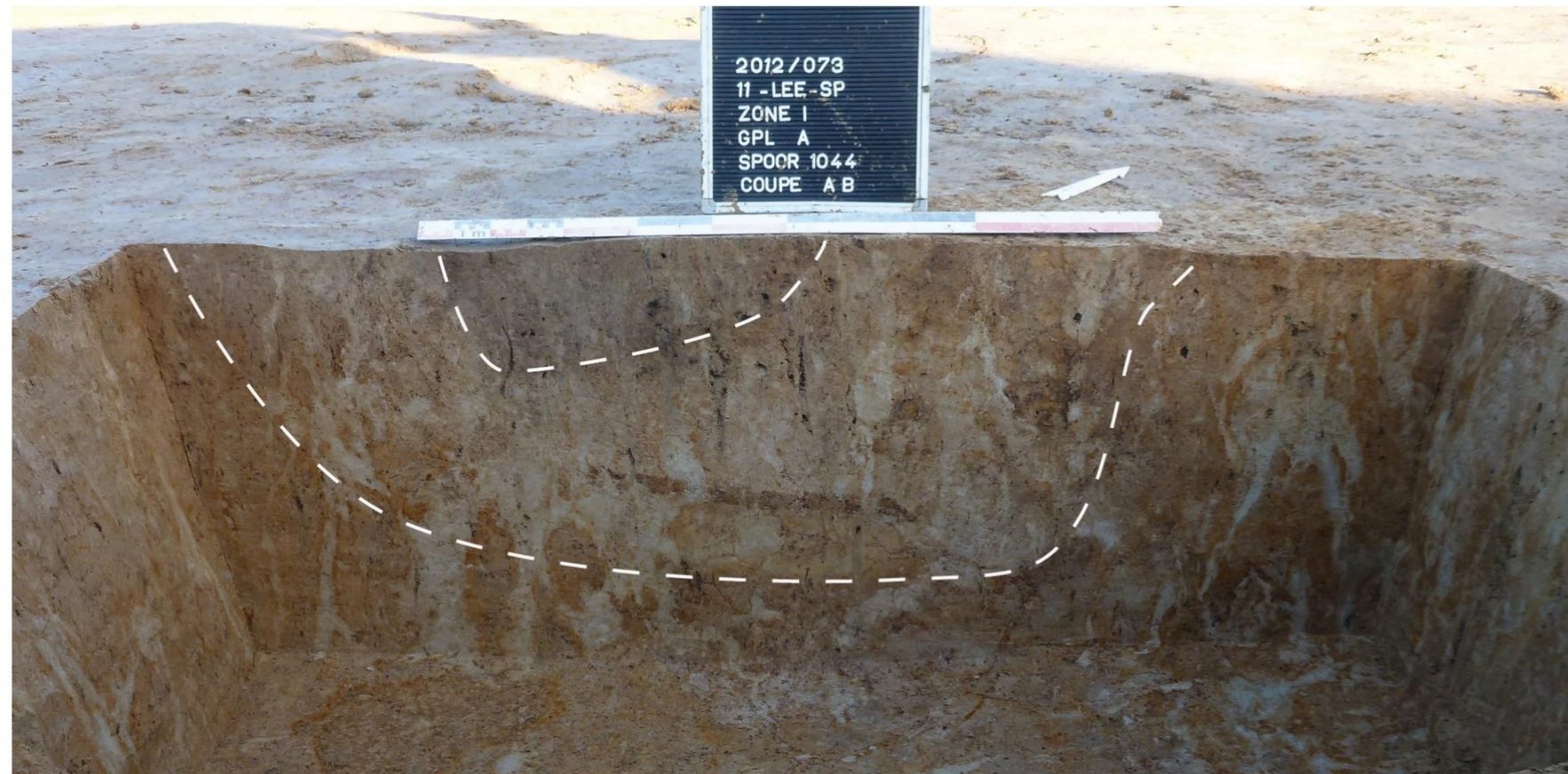
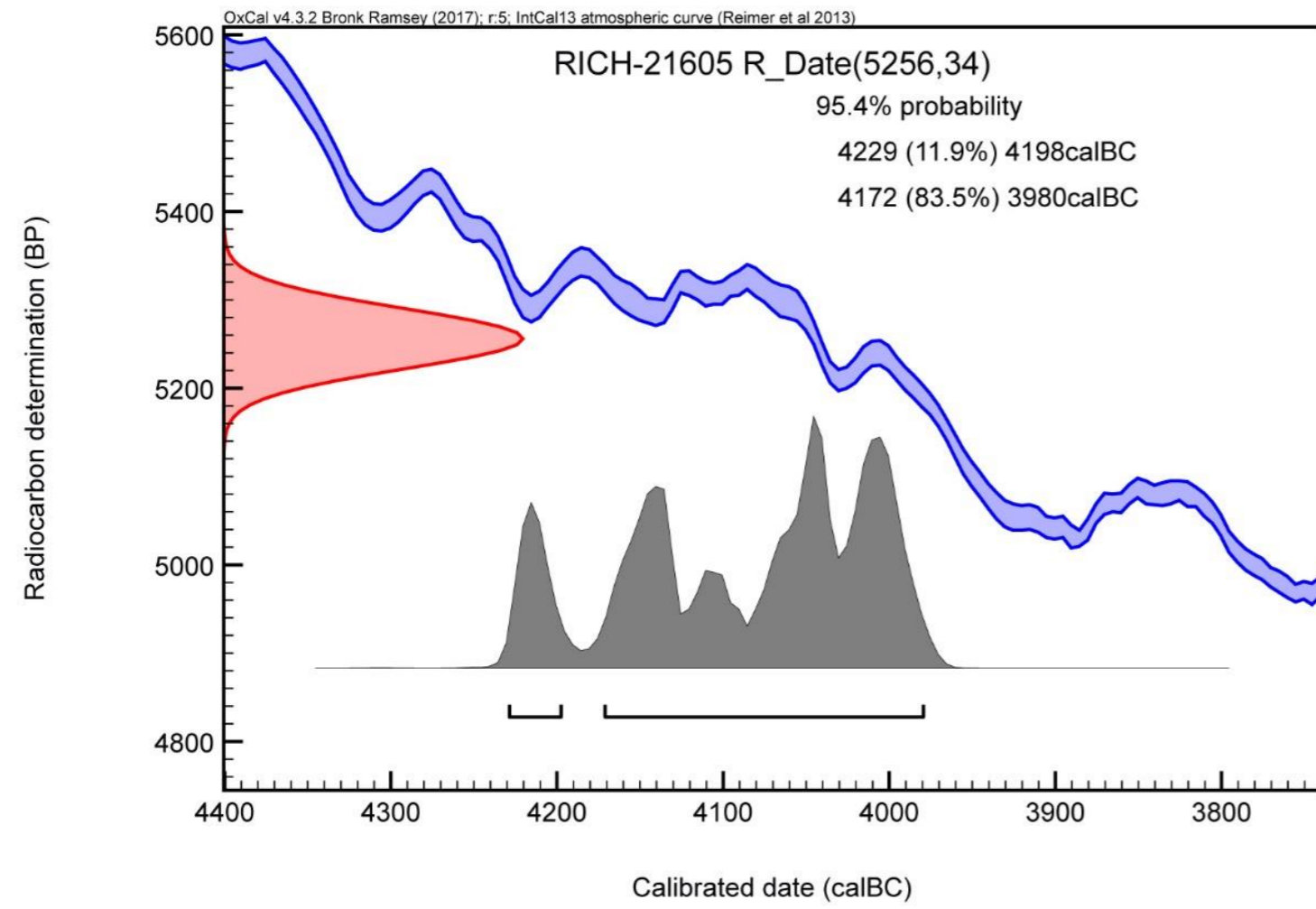
Leeuwegem-Spelaan

Erembodegem-Zuid IV



Neolithicum- Leeuwegem Spelaan





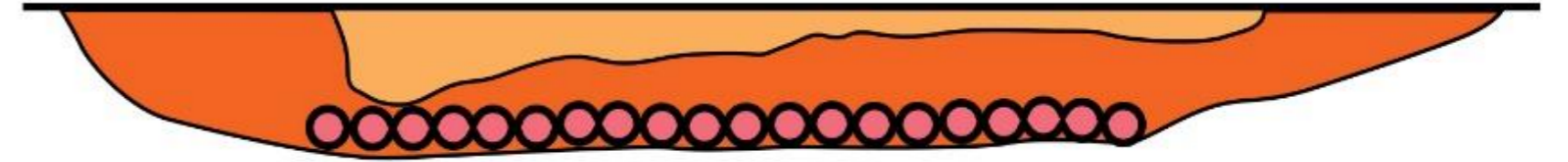
Neolithicum - Erembodegem Zuid-IV



Neolithicum - Erembodegem Zuid-IV



Neolithicum - Erembodegem Zuid-IV



- Ingegraven structuren
- leemlaag boven op de stenen vloer
- Weinig of geen houtskool !



Haarden of ovens zonder
stookkuil ??

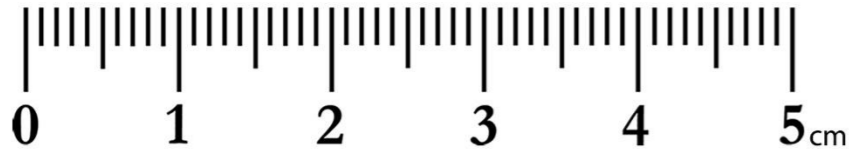
Briquets



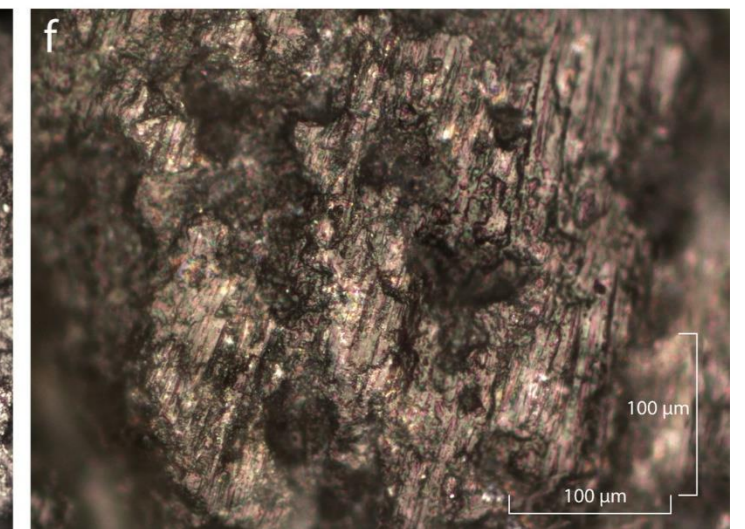
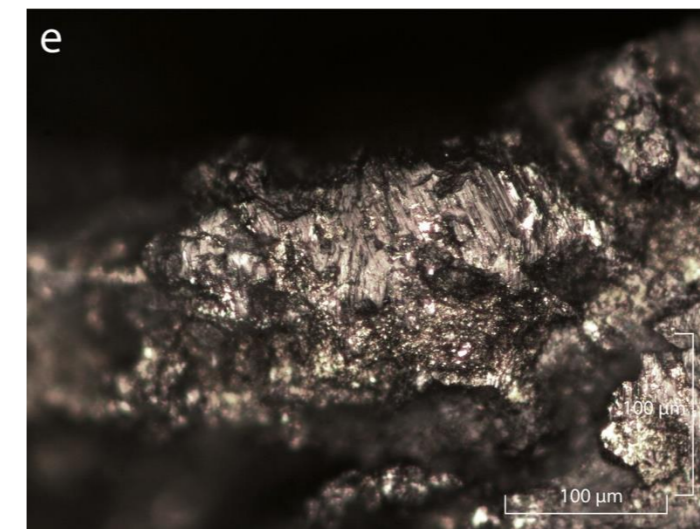
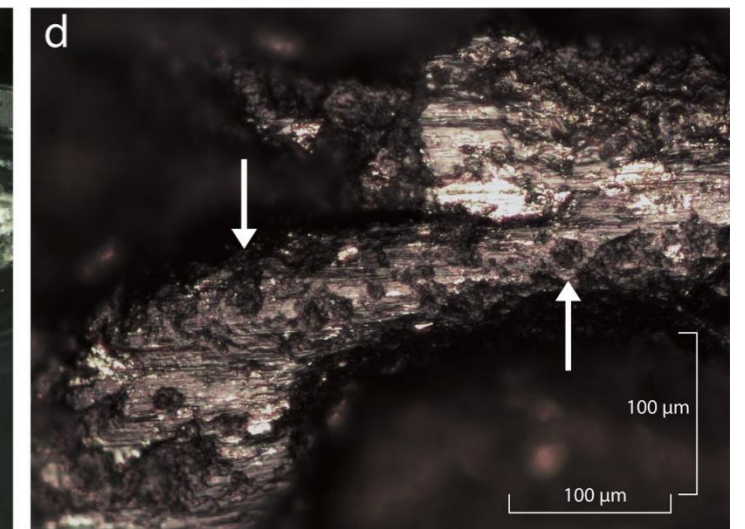
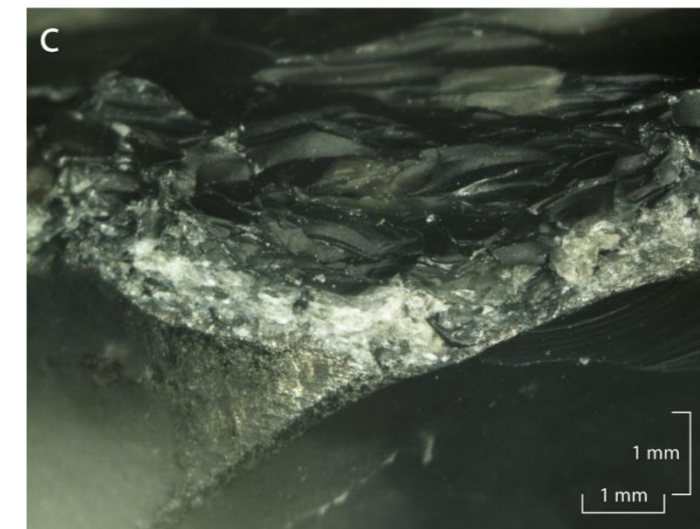
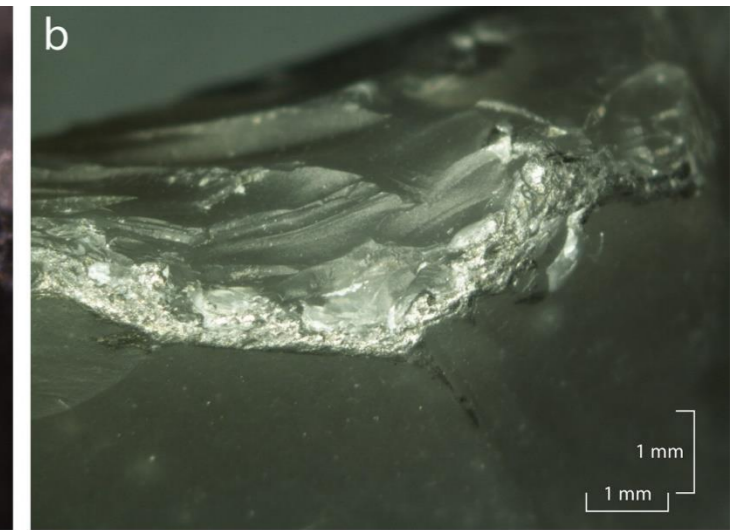
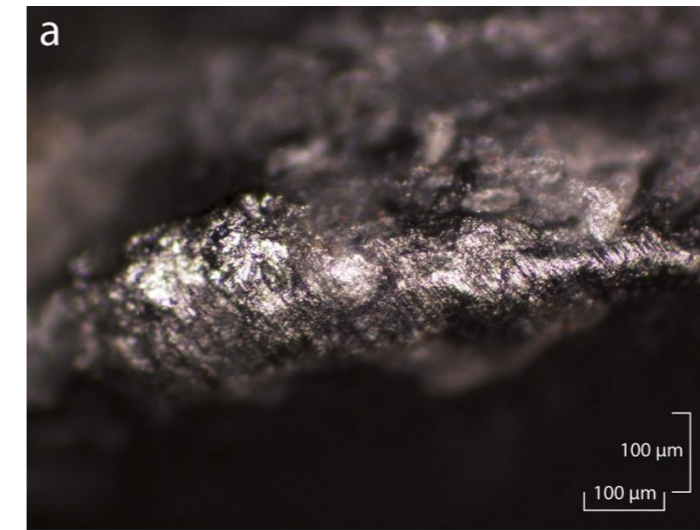
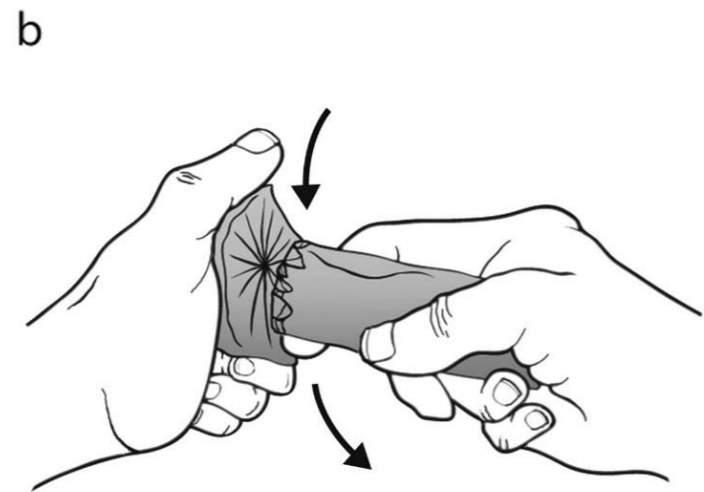
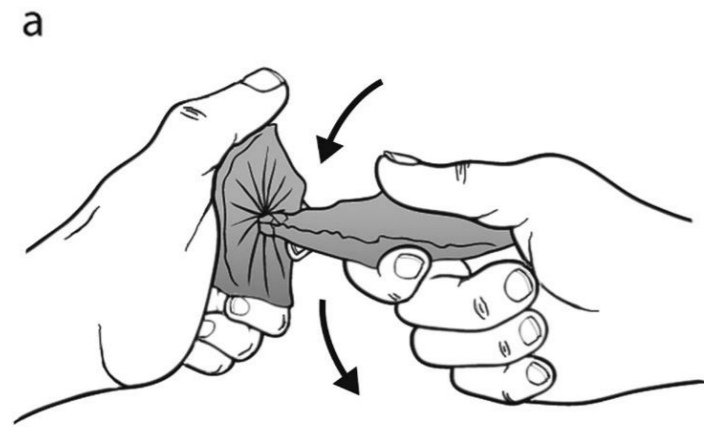
HOE MAAKTE MEN VUUR?



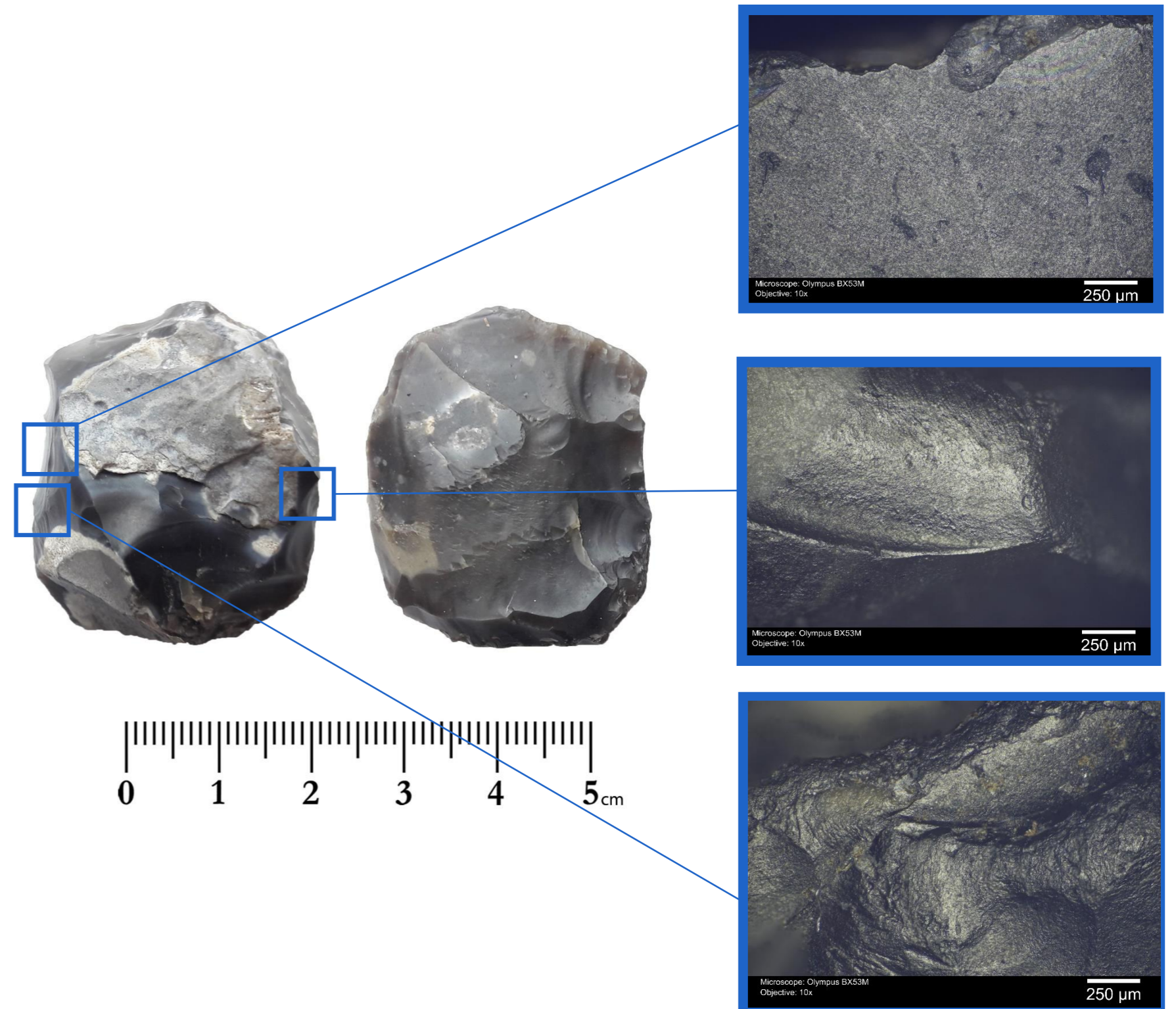
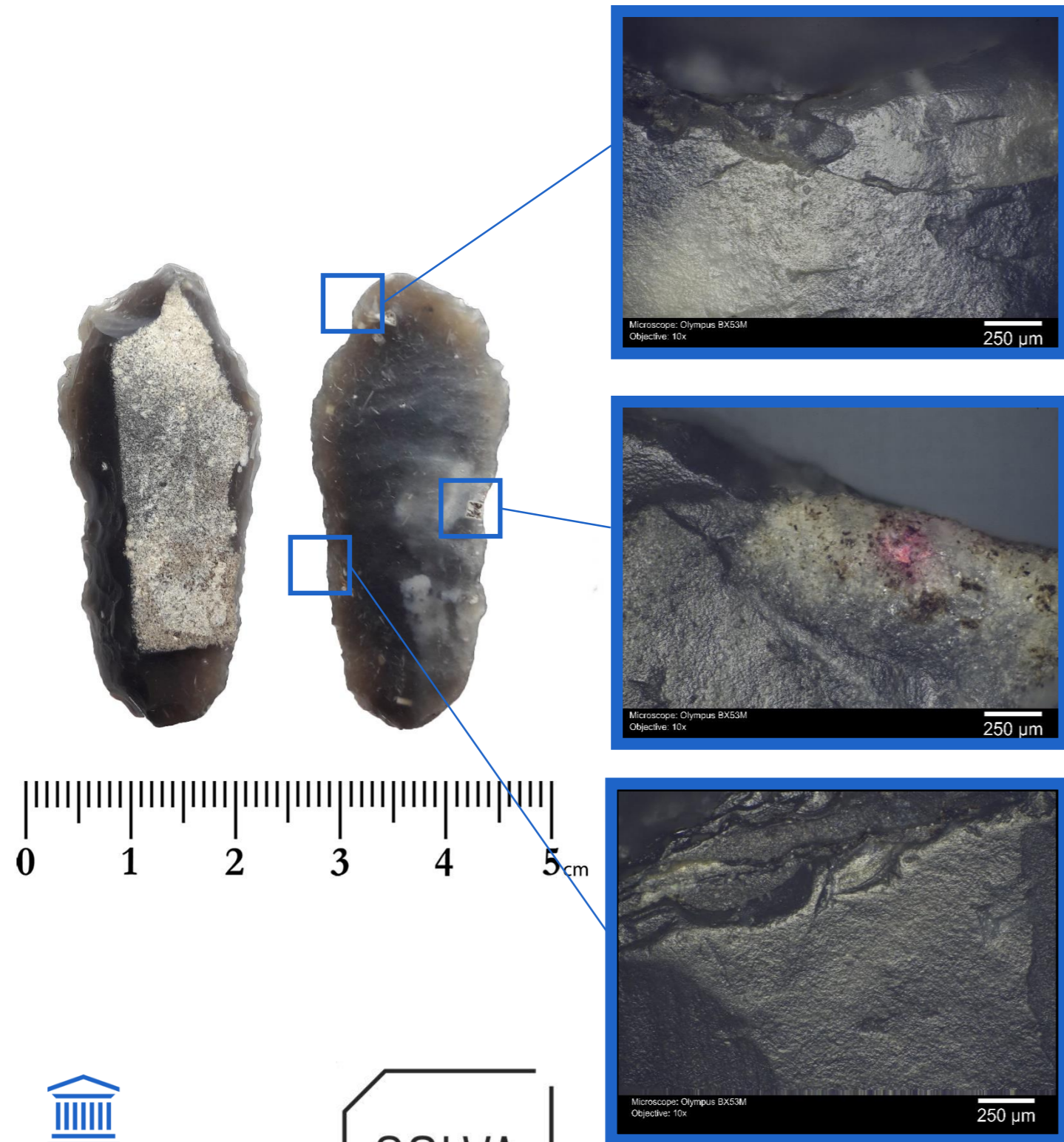
HOE MAAKTE MEN VUUR?



“Fire production in the deep past?”



Doel-Deurganckdok (Sector B) – Swifterbant cultuur





Schipluiden (NL) Midden-Neolithicum

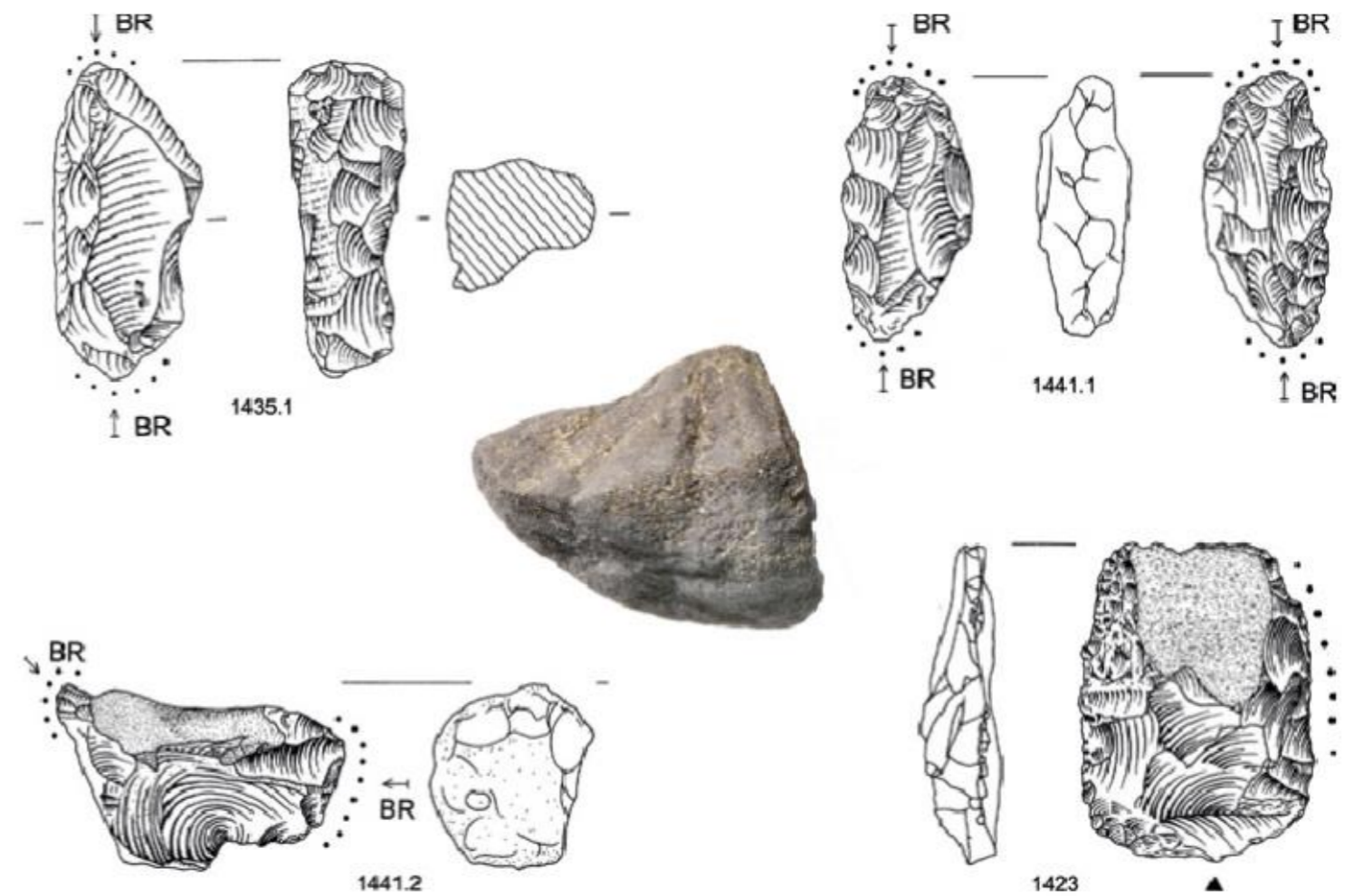
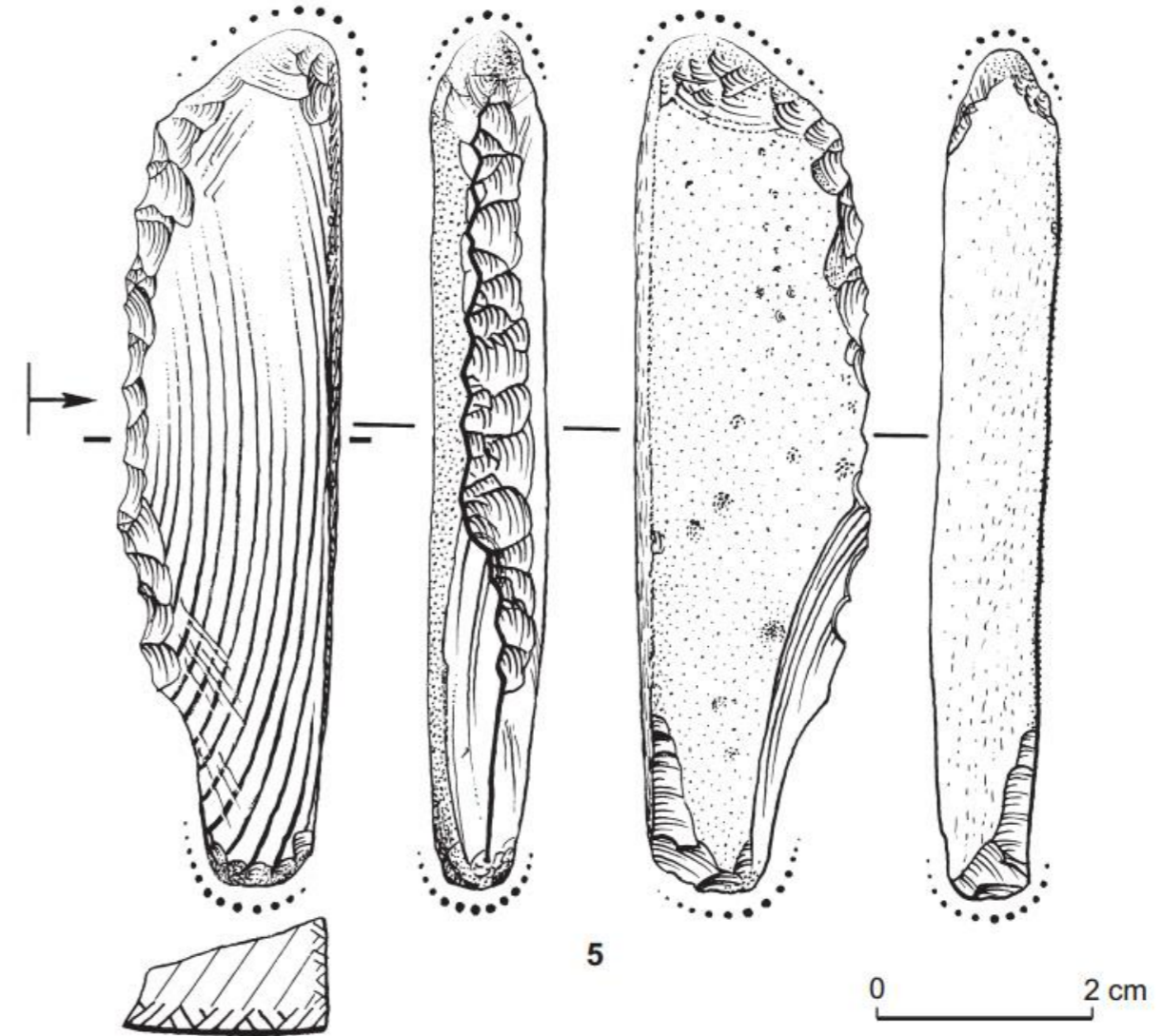


Figure 5.4 Grave 2, grave goods. Three strike-a-lights with a pyrite nodule and a retouched flake (scale 1:1)

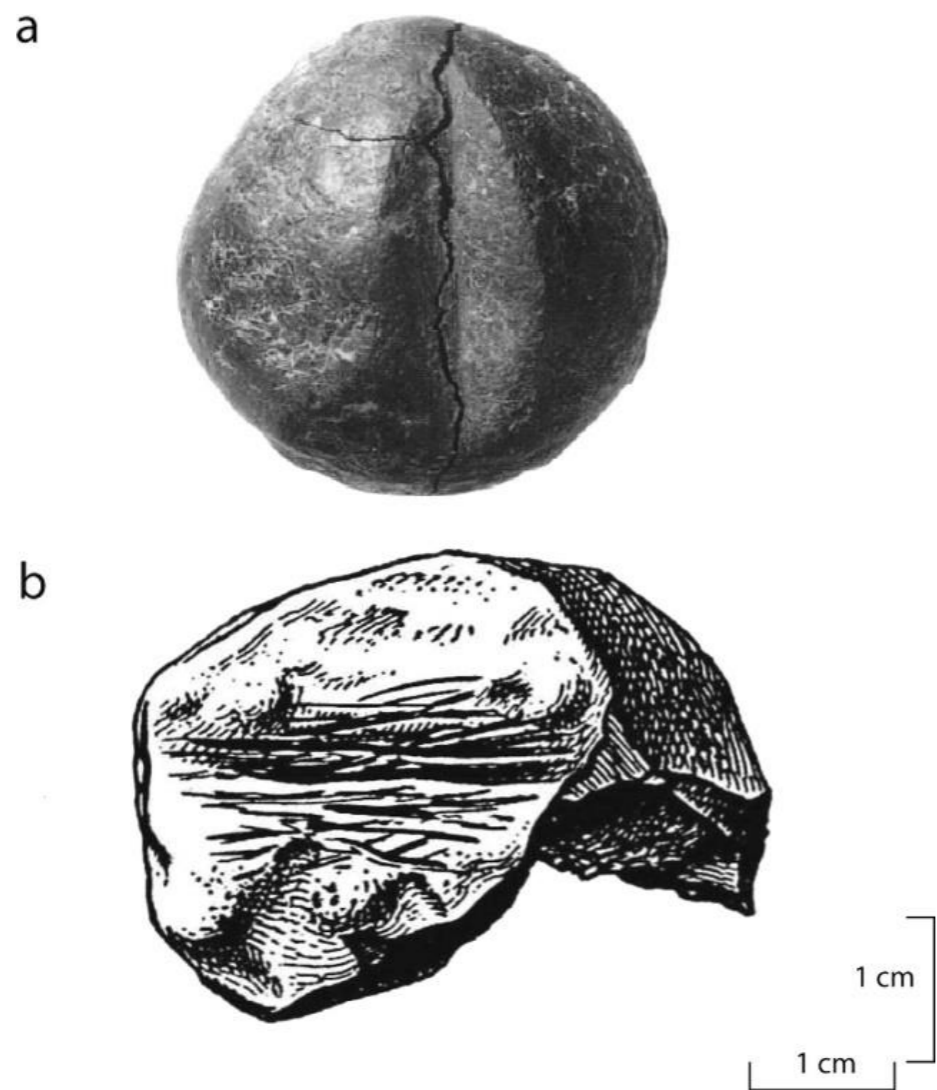


Altwies – Op dem Boesch (LU) Klokbeker cultuur, Finaal-Neolithicum

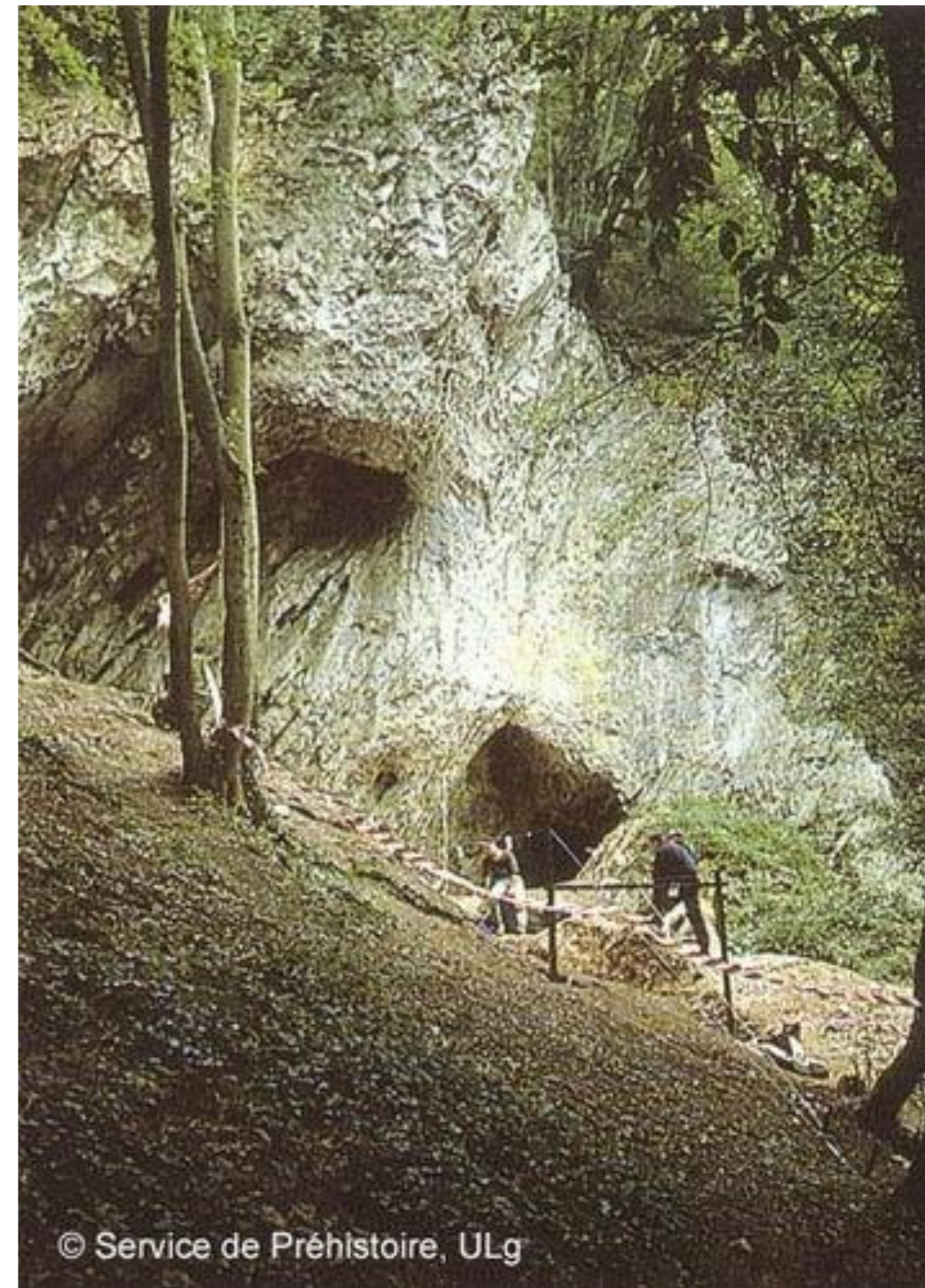


Le Brun-Ricalens, Toussaint & Valotteau 2011

Trou de Chaleux - Magdaleniaan (BE)



Sorensen, Roebroeks & van Gijn 2014



© Service de Préhistoire, ULg

Otzi – Finaal-Neolithicum



Publieksboek: De Schelde, stroom in verandering. Hier verkrijgbaar!

