

The arrival of Indo-European speakers in southern Scandinavia

- an archaeolinguistic approach

PART II

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Languages and migrations in prehistoric Europe

Roots of Europe summer seminar 7-12 August 2018

UNIVERSITY OF COPENHAGEN



How was Indo-European implemented?

- the archaeological evidence

- From the linguistic evidence we have learned:
 1. The first farming communities in northern Europe, the Funnel Beaker culture, probably spoke a non-Indo-European language.
 2. That this Early Neolithic European language contained a layer of agricultural vocabulary that was shared with other early Neolithic communities across Europe.
 3. The language may have spread across Europe together with Neolithic life.
 4. That Proto-Indo-European was introduced at a time when the now vanished Early Neolithic European language was still in use.
- How can these linguistic facts be matched with the archaeological evidence?
- If we are to explain the adoption of old agricultural words originating in a lost Neolithic language by an Indo-European dialect, we must expect a certain chronological overlap/co-existence between the speakers of these two languages.

The Single Grave culture – early period

- From c. 2850 BC the Single Grave culture succeeded the Funnel Beaker culture on the Jutland Peninsula



The whole story?

- *These were the Indo-Europeans, who broke out of their homeland and scattered in every direction. [...] Wherever the Battle-axe people came they made themselves masters over the peasants and any others who were settled in the area. Prepared and well armed as they were, it was in most cases an easy matter to subdue peaceful farmers.*

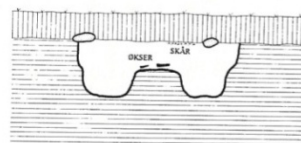
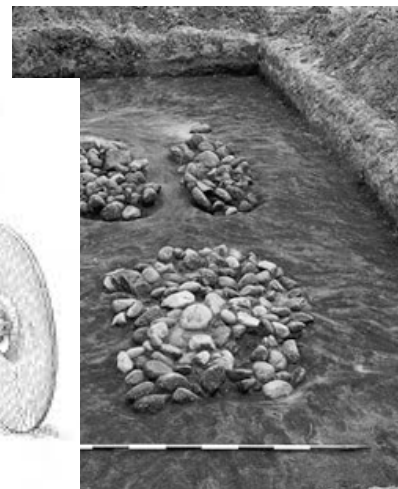
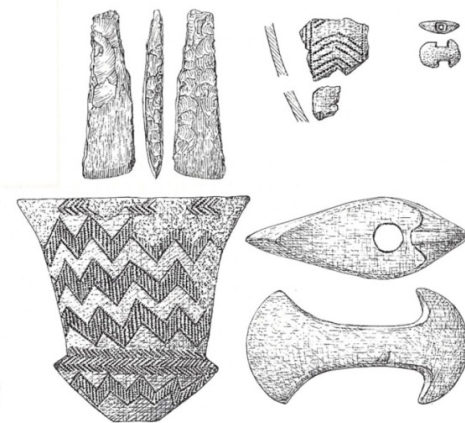
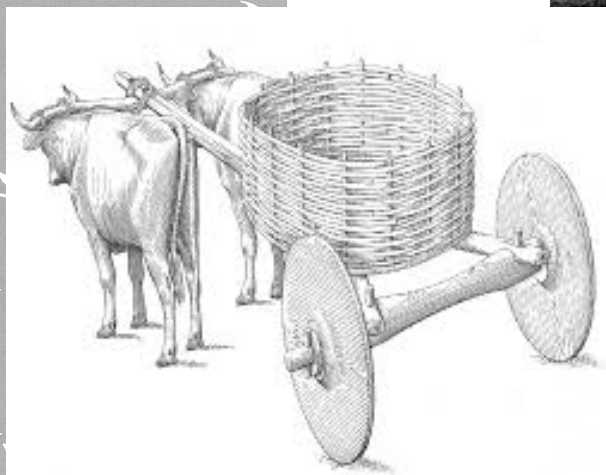
(Glob 1971: 106-7)

Ha! Just what you needed – wimp!

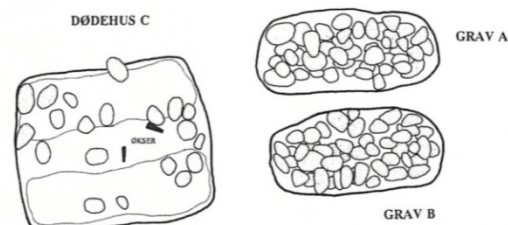
Does that mean that you are not doing the dishes today?



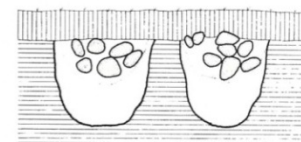
- ... or are there any contacts predating the Corded Ware?



SNIT GENNEM DØDEDUS C



3 METER



SNIT GENNEM GRAV A OG B

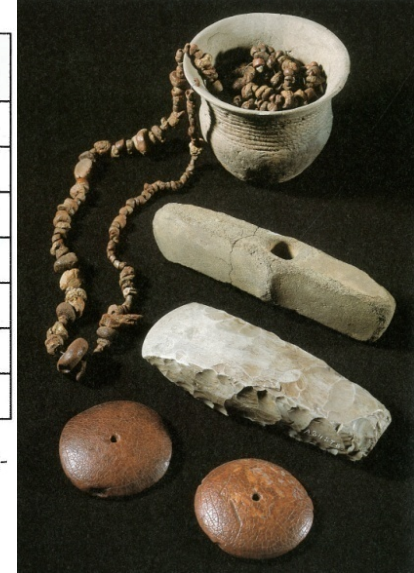
Fig. 1. Distribution of known sites with stone heap graves on the Jutland Peninsula, after the National Monuments Registry of Denmark (www.dkconline.dk) and Fabricius (1996, 257–59) with addition of unpublished sites (nos. 18, 20, 21, 35, 37 and 41), cf. Acknowledgements. 1. Bjergby; 2. Bonderup; 3. Engedal I–II; 5. Dammørgårde; 6. Faddersbøl; 7. Filsøhus; 8. Fjelsø I–II; 9. Frydendal; 10. Galgevar; 12. Havnsrup; 13. Herrup; 14. Hoveddal Plantage; 15. Kappelhage; 16. Karsbøl; 17. Kjeldgård; 19. Kobbeltøje; 20. Kvorning; 21. Langdyssøgaard; 22. Langer Dal; 23. Linde; 24. Lånum I–II; 25. Mønsild; 27. Onsildgård; 28. Rebstrup; 29. Ringkøbing Markjod; 30. Ristoft; 31. Rundrup; 32. Svangelbjerg Kirke; 34. Søndermølle; 35. Thinghøj; 36. Torsted Præstegård; 37. Torup Høj; 38. 1. Ullis; 40. Vroue Hede I–IV; 41. Ørum; 42. Øster Brændgård; 43. Øster Burlund; 44. Østerbølle; 45. 46. Øster Thoustrup; 47. Øster Torslev

Continuity: flint axes

- Use of thick-butted flint axes that resemble those of final TRB
- Common in early single graves.
 - The earliest burials (Under Grave Period) hold most axes, the longest axes and the most intensive polished SGC flint axes.
 - Length, 'quality' and number decreased over time.
- If immigrants unfamiliar with flint knapping and flint axe production adopted the polished flint axe – one should expect the opposite development:
 - Improved quality in the course of the SCG period.

	Fund-gattung	Zahl der Gräber	Prozent-anteil
Männergräber	Streitäxte	1129	44 %
	Flintbeile	509	19,8 %
	Flintmeißel	40	1,6 %
	Pfeilspitzen	63	2,5 %
Männer- und Frauengräber	Bernstein	737	28,7 %
	Kleingeräte	429	16,7 %
	Keramik	579	22,6 %

Abb. 442. Der absolute und prozentuale Anteil der häufigsten Beigaben in Einzelgräbern.



Refshøjgård

- Early and very eastern single grave!
- Transitional phase TRB/SGC
- ¹⁴C: final 29th/early 28th century BC

- TRB features: Large narrow side angle and a butt-index at 81%, resemble the A-axes (Valby-type).
- SGC features: Partial polishing and slightly downturned cutting edge.

Fig. 10. Flintoksen fra den nederste grav. 1:2.
– Tegning: Louise Hilmar.

A flint axe from the lower grave.

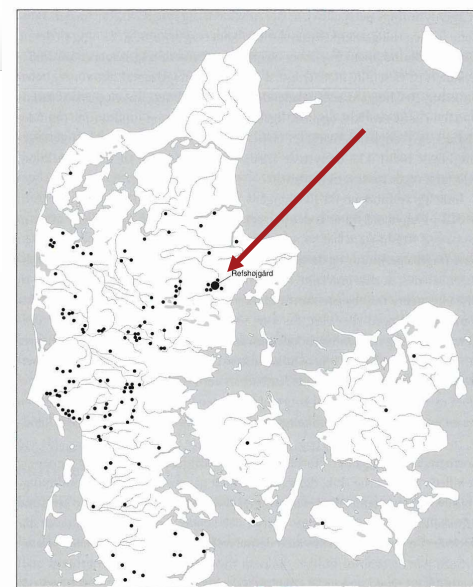
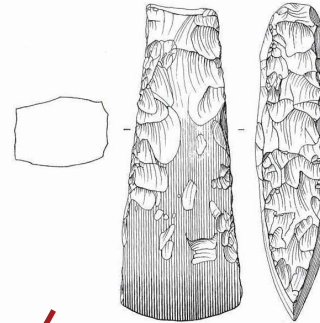
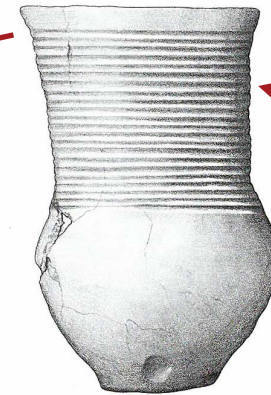


Fig. 16. Kort over udbredelsen af enkeltgravskulturens ældste fase. Kortlagt er stridsøkser af Globes type A og B såvel som bægere af typen A1 og A2. Enklaven med fund fra tidlig enkeltgravskultur omkring Refshøjgård træder tydeligt frem. Kortlagt efter Siemen (1997) med tilføjelser.

Fig. 11. Lerkarret fra den nederste grav. 1:2. – Tegning: Louise Hilmar.

A beaker from the lower grave.



Local origin. However, comparatively high and cylindrical neck and tight lines of decoration. Parallels in CWC beakers south of the Harz in Eastern Germany/ Bohemia

Fig. 12. Rest af skorpen på indersiden af lerkarret fra den nederste grav. Det meste af skorpen er fjernet med hensyn til pollenanalytiske og mikroskopiske undersøgelser. – Foto: Rogvi Johansen.

Remnants of a crust preserved inside the beaker from the lower grave. Most of the crust has been removed for pollen analysis and microscope investigation.

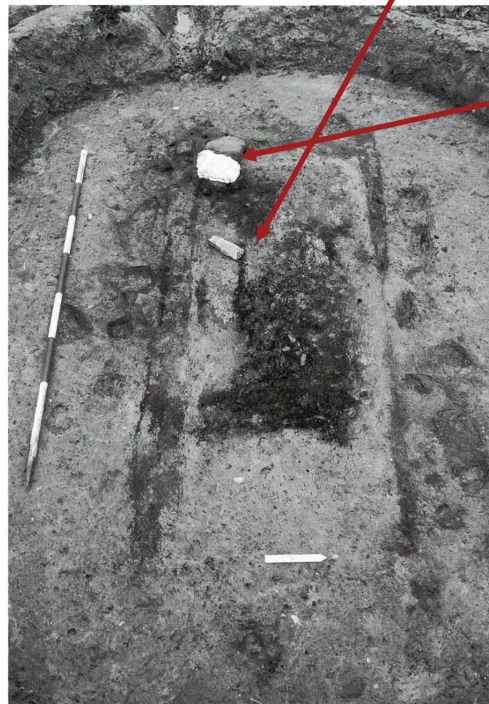
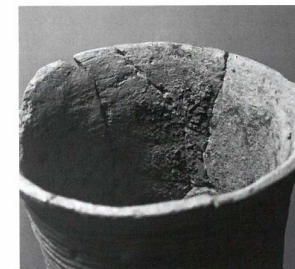


Fig. 6. Foto af nederste grav. Kisten med åben østende, ligsporet og spor efter en gravgave af organisk materiale i gravens sydvestlige ende ses tydeligt. Flintoksen ligger foran den døde ansigt, lerkarret bagved er forberedt til blokbjergning med gips.

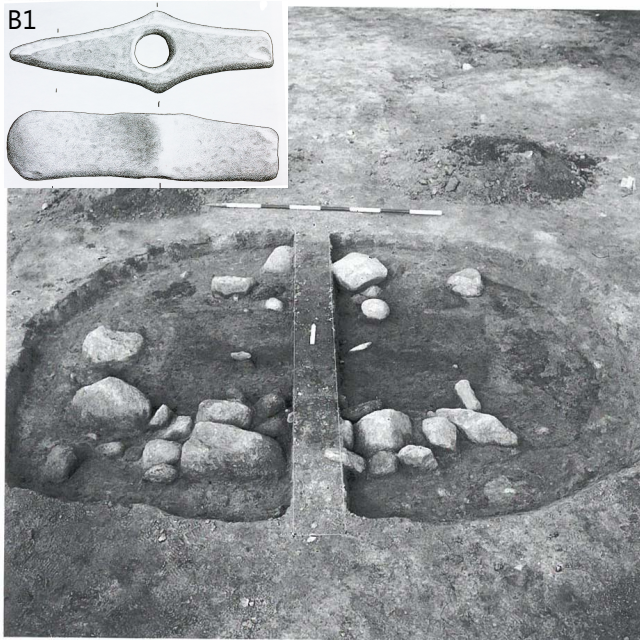


Fig. 4. Refshøjgård, øverste grav. Flintoksen ses til højre, stridsøkser til venstre for profilbjælken. Begge er vippet om deres længdeakse som følge af den nedeunder liggende gravs sammenstyrtning. De sidste rester af højens oprindelige fyld ses i form af en ca. 35 cm bred stribe på langs med graven. Stenrammen udenom hører til den nederste grav. Kværnstenen fra stenrammen ses som smal stenplade på højkant i forgrunden, hvor den som eneste sten rager ind i gravens ellers stenfrie østside.



Continuity: depositions

- Continued deposition practice focused on flint axes.
- Also pottery depositions in bogs and burial mounds.

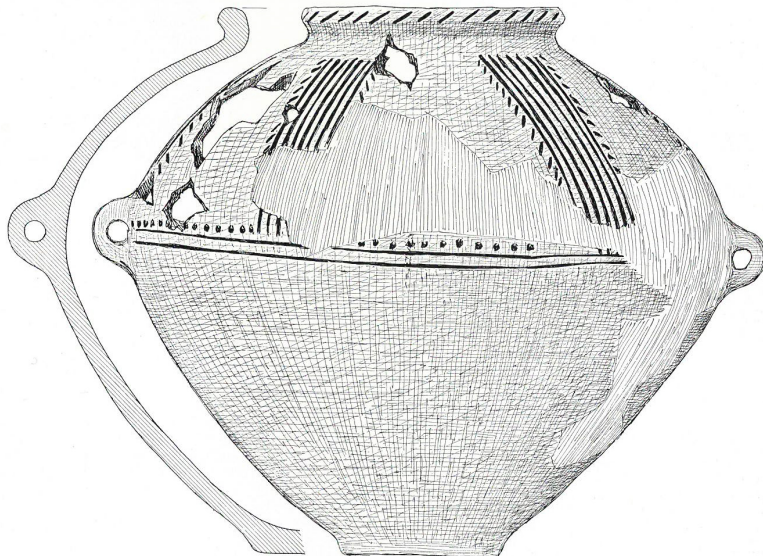


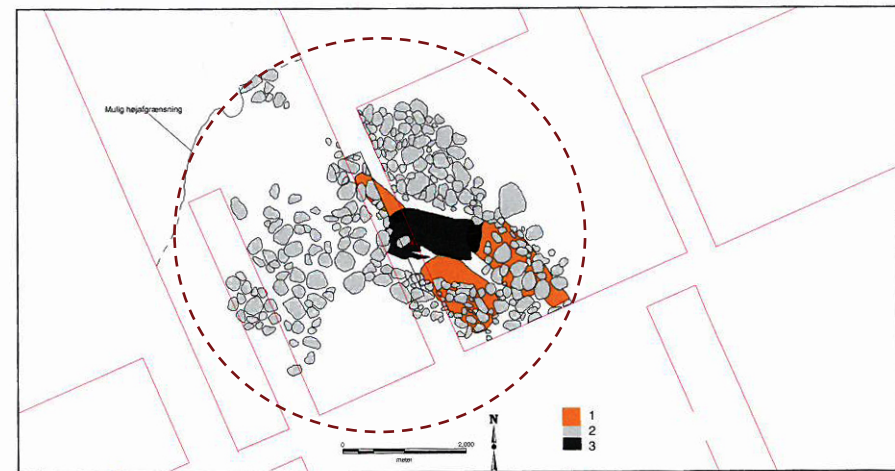
Fig. 5. Pottery from the bog at Kokholm (113).

	battle-axes	tongued wedges	heavy axes	" adzes	thin axes	" adzes	chisels	amber-beads	blade arrowheads	other
1			2							
2				2						
3		1		1			1			
4			1	1	1		2			
5		3	(1)							
6							2			
7			3							1 axe/adze
8									9	
9			2							
10				2	1					1 similar "
11			1	1	1		1			
12				2						
13			1	1						
14				13						
15			2							
16										14 flint blocks + 2 " pieces
17			9		1					2 a./a.
18			3		1					
19			2							
20		1	3				1			
21	1	2	0	7	1	2	3			1 thin-butted axe
22		3								1 fragment of a./a.
23				4						
24				4						
25				2						
26				2						
27				3						
28					1					1 grindstone frgm.
29				2						
30								67		
31				1			2			1 a./a.
32				3						
33				1	1		1			
34				1		2	1			
35				2		2	1			
36			2							
37				2						
38			5							
39			1							1 grindstone
40			2	2	1					
41			5							
total	1	10	45	59	9	6	15	67	9	

Site continuity

- A series of sites from central Jutland show early SGC mounds on late TRB culture layers: Pilgård, Skarrild, Lille Hamborg, Damsmark.
- Single grave mound overlaying a stone-heap grave at Kvorning (also central Jutland).
- Could this 'first generation' SGC burials on final TRB sites reflect the very transition from one cultural sphere to another?
 - Ancestral based legitimation of territorial rights?

Fig. 36. Gravfund fra tidlig enkeltgravskultur fra en høj ved Pilgård i Skarrild sogn: stridsøkse, to ravskeer og to flækker (nr.84). 1:3.



Gaasemosen

- Coastal site in eastern Jutland with culture layer holding late TRB as well as early SGC occupations.
- Faunal remains showing a mixed economy of animal husbandry, hunting and fishing.
- Represents a transitional stage between TRB and SGC.

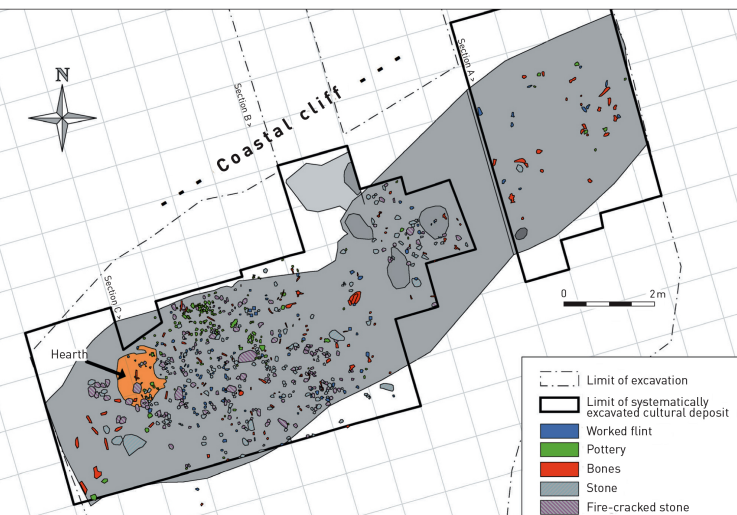
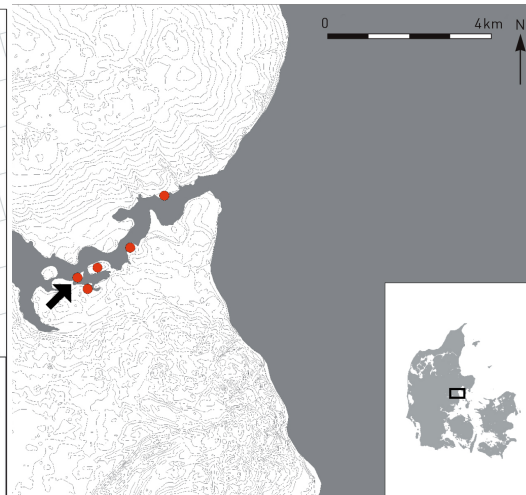


Fig. 5. Gaasemosen. Finds and features in the cultural deposits.



The prehistoric Brabrand Fjord in Eastern Jutland and sites of the Single Grave culture. The Gaasemosen site is marked with an arrow. The square marks the Voldbaek site.

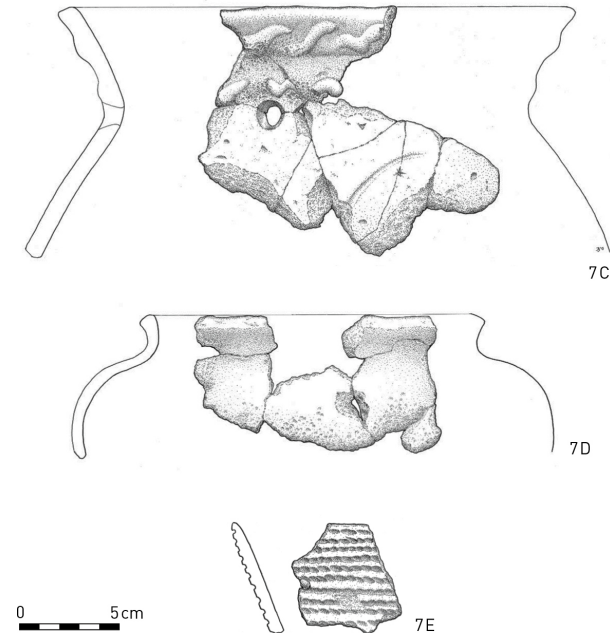
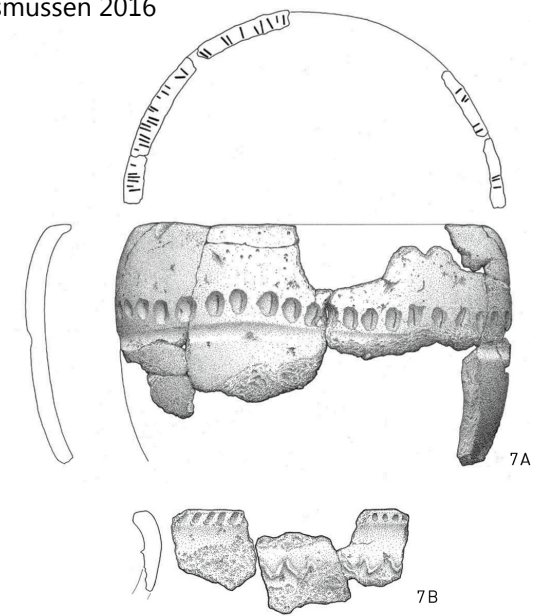
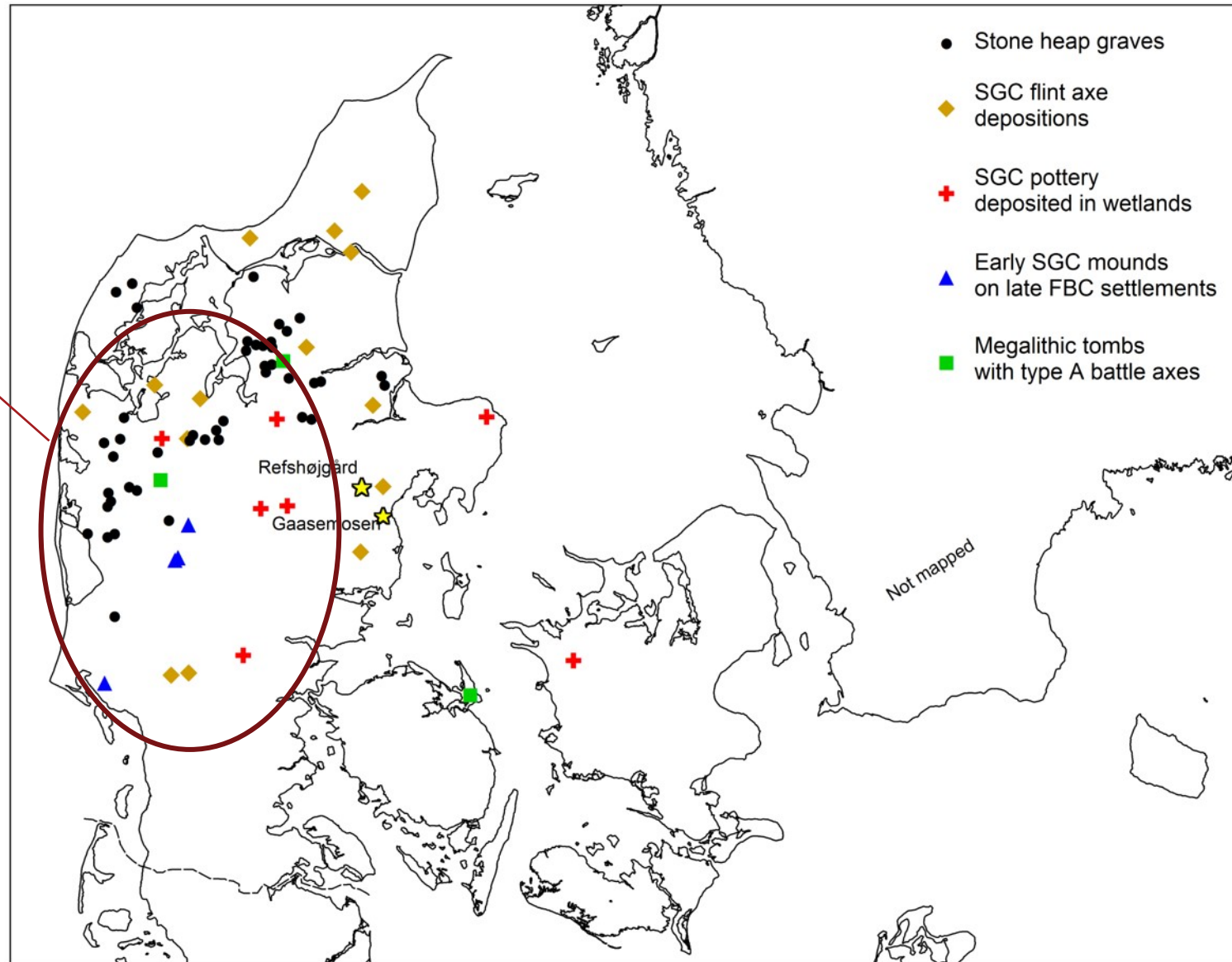


Fig. 7. Gaasemosen. Pottery from the cultural deposits. A) Bucket-shaped pot of the late Funnel Beaker culture, decorated with finger pits and finger grooves; B-C) Beakers with an S-shaped profile and decorated with short-wave mouldings; D) Amphora; E) Corded ware. B-E are all from the Single Grave culture [scale 1:3] (drawings: Jeppe Boel Jepsen).

Late TRB and early SGC features

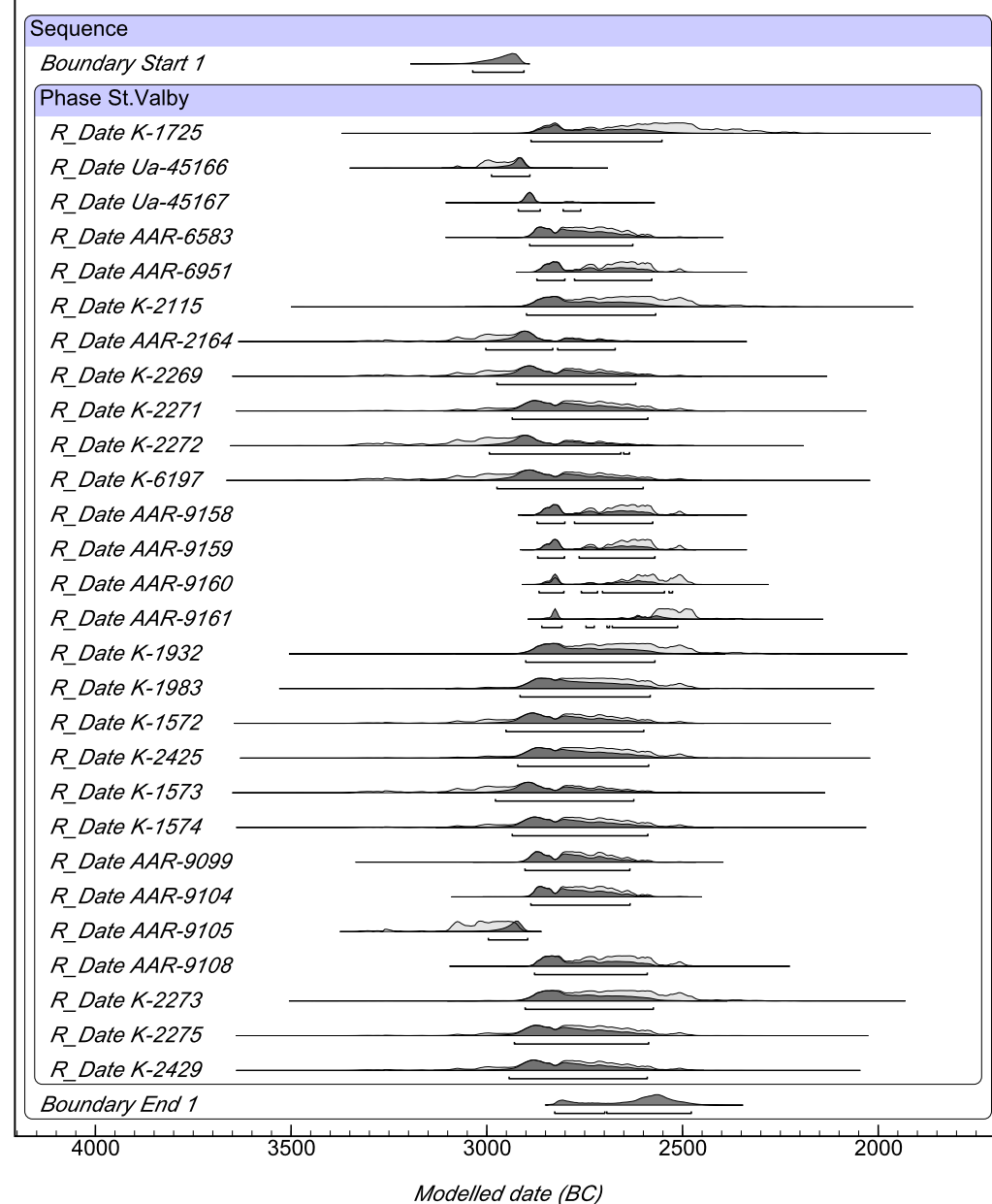


TRB in Eastern DK

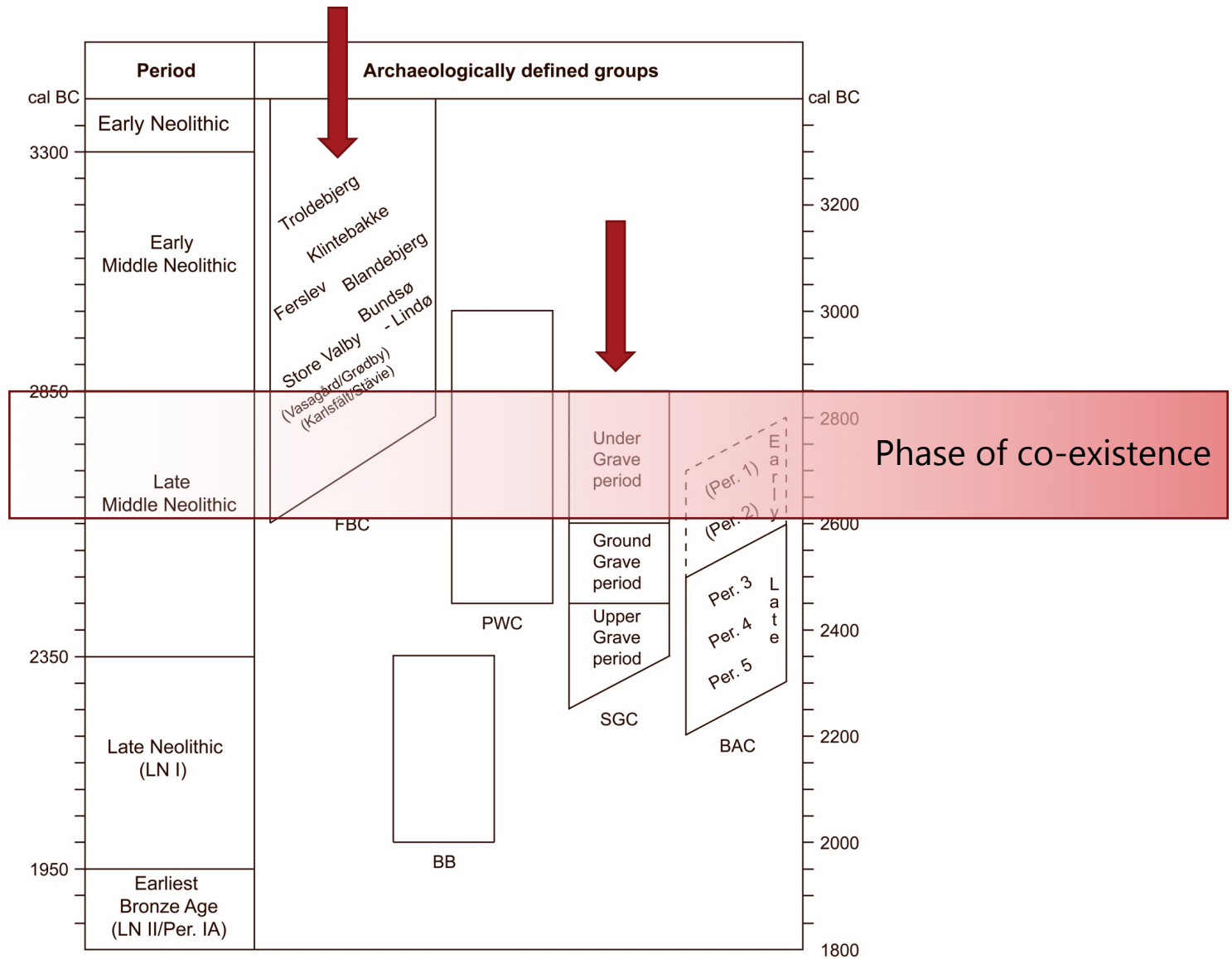
- Final TRB phase (St. Valby) until c. 2600 BC



OxCal v4.2.3 Bronk Ramsey (2013); r:5 IntCal13 atmospheric curve (Reimer et al 2013)



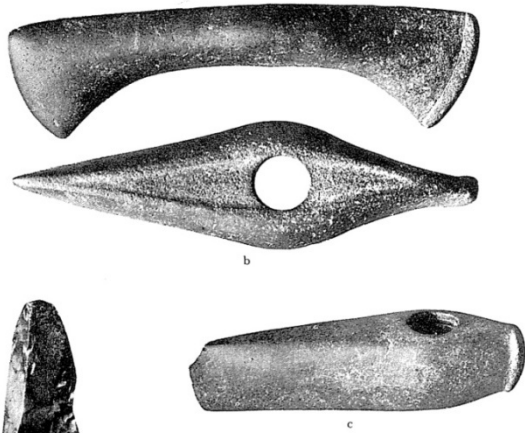
Revised chronology



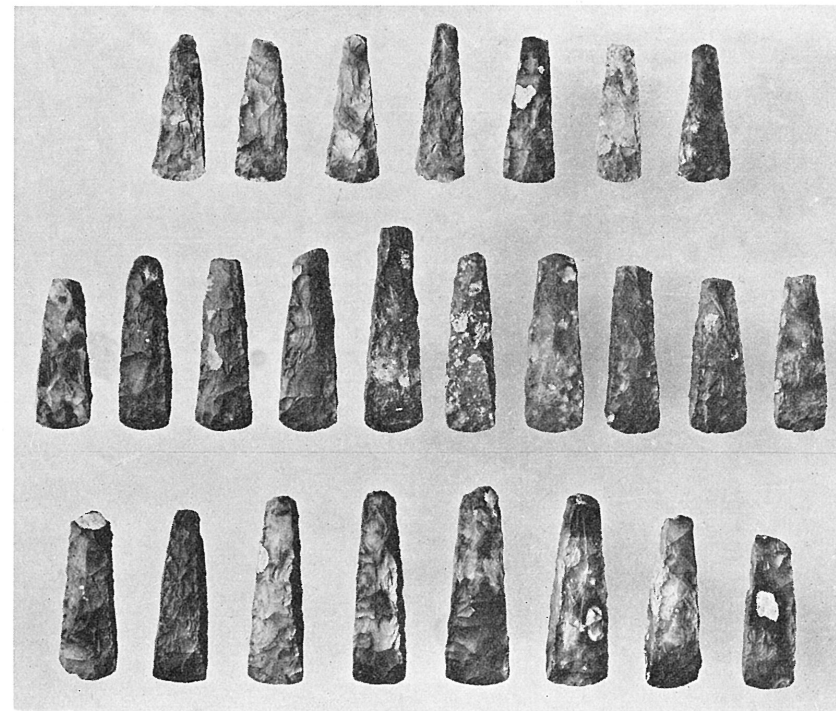
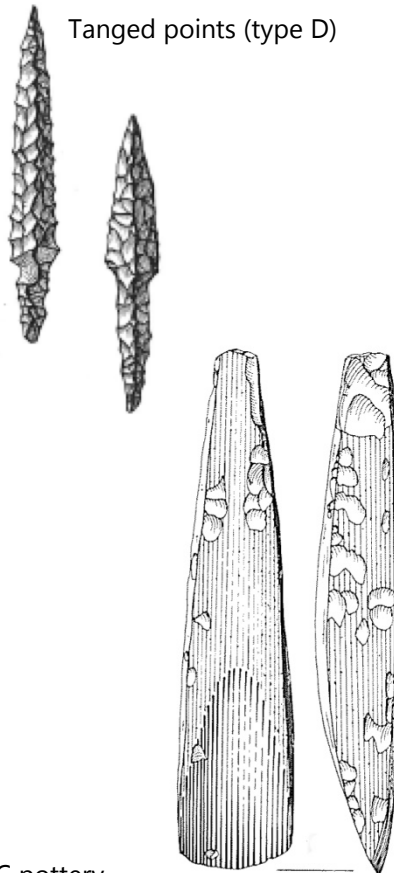
What happened after c. 2600 BC?

- The '*East Danish Single Grave culture*', c. 2600 BC

Late SGC battle axes



Tanged points (type D)



Thick-butted adzes

Horneby hoard

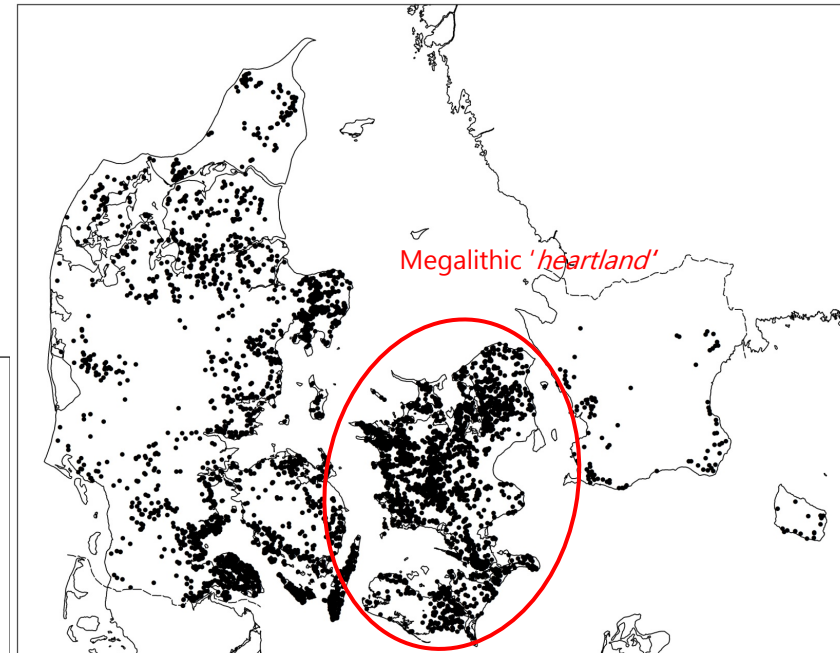
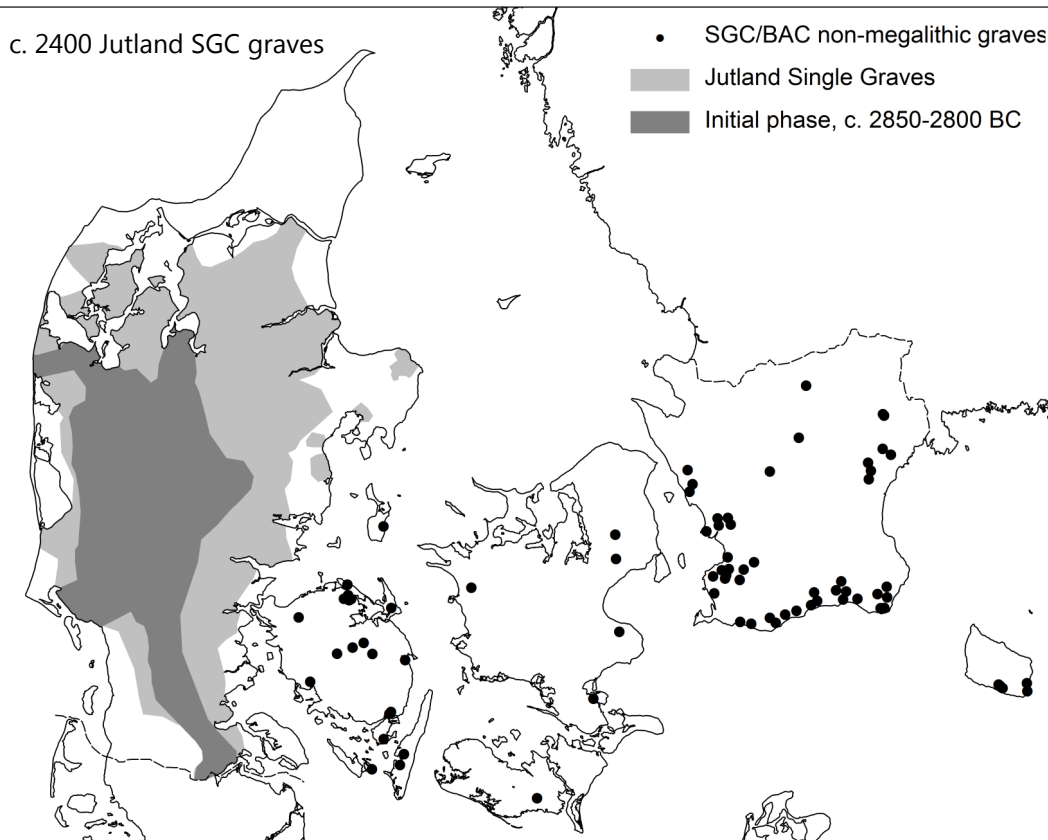
SGC pottery



Uneven distribution of the CW in South Scandinavia

- Continuation of TRB norms in Eastern DK after 2600 BC

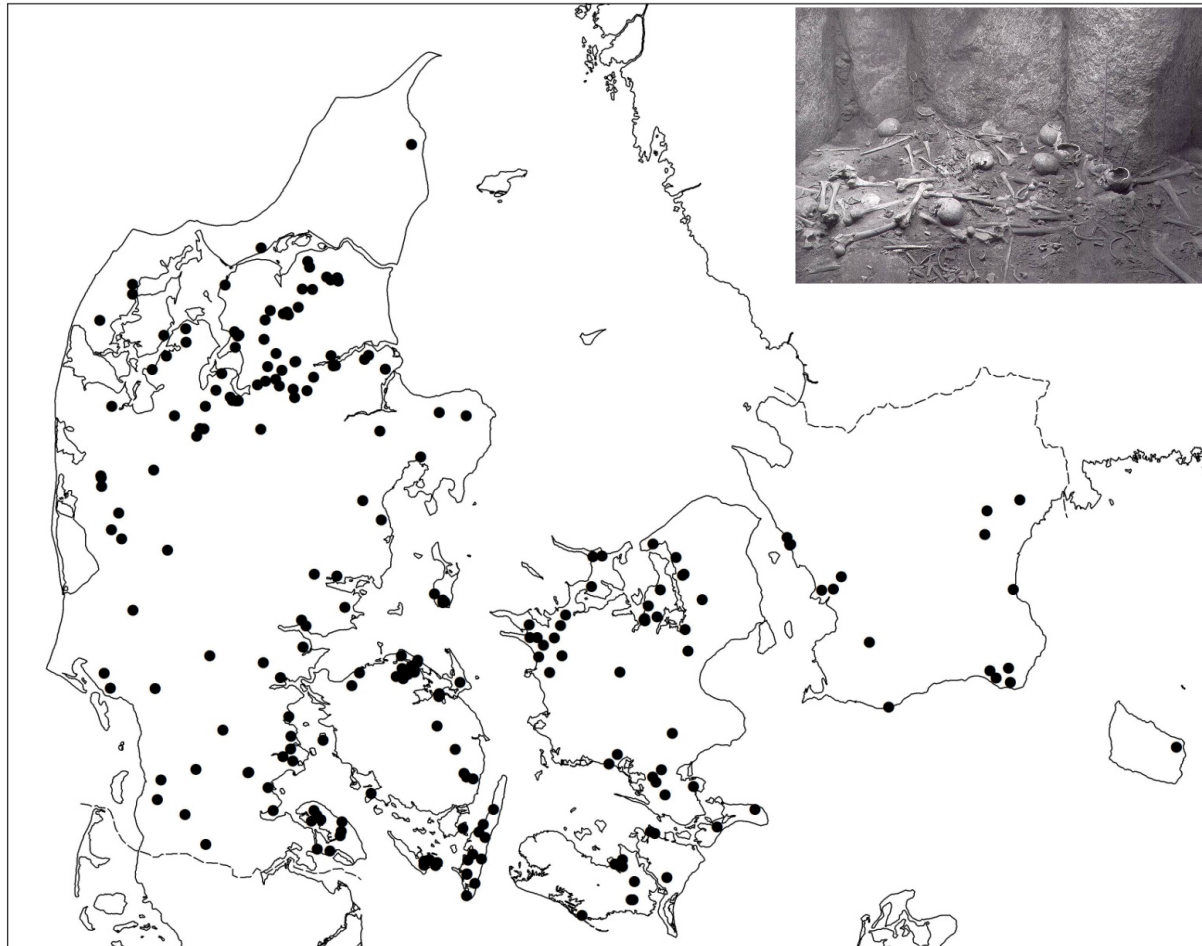
c. 2400 Jutland SGC graves



After the Funnel Beakers

- was there ever a Single Grave culture in East Denmark?

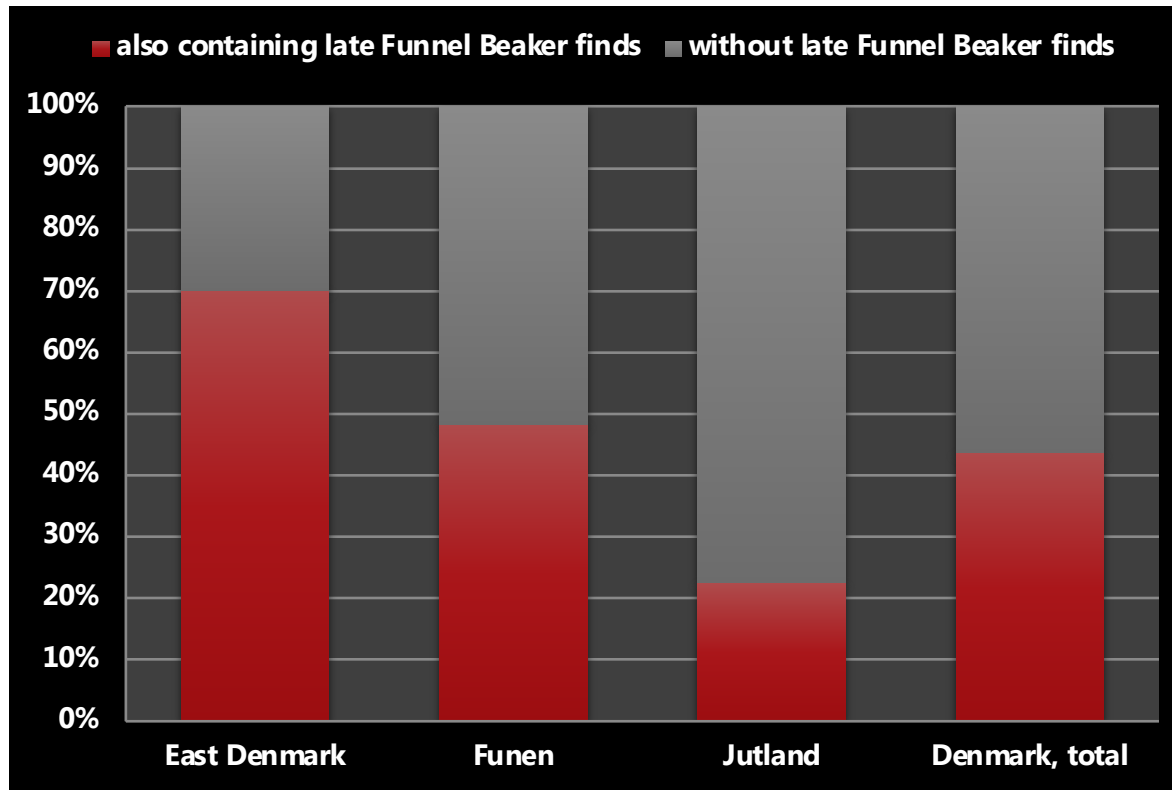
- Megalithic tombs with SGC finds



After the Funnel Beakers

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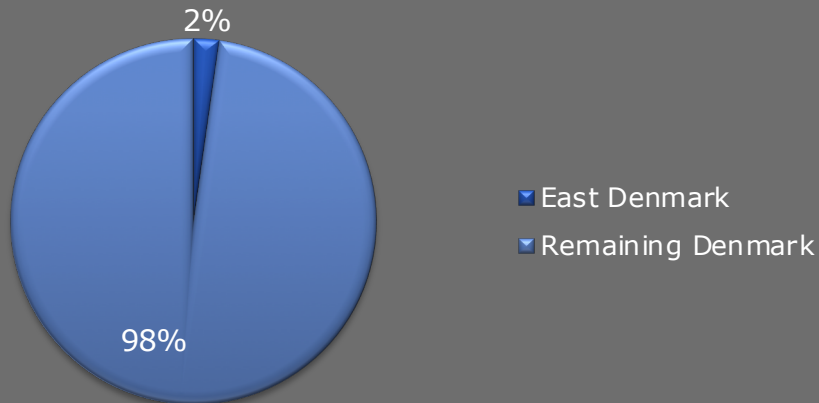
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After the Funnel Beakers

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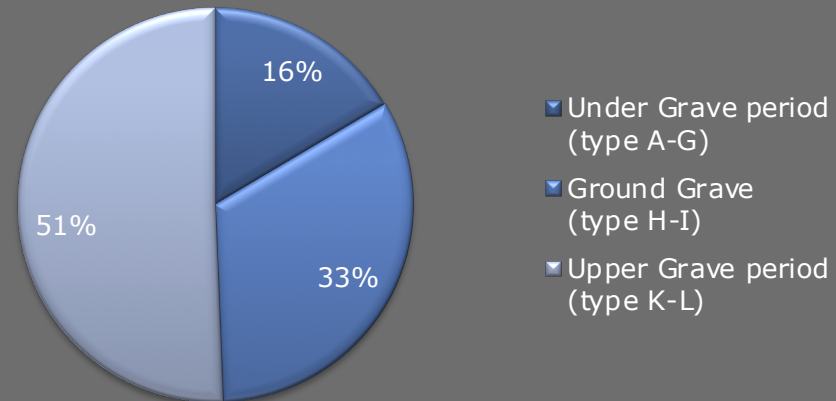
Percentual distribution of battle axes in Denmark



Data from Glob 1945: $\Sigma = 2373$ axes



Battle axe types in East Denmark

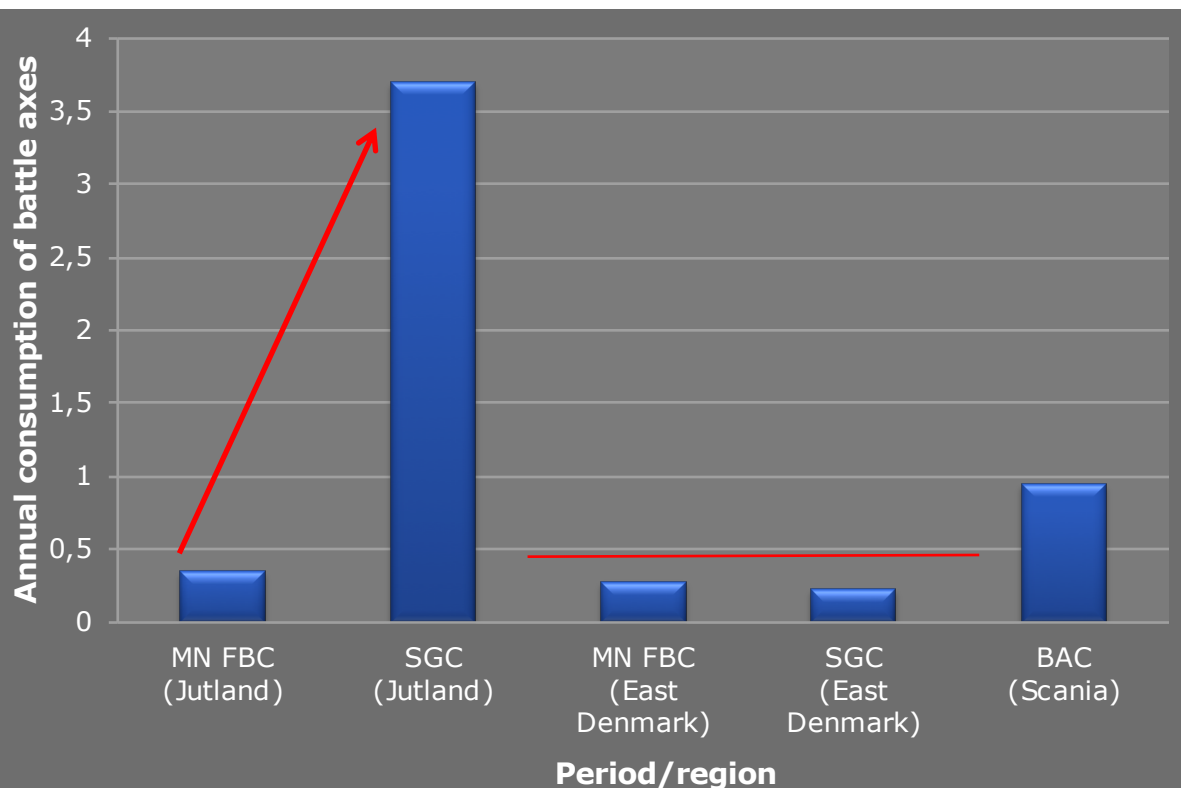


$\Sigma = 79$ axes

After the Funnel Beakers

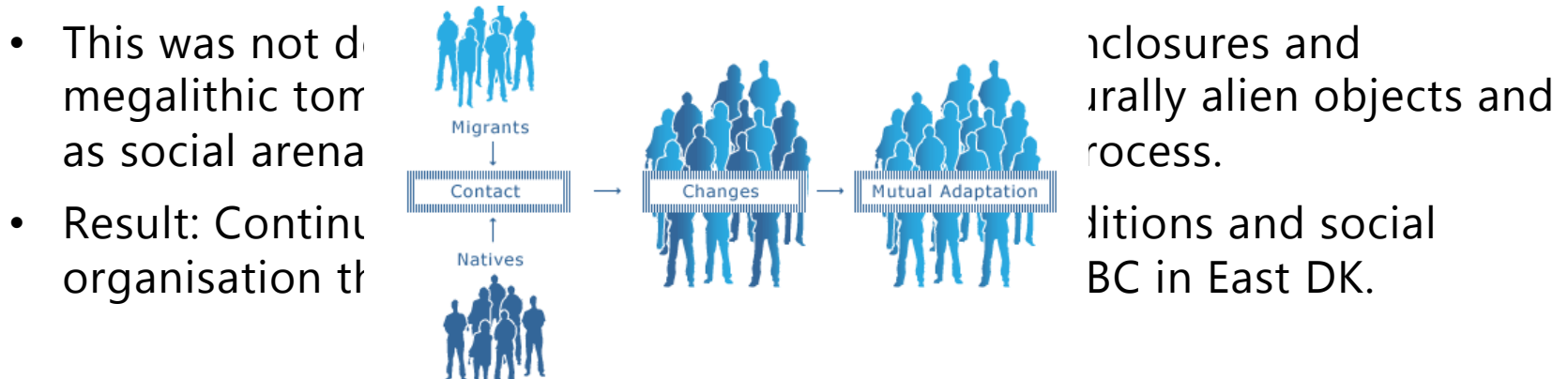
- was there ever a Single Grave culture in East Denmark?

- Number of battle axes used during the MN FBC compared with SGC – 'change vs continuity'
- Annual consumption = $\frac{\text{No. of battle axes pr. region}}{\text{length of period in years}}$



How to interpret the 'post-Funnel Beaker Middle Neolithic'?

- Application of the linguistic concepts of *creolisation* and *pidginisation*:
 - *Creolisation* is the blending of two or more languages into a new *creole* language with its own native speakers.
 - *Pidgin* is the initial rudimentary blend of two or more parent languages. Pidgin speakers also have a native language but as pidgin is learnt by new generations as a primary language it becomes a creole.
- As shown, a series of new material culture elements were obtained by the late Funnel Beaker culture in a process that can be described as '*cultural pidginisation*'.
- The result was the creation of *creole communities* from c. 2600 BC that adopted, transformed, and used new material elements in accordance with the underlying cultural norms of the Funnel Beaker culture.



Did the significant changes of the 3rd millennium BC mean language changes as well?

- Some form of Proto-Indo-European introduced with the SGC.
- Overlap with the late TRB for c. 250 years (east-west border that persisted until the classical Nordic Bronze Age per. II, c. 1500 BC).
- Great opportunity for language exchange and the adoption of an old Neolithic agricultural vocabulary into Indo-European.

