

# DAACS Tobacco Pipe Workshop

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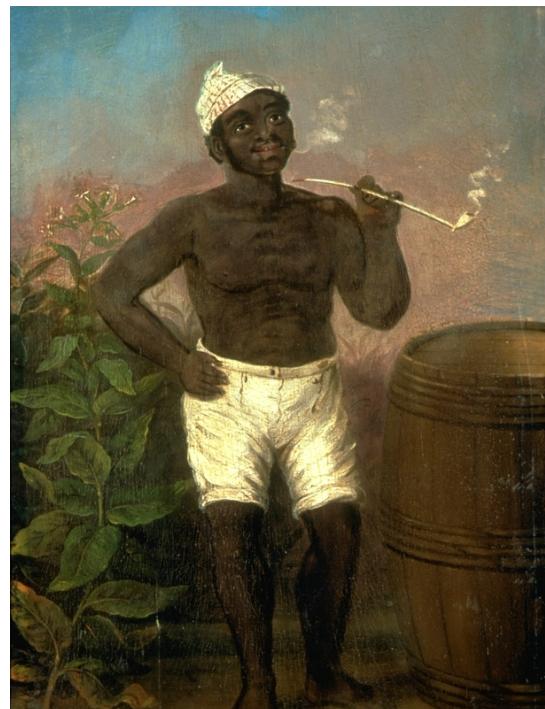


# Goals for Today:

- Review brief history of tobacco pipe production 17<sup>th</sup> – 19<sup>th</sup> c.
- Provide background on why the characteristics we record are useful
- Explain what attributes we record in the DAACS modules (Gold, Silver, and Bronze)

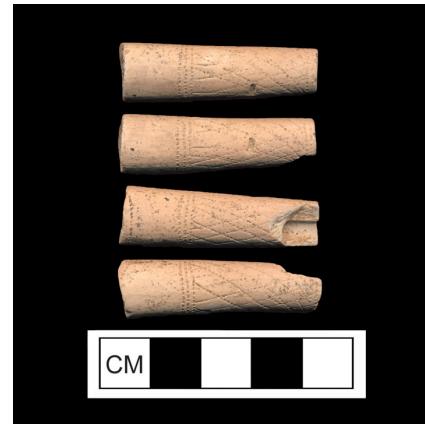
# Tobacco Pipes are Useful Tools:

- Ubiquitous on many archaeological sites due to:
  - popularity of tobacco smoking in England and Europe starting in 16<sup>th</sup> century
  - pipes were relatively inexpensive
  - short-lived object (used and discarded within 1-2 yrs)
- Made of fired clay – durable (like ceramics)

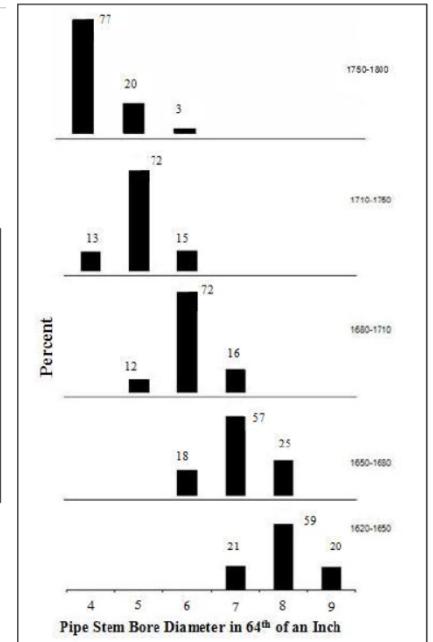
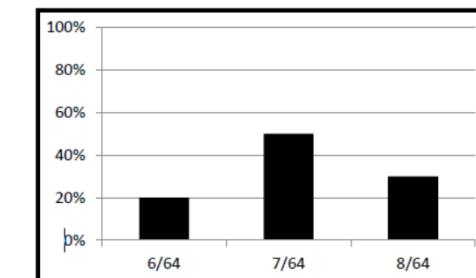
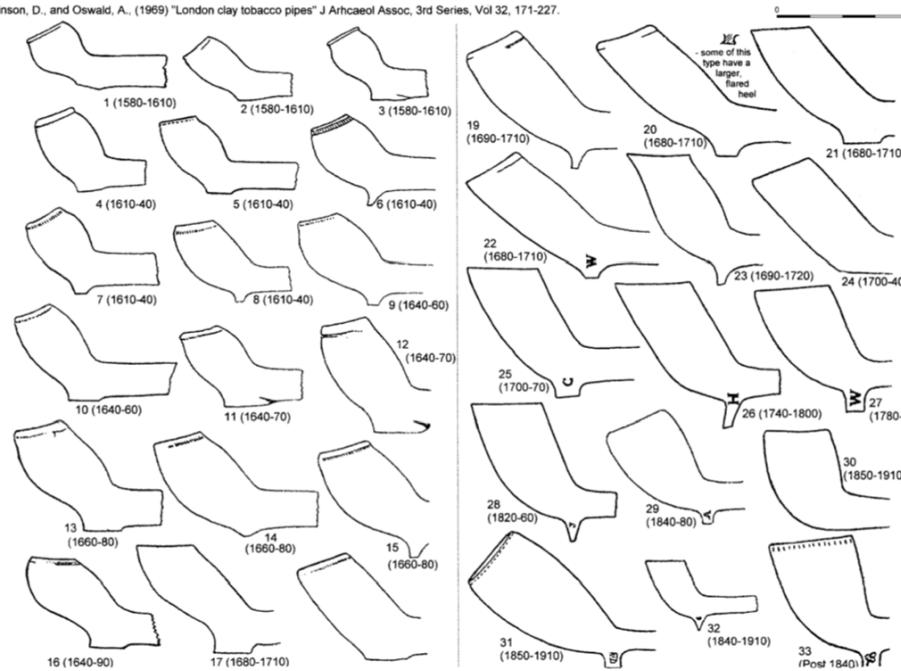


# Tobacco Pipes are Useful Tools:

- Changes over time in bowl forms, decoration and stem bore diameter size provide methods for dating
- Variation in forms, maker's marks and stylistic elements provides info about producers, social status of users, and exchange networks



Atkinson, D., and Oswald, A. (1969) "London clay tobacco pipes" J Archaeol Assoc, 3rd Series, Vol 32, 171-227.

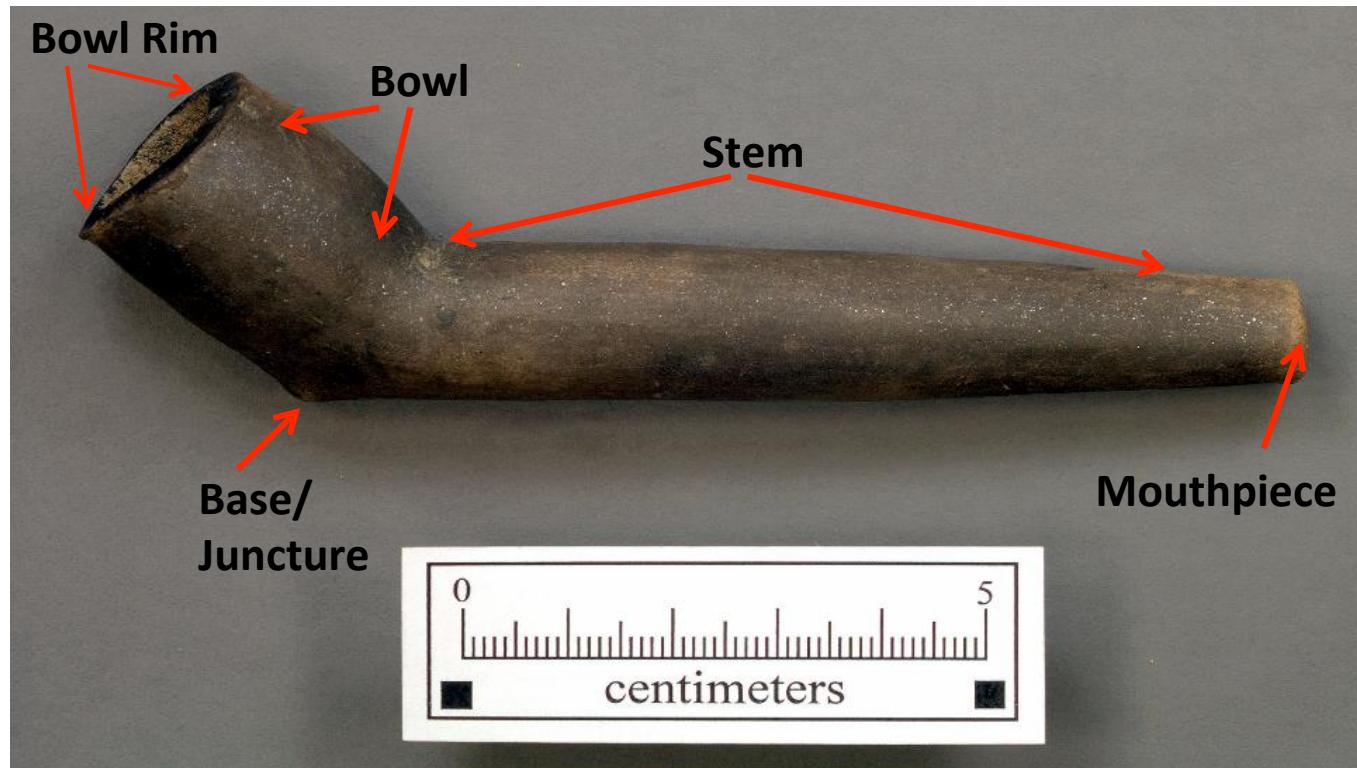


# Tobacco Pipe Production

European pipe forms take their inspiration from Native American forms – in particular elbow forms used in the Northeastern and Middle Atlantic regions of what became the United States.

Pipe making tradition: Albemarle sound → England → Netherlands

Tobacco smoking becomes popular in England in the 1570s, tobacco pipe industry developed around England and Netherlands during early part of 17<sup>th</sup> c.



Smoking Pipe from Late Woodland/Early Contact Period Site in North Carolina, Image courtesy UNC-RLA

# Note about how attributes are recorded in DAACS:

## 1. Attributes vs. Types

- We record individual details about each fragment – i.e. each individual field is meant to capture a single piece of information about a fragment of pipe (or a batch)
- Information can be aggregated to create types if desired
- One exception is bowl type (only recorded in Gold), which encompasses the shape of multiple areas of the pipe.

**Tobacco Pipe (Gold)**

[+ ADD NEW](#)

[← BACK TO LIST](#) | [← PREVIOUS](#) 12 OF 23 [NEXT →](#)

**MAIN** MEASUREMENTS BOWL/MOUTHPIECE DECORATION TEXT MARKS MANUFACTURING CONDITION IMAGE OBJECTS

**GENERAL**

Artifact Count	1	Completeness	Stem, Base, Bowl, Rim
Material	Earthenware, ball clay	Manufacturing Technique	Molded
Paste Color	5Y 9/1, 10Y 9/1	Non-Plastic Paste Inclusion	None
Mended?	No	Decoration?	No
Text Mark?	No		

**SURFACES**

Glaze Type	No Glaze	Glaze Color	Not Applicable
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**NOTES**

Bowl form 25 without the heel. Type 18 in Hume, p. 303.

**RECORD DETAILS**

[+ ADD TOBACCO PIPE TO CONTEXT SAMPLE](#)

**SAVE** **DUPLICATE**

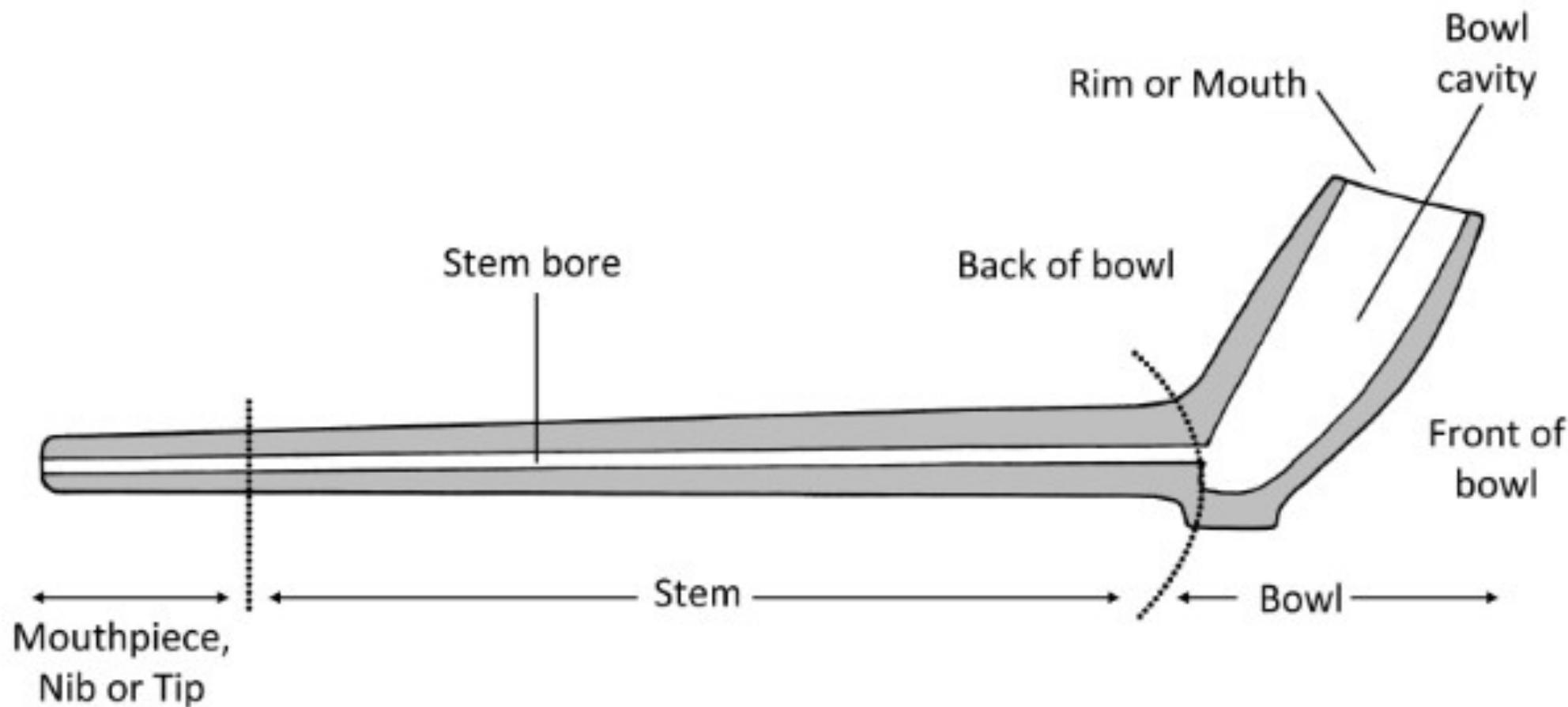
**ARTIFACT ID:** 1009-AL00133-FLT-00019  
**PROJECT:** Richneck Quarter  
**CONTEXT SAMPLE:** 1009-AL00133-FLT-  
**COMPLETENESS:** Stem, Base, Bowl, Rim  
**MATERIAL:** Earthenware, ball clay  
**MANU TECH:** Molded  
**DECORATION:** No

**ALL TOBACCO PIPES IN CONTEXT SAMPLE**

**CATALOGER DETAILS**

**IMAGES**

# Tobacco Pipe Completeness



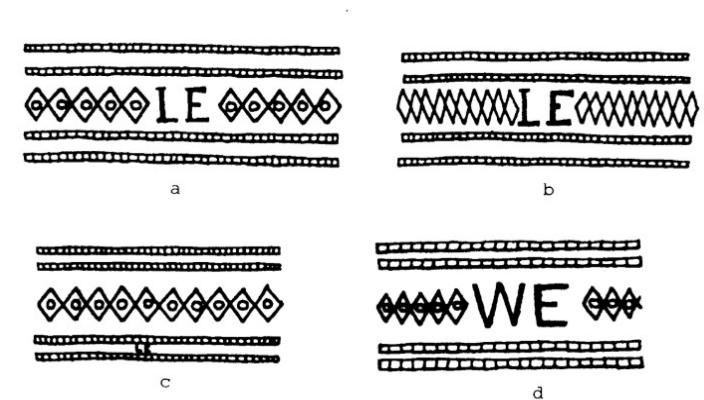
# Note about how attributes are recorded in DAACS:

## 2. Morphological Features vs. Decoration/Marks

- Morphological Features are part of the general shape of the overall pipe: Bowl shape, base shape etc.
- Decoration/Marks are often designs impressed, molded, or applied to the shape of the pipe:
  - Marker's marks
  - Rouletted designs etc.
- These are not always mutually exclusive as we will see with figural pipes later on.



Figural pipe

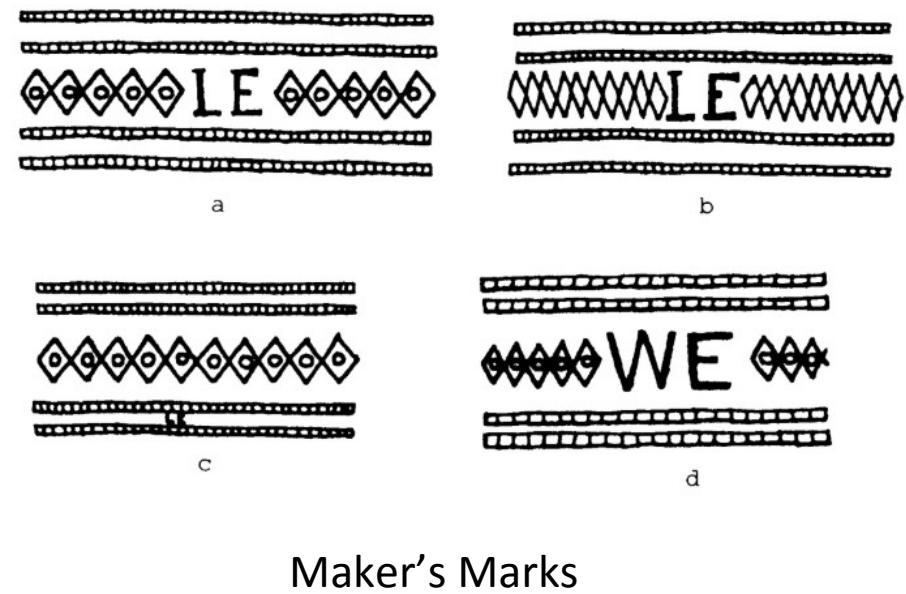


Marker's Marks

# Note about how attributes are recorded in DAACS:

## 3. Differentiation between Maker's Marks and Decoration

- Maker's Marks – can provide an accurate date for manufacture and an origin
- Maker's Marks always include initials (or partial name) or numbers



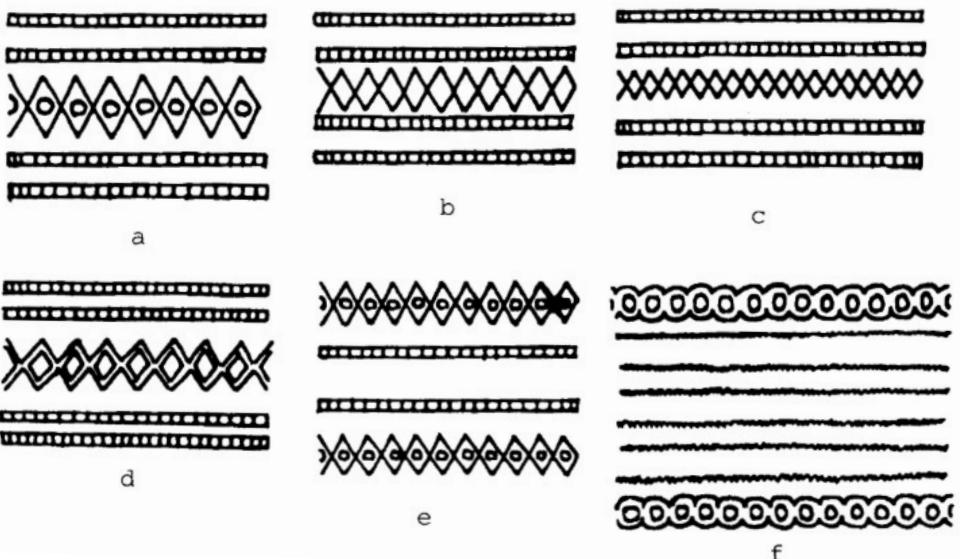
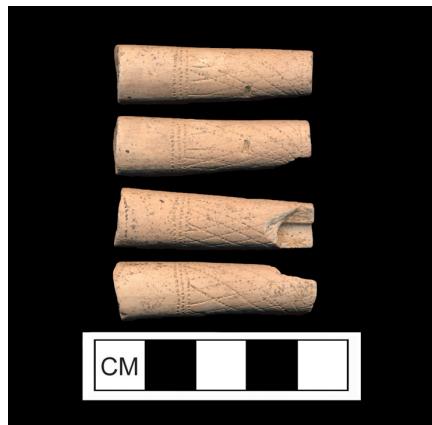
Maker's Marks



# Note about how attributes are recorded in DAACS:

## 3. Defining Decoration

- Decorations are added to the pipe (molded, incised, stamped etc)
- Generally do not have initials or numbers associated with them
- Glaze isn't recorded as a decoration
- Agatized paste is not considered a decoration



Decoration (Hurry and Keeler  
n.d.)



# **Production Origins of Pipes on British Atlantic Sites: 17th c. - 19th c.**

## **17<sup>th</sup> century**

- Locally made
- English
- Dutch

## **18<sup>th</sup> century**

- Mostly English

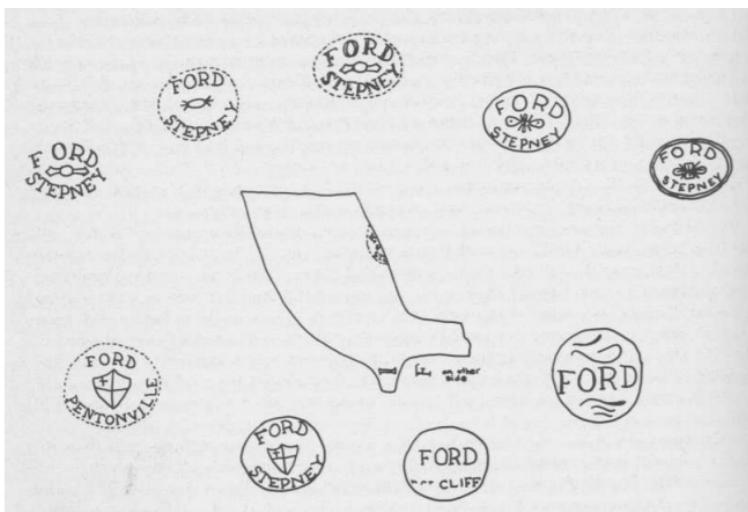
## **19<sup>th</sup> century**

Mass industrialization (like with many other types of materials) diversifies both forms and materials used to make pipes and the locations where they are made

- Earthenware, Stoneware – America, England, Scotland, Ireland, Canada
- Porcelain – France, Germany
- Meerschaum, corn cob, briar, and woods

# White Ball Clay Pipes

- Most common pipe found archaeologically
- First ball clay pipes produced in England, likely ~1590
- Found on sites dating from the 17<sup>th</sup> to 20<sup>th</sup> centuries
- 17<sup>th</sup> and 18<sup>th</sup> centuries mostly English and Dutch
- By 19<sup>th</sup> century English, Dutch, Scottish, Canadian and Irish workshops in operation
- Changes in bowl shape, bore diameter size, molded decoration and makers marks help to identify time period and producers



English (Walker 1970:Plate 2)

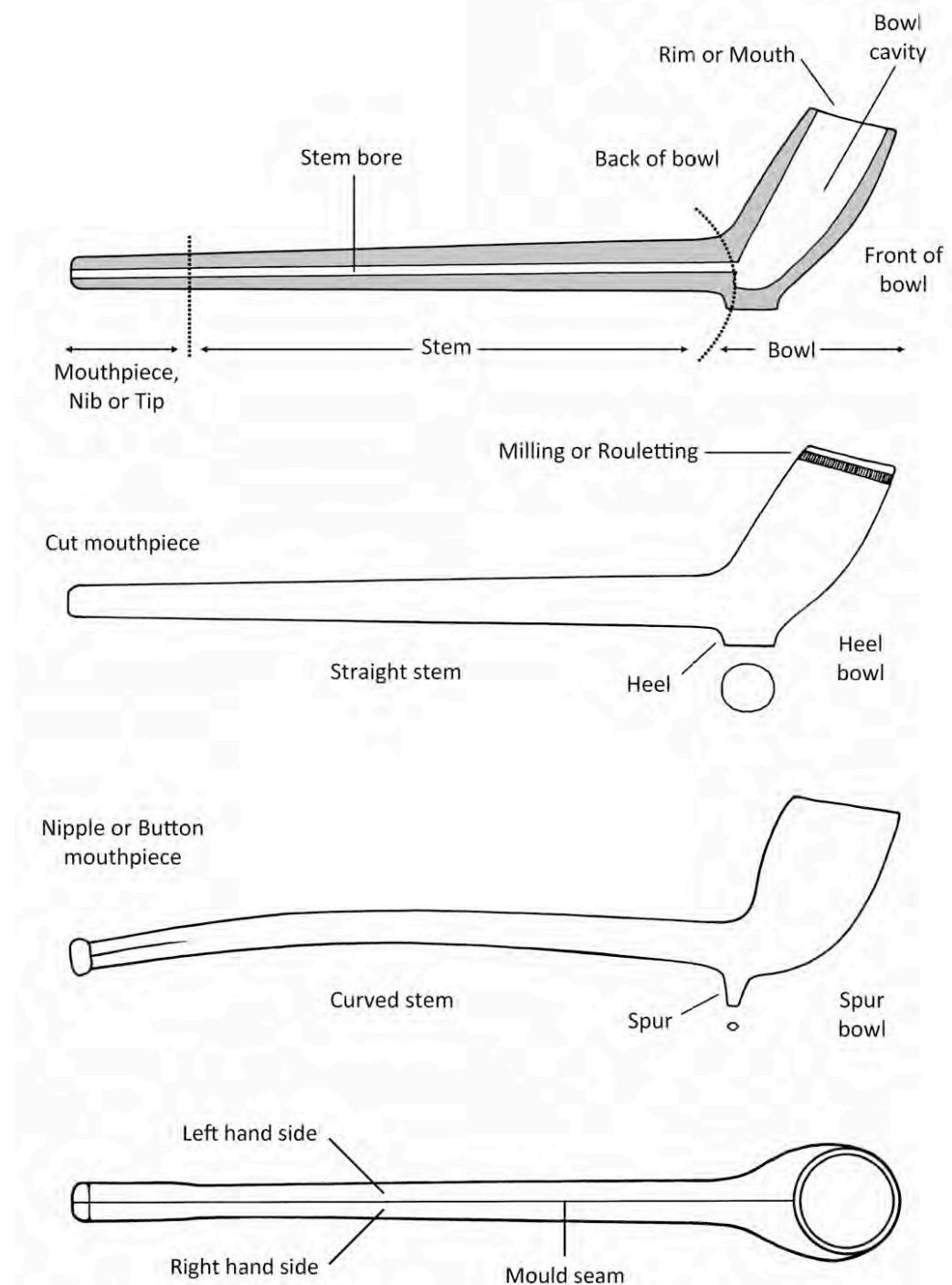


Dutch



Canadian

# White Ball Clay Pipes



# White Ball Clay Pipes

## How Clay Tobacco Pipes Were Made



1. Preparing the Clay.



The clay was washed in wooden or copper tubs to remove dirt and stones and placed on boards to mature and dry.



When dry the clay was worked by heating with an iron bar to remove air.

2. Forming the rough shapes

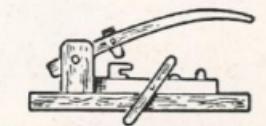


Balls of clay were rolled by hand and afterwards rolled out to form the rough shape of the pipe to be moulded. These were called 'rolls'.

3. Moulding.



A piercing rod was passed through the shank of a roll and placed in a two-piece mould as shown.

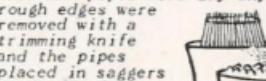


The assembled mould was then placed in a 'Gin Press' and the lever pulled down to form the hollow in the bowl. After this the piercing rod was withdrawn and the pipe removed from the mould.

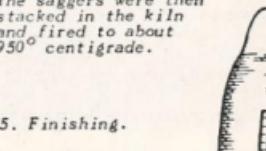
4. Trimming and Firing.



When the pipes were dry any rough edges were removed with a trimming knife and the pipes placed in saggers ready for firing.

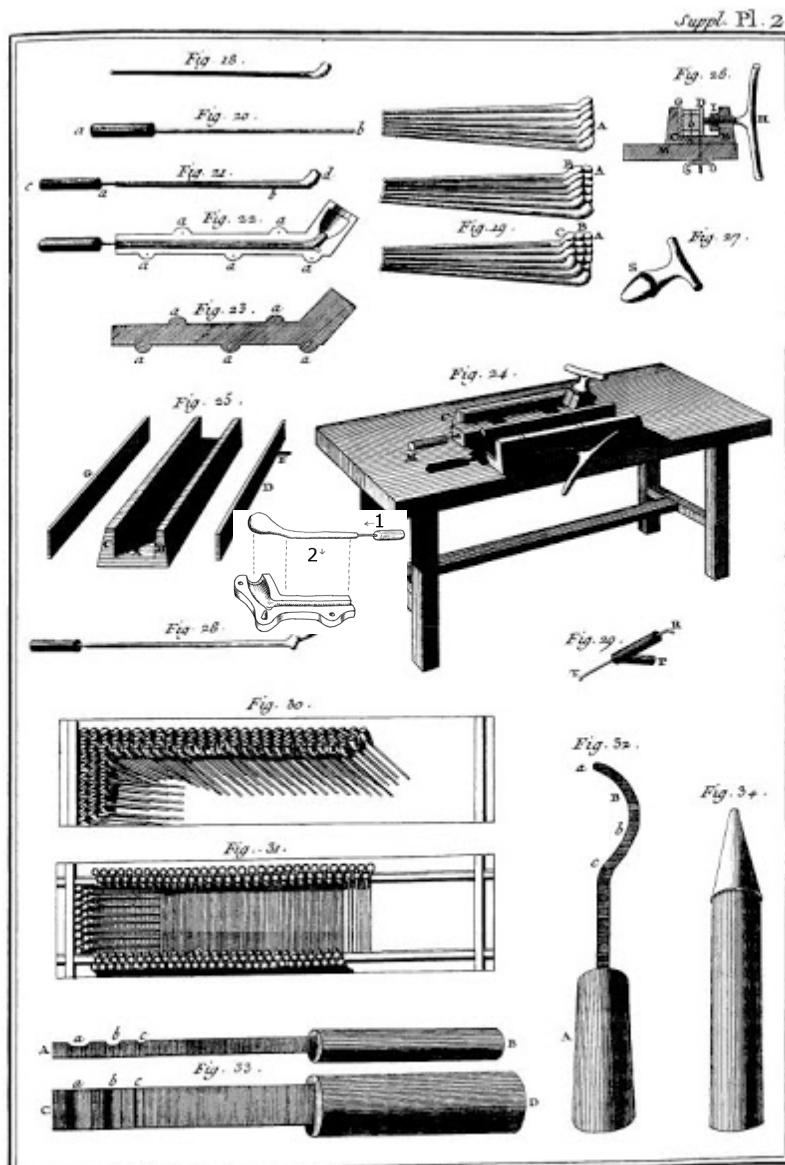


The saggers were then stacked in the kiln and fired to about  $950^{\circ}$  centigrade.

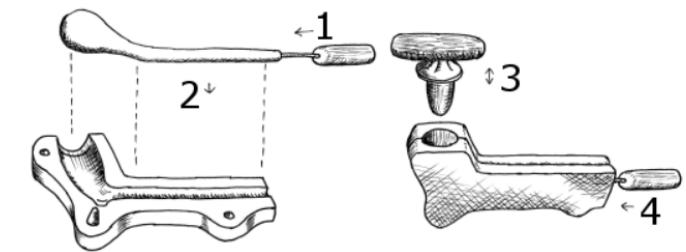


5. Finishing.

After firing the pipes were checked for flaws and the mouthpieces coated with wax or lacquer to prevent the smoker's lips sticking to the clay.



*Art de faire les Pipes.*



All largely created through the same process using metal molds. Molds gave general shape and size.

[https://  
www.youtube.com/  
watch?  
v=6vlnpvT2GYU&list=PLPZ  
4pzUQuTIMhR4ejujllbheut  
Mr5x-J7&index=2&t=0s](https://www.youtube.com/watch?v=6vlnpvT2GYU&list=PLPZ4pzUQuTIMhR4ejujllbheutMr5x-J7&index=2&t=0s)

# English Clay Pipes

Methods of Dating English Pipes:

## Bowl Shape

- Capacity (size) increases over time because tobacco becomes cheaper
- Angle of bowl to stem changes (pipes become more upright)

Several Typologies:

Oswald 1951

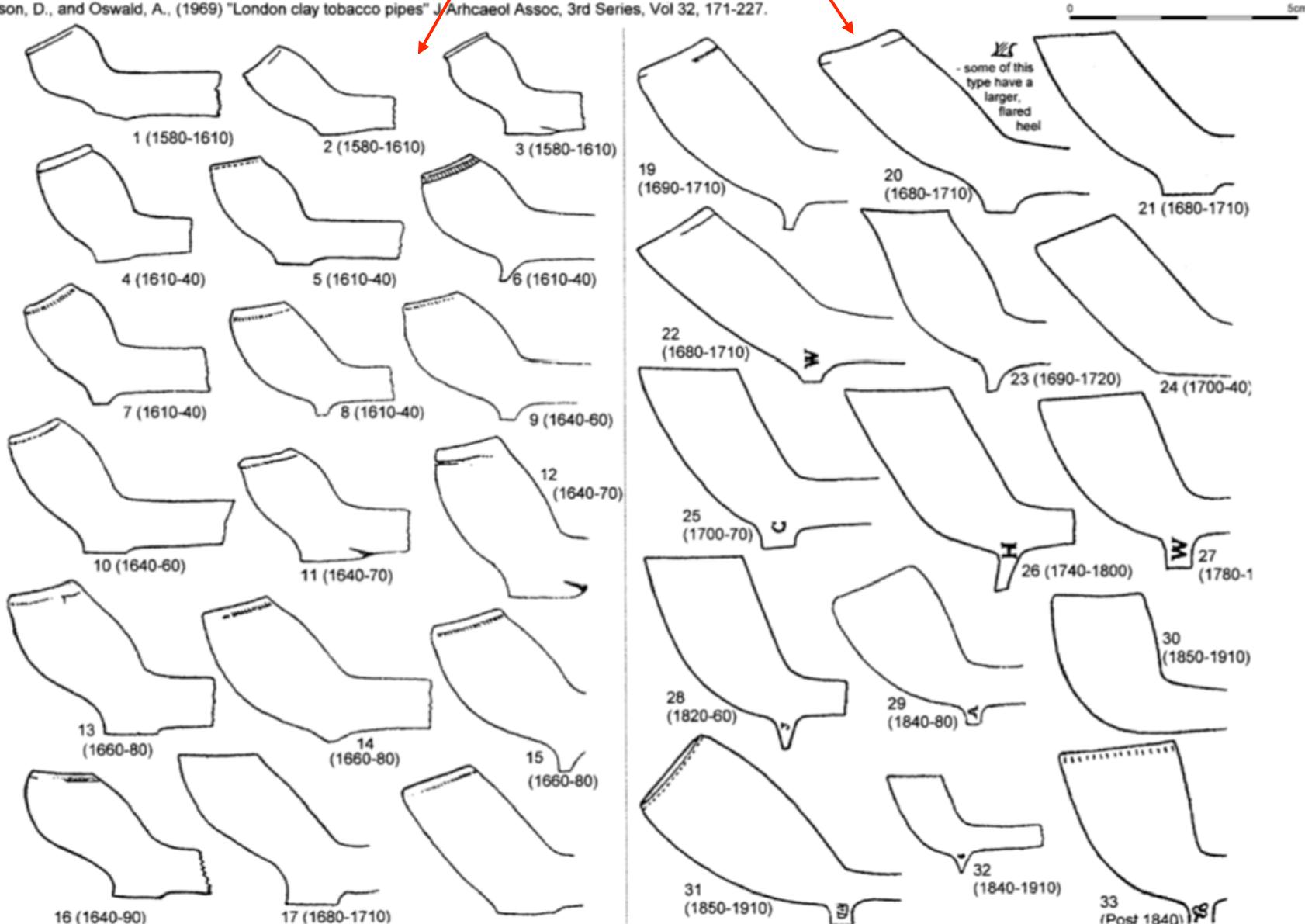
Noël Hume 1969

Atkinson and Oswald 1969

Oswald 1975

## Belly Bowl to Trade Pipe

Atkinson, D., and Oswald, A., (1969) "London clay tobacco pipes" J. Archaeol Assoc, 3rd Series, Vol 32, 171-227.



# DAACS Record for Example Below:



**In Bronze module:**

**Completeness:** Stem, Base, Bowl, Rim

**Material:** Ball clay

**Paste color:** 5Y 9/1, 10Y 9/1

**Decoration:** Yes

**64ths Bore Diameter:** 8

**Metric Bore Diameter:** 3.3

**In Gold module:**

**Bowl Type:** 5

**Base Type:** Heel

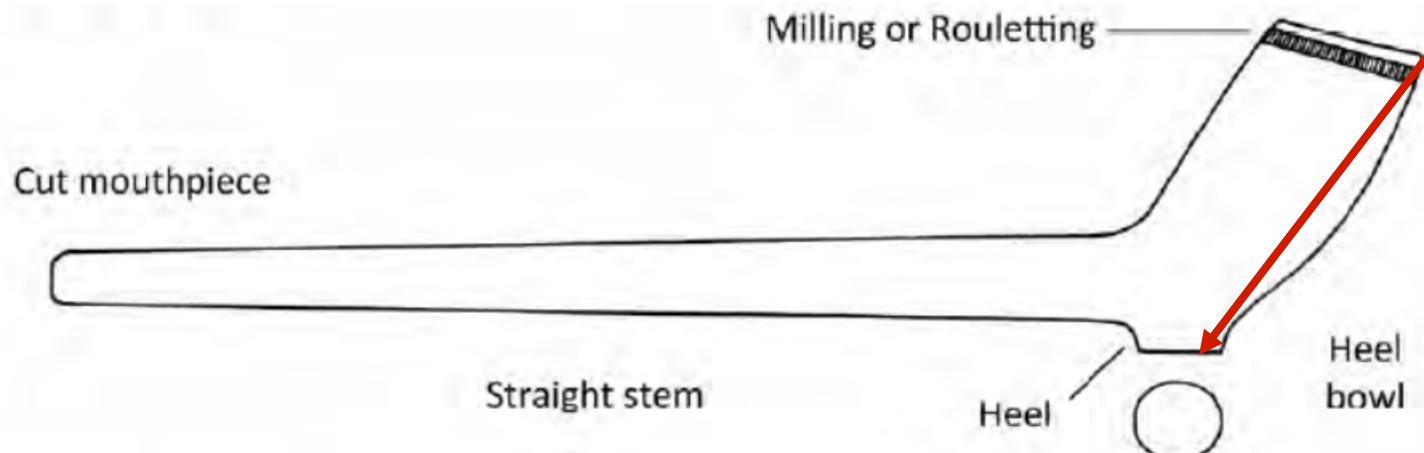
**Additional measurements**

# English Maker's Marks

- Always initials (or partial name)
- Placement changes from early 17<sup>th</sup> century to 18<sup>th</sup> century



Higgins 2017:5.1, Stamped Makers Marks: 1-4 Incused, 5-8 Relief



Marks on the base of the heel were primarily used on English pipes between about 1580 and 1730



(1640 - 1660)



(1640 - 1660)

Marks on the sides of the heel/spur started in 1670s and by 1700s were common were on English pipes (continued through 19<sup>th</sup> c)



(1687-1719)



Stem stamps more common from around 1680-1780 in most areas (Higgins 2017:5.2)



The stamped makers mark is most likely the mark of pipe maker William Evans I or William Evans II (1660-1700), a pipe manufacturer in Bristol, England. (City of New York)



Early eighteenth-century Bristol style relief-moulded cartouche mark containing the maker's initials. This mark occurs on one side of the bowl only (pipearchive.co.uk), common on pipes exported to Caribbean and Americas (Higgins 2017:5.2)

19<sup>th</sup> century marks, left – stamped, right – molded (Higgins 2017: 5.0)



Stamped maker's mark on back of bowl -- William Manby, an English pipe maker from 1719-1763 (DAACS -- Mt. Vernon)



# Decoration



Bristol diamond roulette pattern  
(McMillian and Hatch 2019:Fig 11)



Rouletted/Milled stem, DAACS -- Trents



Leaf molding starts in late  
18<sup>th</sup>/ 1<sup>st</sup> half 19<sup>th</sup> c.

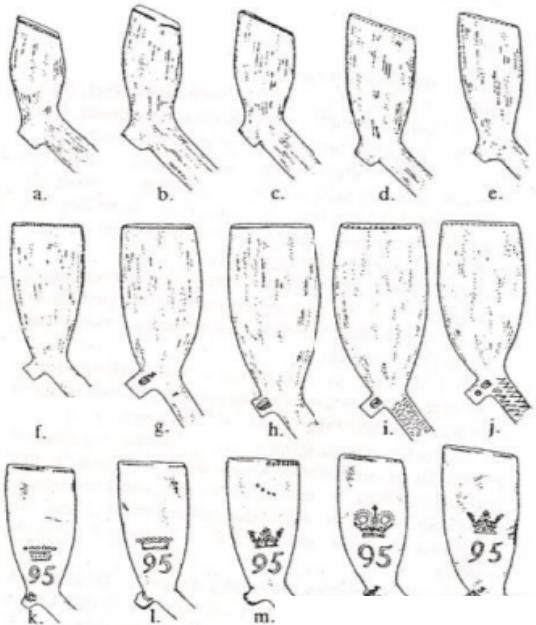


Molded Decoration, DAACS –  
Montpelier House 24



Rouletted/Milled Rim (17<sup>th</sup> - early 18<sup>th</sup> c)

# Dutch Clay Pipes



Duco 1982

Bij de figuren:

'fijne' of 'porseleinen' kwaliteit

- a. Overgangsmodel van dubbelconisch naar langgerekt en slank, 1660 - 1675/1680
- b. langgerekt ketelmodel met dikke steel, 1675-1690. -
- c. vroeg trechtervormig model ketel, de steel wordt weer dunner, 1690-1710.
- d. plomp trechtervormig model met dunne steel, 1700-1715.
- e. elegant slank trechtermodel met nauwe hals en dunne steel, 1715-1735.
- f. vroeg ovaal, ei-vormige, zgn. ovoide ketel, 1730-1740.
- g. ovoide ketel, nog een weinig a-symmetrisch, 1750-1775.
- h. langgerekte ovoide of symmetrisch model, 1775-1815.
- i. minder slanke ovoide met nauwe hals, 1815-1900.
- j. bollere ovoide met nauwe hals, 1850-1940

grote kwaliteit

- k. vroeg zijmerktype, iets trechtervormig met schuinstaande ketelopening, radering alleen aan de voorzijde van de ketelopening, parelkroon, 1700-1730.
- l. slanker model met parelkroon, 1725-1740.
- m. groter model ketel, bladerkroon, 1735-1755.
- n. ovoidemodel ketel maar met schuin staande ketelopening, keizerskroon, 1750-1775.
- o. vormeloos model zonder radering langs de ketelopening, bladerkroon, 1770-1815.

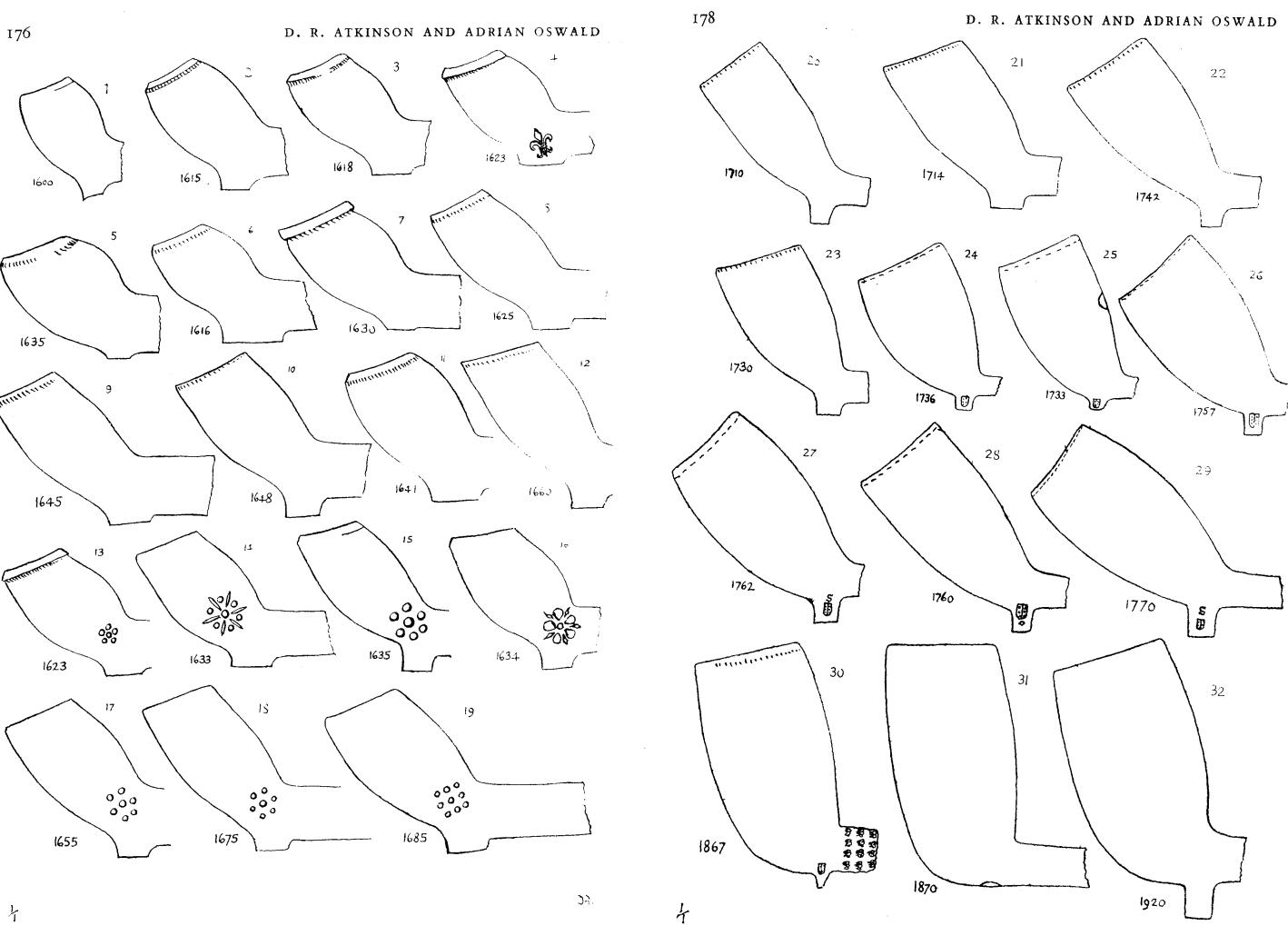


FIG. 78  
THE IDENTIFICATION OF DUTCH CLAY TOBACCO PIPES FOUND IN ENGLAND  
Seventeenth Century Dutch Pipe bowls. Scale: 1:1.

FIG. 79  
THE IDENTIFICATION OF DUTCH CLAY TOBACCO PIPES FOUND IN ENGLAND  
Dutch undecorated pipes, c. 1710-1920. Scale: 1:1.

Atkinson and Oswald 1972

# Dutch Clay Pipes

Methods of Dating Dutch Pipes:

## Bowl Shape

- Capacity (size) increases over time (mid-17<sup>th</sup> c.) because tobacco becomes cheaper
- Angle of bowl to stem changes (pipes become more upright)



Left to Right ca. 1680 - 1840

# Dutch Makers' Marks

## 17<sup>th</sup> century

Symbols and sometimes initials

- Base of the heel

## 18<sup>th</sup> and 19<sup>th</sup> century

Registered numbers and images

- Small numbers and letters surrounded by crowns, heraldic and symbolic devices
- Base and side of heels, side of spur, side of the bowl
- Marks could be bought, sold, or inherited
- Mark of Coat of Arms of City of Gouda provides a TPQ 1739/1740



Catalog > Marks

## Gouda Claypipe - Marks

Browse [Symbols] [Letters] **Numbers**

XML data HTML

< >

1-10	2	3	4	5	6	7	9	10
11-20	12	13	14	15	16	17	18	19
21-30	21	22	23	24	25	26	27	28
31-40	31	32	33	34	35	36	37	38
41-50	41	42	43	44	45	46	47	48
51-60	51	52	53	54	55	56	57	58
61-70	61	62	63	64	65	66	67	68
71-80	71	72	73	74	75	76	77	78
81-90	81	82	83	84	85	86	87	88
91-100	91	92	93	94	95	96	97	98
> 100	22	33	44		66		99	



16

- 1720- Willem Jacobsz. van Dalem  
1763- Jacob van Dalem  
1764- Arij van der List (huur)  
1784-1791 Adm. pijpenfabriek (Kleijne)  
-1814 Pieter Stomman  
1814-1832 Geertruy Pietersdr. Stomman  
1842- Gerrit Cornelis Pzn van der Want  
-1869 Johannes Marinus van der Want

**Gouda Claypipe - Marks**[Browse \[Symbols\]](#) [Letters](#) [Numbers](#)[\[Search\]](#)[XML data](#) [HTML](#)[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

&lt; &gt;



WP

1715-1745 Willem Hendericksz. Peck

1753-1782 Jan Gerritse de Jong

1753-1768 Gerrit Moleman (huur)

1795- Franciscus Zwartjes

-1819 wed. F. Zwartjes

1838-65 Hermanus Zwartjes

1881 Anthonius Johannes van Velzen

1925 Nico van Duyn - van Velsen



Note: All content was extracted from 'Goudse pijpenmakers en hun merken', by J. van der Meulen

RB	SH	SB	SB	D	E	SH	SH	SH	SH	M	N	SR	SM	SS	SS	S	V	Y	SO	SS	SH
SA	SL	SR	SL	ER	SH	SH	SH	SH	VS	SM	SS	SS	SS	SS	S	V	SO	SS	SWA	SH	
T	TD	TI	TP	K	TM	TM	TP	TS	TVE monogram												
U	VA	VB	VB	VD	VD	VH	VB	VR	VS	VT	VV	VW									
V	WA	WB	WC	WI	WL	WM	WP	WS	WS	WT	WR										
W	WAP	WB	WE	WC	WI	WL	WM	WP	WS	WS	WT	WR									
X																					
Y																					
Z																					



Gouda coat of arms, S, troubadour, Gerrit van der  
Want Pzn, 1800-1825



Boat, Hendrik van Rijst, 1860-1880

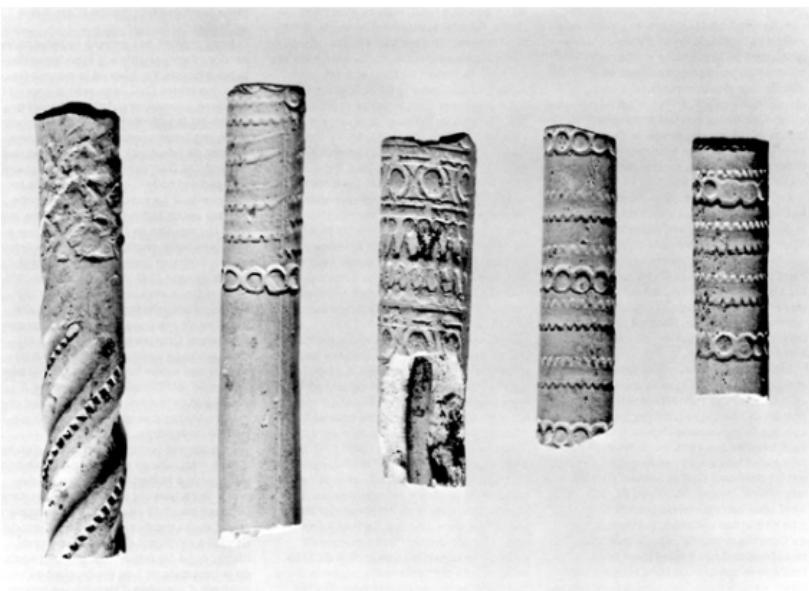
# Decoration



Ca. 1580-1640



Ca. 1650-1730



Stem rouletting – ca. 1720-32



Ca. 1700-1760

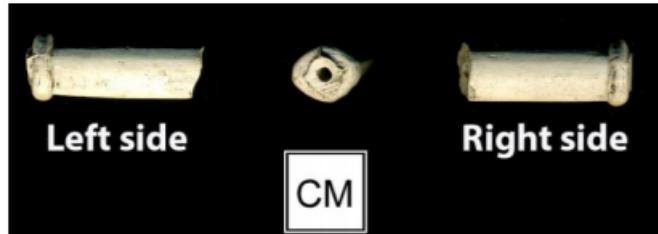
# Mouthpiece Forms and Finishes



Cut mouthpiece, most common  
17<sup>th</sup>-19<sup>th</sup> c., DAACS - Trents



Higgins 2017:6.6 19<sup>th</sup> c mouthpieces  
with red paint/wax



Diamond Nipple (post  
1850, DAACS – Morne  
Patate)



Nipple  
(DAACS – Trents)



Glazed mouthpiece (DAACS-  
Silver Bluff)



# Pipe Stem Dating

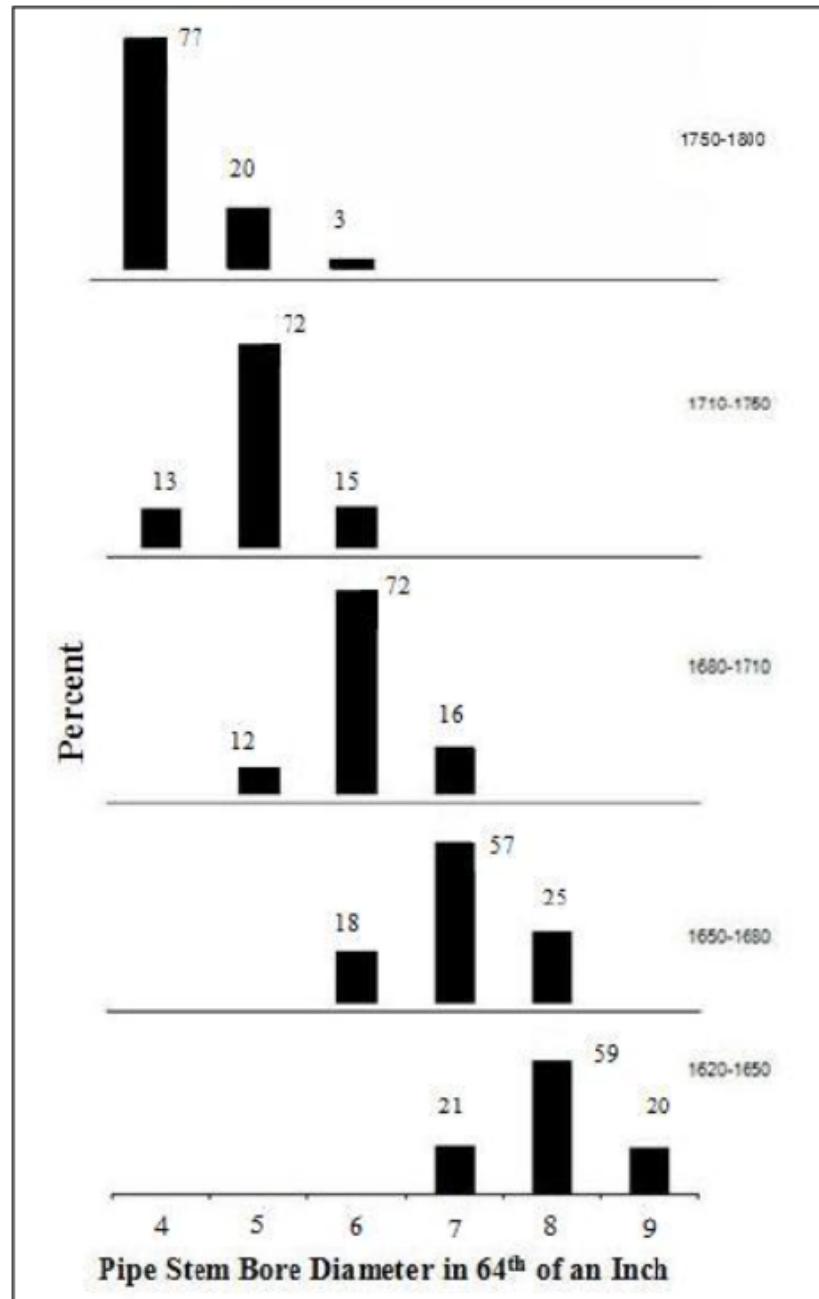
- Hole in stem made by running wire the length of the stem.
- Pipe stem length increases over time (3 ½" in late 16<sup>th</sup> century and 13 ½" by 1750)
- Bore hole decreases as stem length increases.
- Greatest accuracy for pipes produced between 1620 to 1760.
- Dates should be compared with other evidence from ceramics, etc.



# Pipe Stem Dating

JC Harrington (1954) observed changes in the diameter of the bores in pipestems that seemed to reflect changes in time, confirmed by seriation

Histogram of Time Periods. Based on  
Harrington 1954:64



# Example: Harrington Method

Sample of 150 pipe stems

45= 8/64<sup>th</sup>

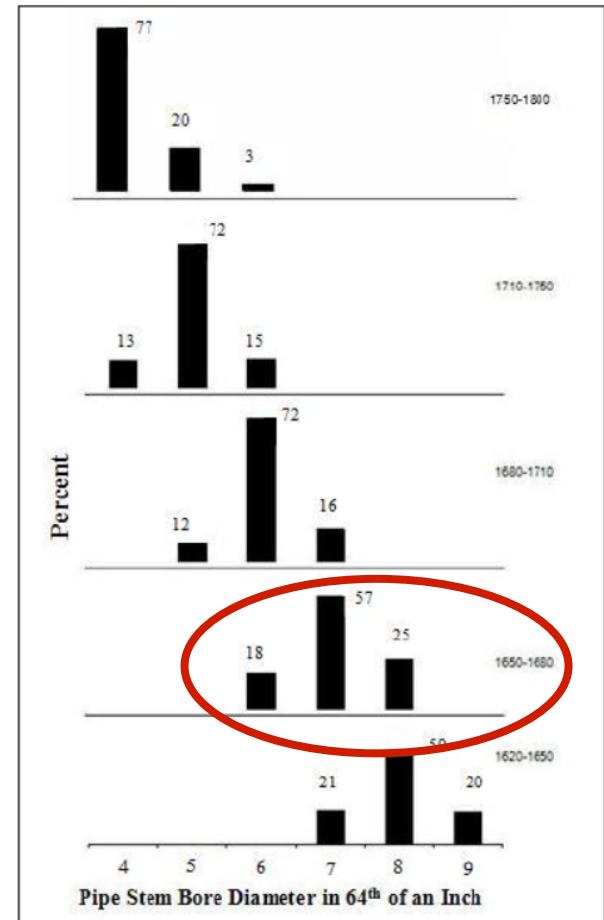
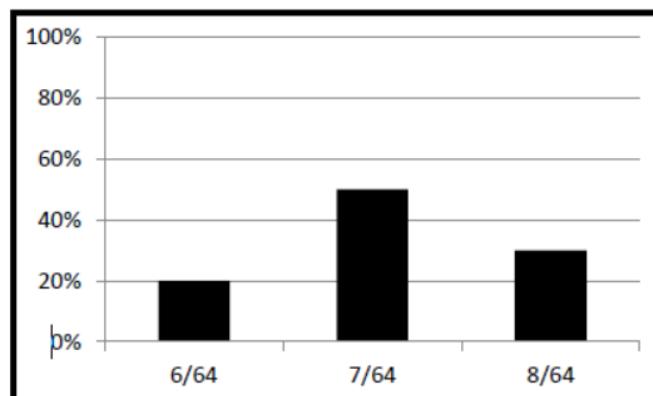
75= 7/64<sup>th</sup>

30= 6/64<sup>th</sup>

$$45/150 = 0.30 = 30\%$$

$$75/150 = 0.50 = 50\%$$

$$30/150 = 0.20 = 20\%$$



**Decorated pipes from the  
J. Reed site (New York) -  
typical of pipes produced  
in America and Canada  
early to mid-late 19<sup>th</sup>  
century**



Rows 1 and 2: Fluted and Plain

Row 3: TD Pipe, "Turks Head"

Row 4: Shield and Eagle pipes

Row 5: Decorated Pipe stems

# Scottish Pipes

– centers of production were Glasgow and Edinburgh -- early 19<sup>th</sup> c. to first quarter of 20<sup>th</sup> century



Figure 2: Two white clay tobacco pipe bowls with the slogan "Home Rule" from a late 19th-early 20th century privy in Baltimore, Maryland.

(Morehouse 2013)

# Irish Pipes

– Knockcroghery was primary production center, some produced with pipes with political slogans



George Brown (2 Thomas Court, Dublin) - Irish clay pipe bowl (1850's / 1860's)

# French Figural Pipes (1820-1920)



This bowl is a French pipe produced by the Gambier factory in St. Omer; the particular molded pattern was known as "Chatelain" (pattern number 980), produced between about 1850 and 1900.

From the Triplex at the Hermitage in Nashville Tennessee, occupied 1820-1870.

# Pamplin Pipes

- Common type produced in eastern US in the 18<sup>th</sup> and 19<sup>th</sup> centuries
  - Individual makers beginning in 1740
  - Pamplin Smoking Pipe and Man. Co. 1878-1951
  - Akron Smoking Co. 1890-1920
- Reed inserted into short (stub) stem
- Earthenware/Stoneware
- Lead-glazed



<https://anthromuseum.missouri.edu/exhibit/pamplin-clay-tobacco-pipes>

# Mid-19<sup>th</sup> century shift to composite forms



Shift to composite forms important because pipes were no longer considered a cheap and expendable commodity. More durable and expensive composite forms were kept for longer periods than clay forms

# Moravian Anthropomorphic Pipes -- 19<sup>th</sup> century



Pipes from Schaffner-Krause pottery, Salem, North Carolina, post-1834  
(Ceramics in America 2009:Figures 33 and 38)

# German and American produced Presidential pipes -- 19<sup>th</sup> c.



- Used in the 1800s as campaign tools and to broadcast political leanings
- Produced in Germany
- Taylor and Fillmore are popular examples

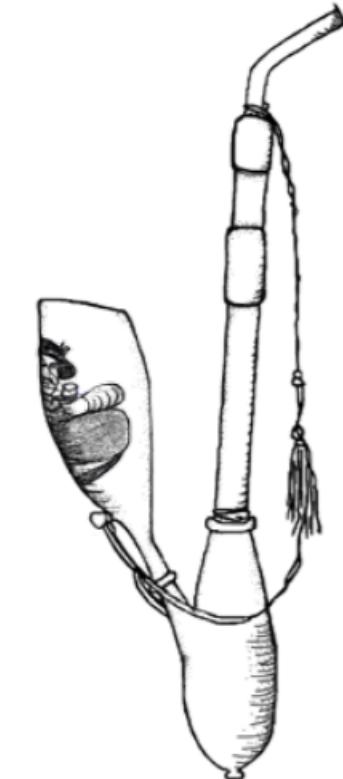
<https://www.nps.gov/archeology/sites/npsites/fortUnion.htm> - produced in Germany circa 1850s

# German Porcelain “Coffee House” Pipe -- late 19<sup>th</sup>/ early 20<sup>th</sup> century

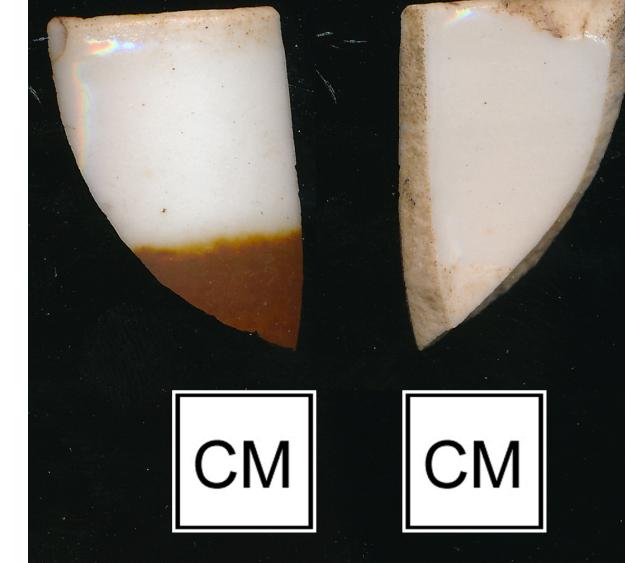
Three parts – 1)  
Porcelain  
reservoir, 2)  
wood stem, 3)  
horn, bone, or  
possibly amber  
mouthpiece



FOVA 18618, porcelain, painted,  
measurements: height 4.88", width 1.50".



*Drawing of a typical “coffee house” pipe; the reservoir is just below the pipe bowl.*



Porcelain Pipe from the  
East Cabin of the  
Hermitage



# Calabash Pipes



- Made of gourds
- Classic style (Sherlock Holmes)
- Late 19<sup>th</sup>/early 20<sup>th</sup> century



# Meerschaum Pipes

- German term meaning “sea turf” – metamorphic rock
- Came from Turkey
- Carved into pipes that were in fashion by the 1750s
- Discovery of more deposits made them more affordable by 1850s
- Composite – attached to an amber or horn mouthpiece or cherry wood stem
- Rare in archaeological contexts

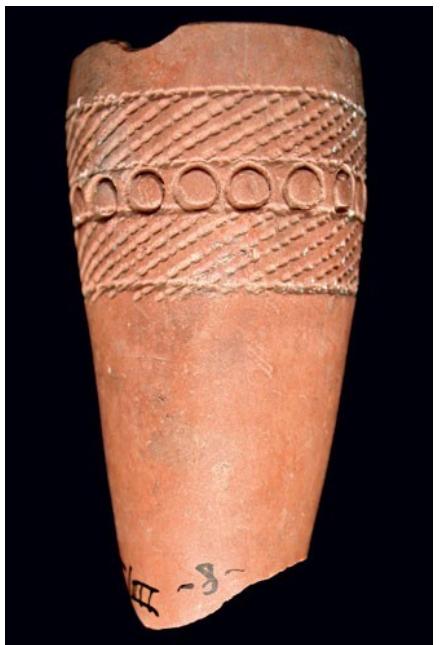


Images from Museum Science Group

# Questions?

# Locally made clay pipes – Eastern United States

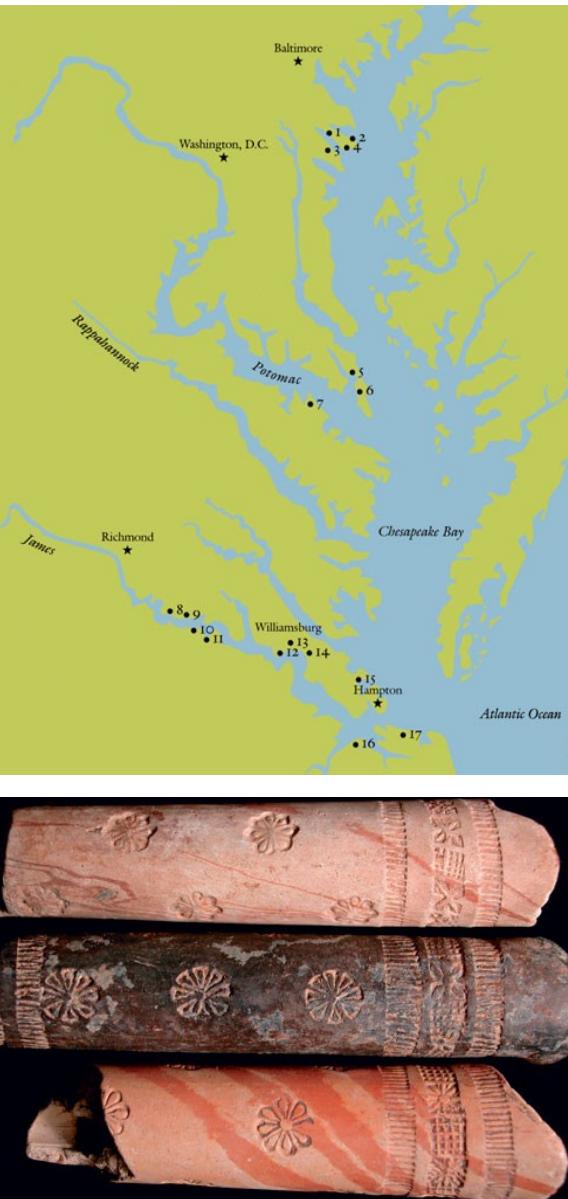
- Molded and handmade
- Produced: 1608-ca. 1700
  - Peak: 1620-1680
- Lots of variation in bowl and bowl juncture shapes
- Molded decoration and makers marks but links to producers are still being determined



# Producers' Styles



Star Maker



Bookbinder



Broadneck

Luckenbach and Kiser 2006

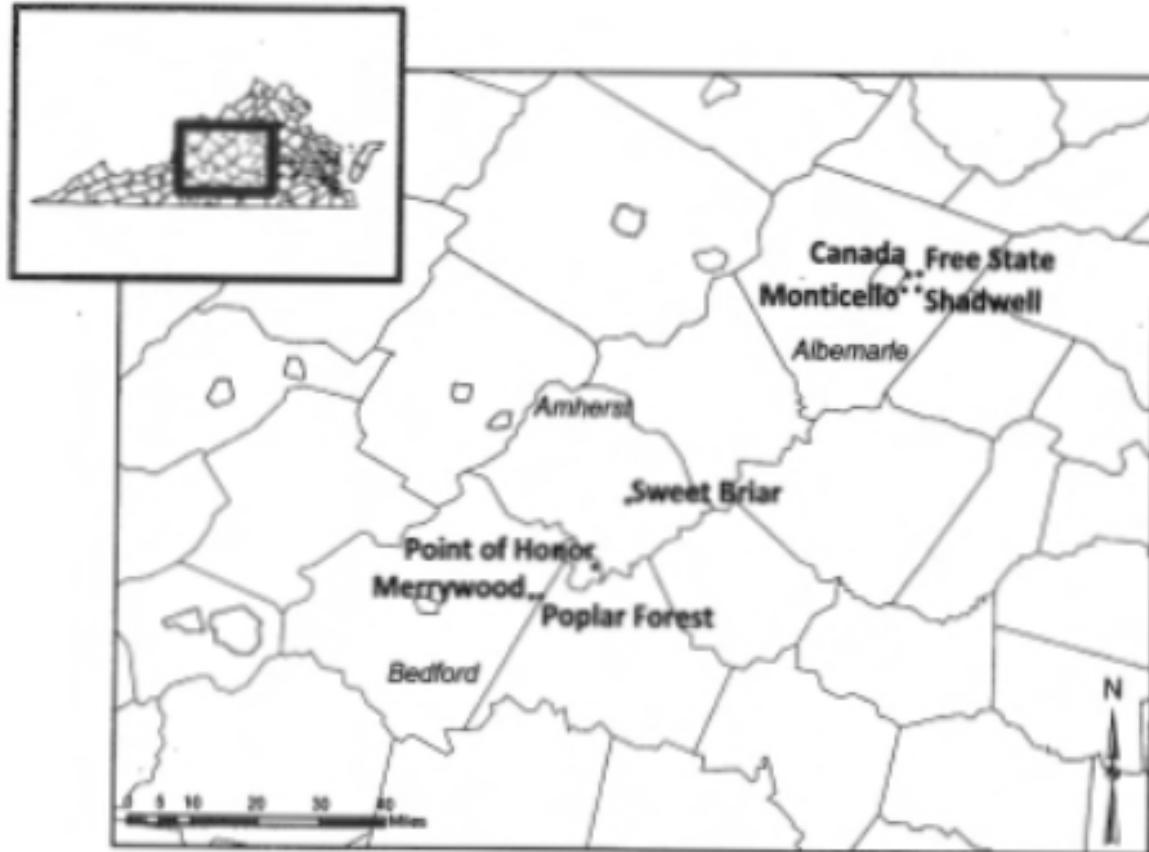
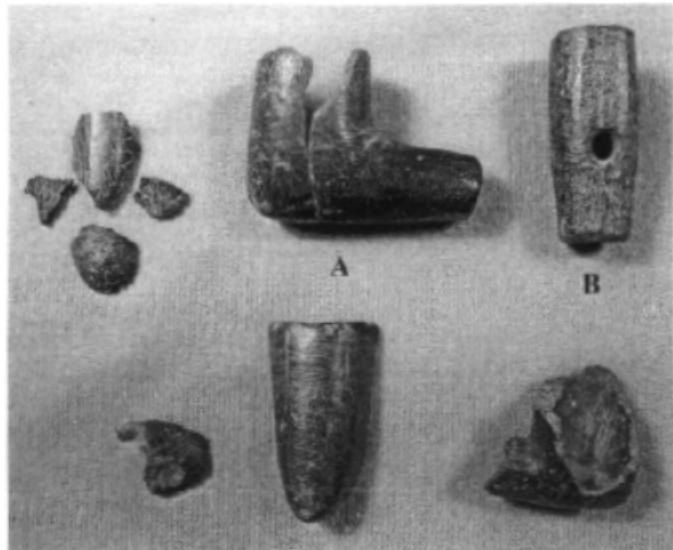
# Locally made clay pipes – Jamaica

- Last half of 18<sup>th</sup> and early part of 18<sup>th</sup> century
- Molded and handmade
- Lots of variation in bowl and bowl juncture shapes
- Molded decoration and makers marks but links to producers are still being determined



Locally made pipes from Port Royal, Jamaica

# Locally made stone pipes -- Virginia



Map 7.2. Historic sites in central Virginia where archaeologists have recovered stone pipes and worked stone.

Lee 2010:Figure 7.2