

DAACS Tobacco Pipe Workshop

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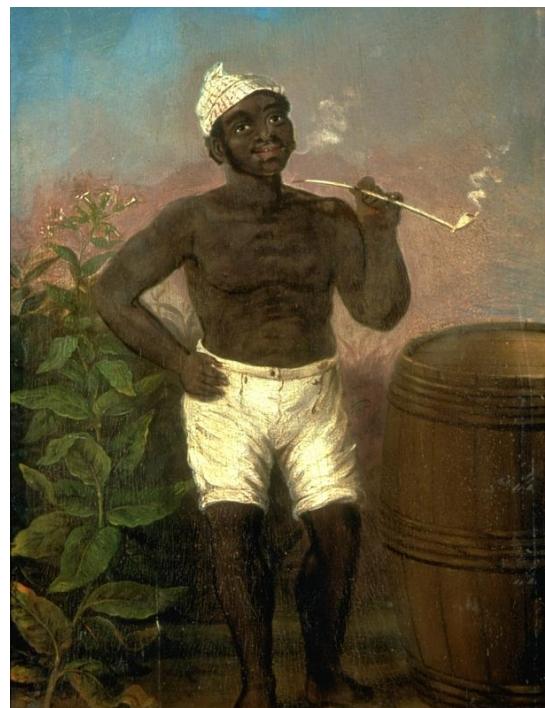


Goals for Today:

- Review brief history of tobacco pipe production 17th – 19th c.
- Provide background on why the characteristics we record are useful
- Explain what attributes we record in the DAACS modules

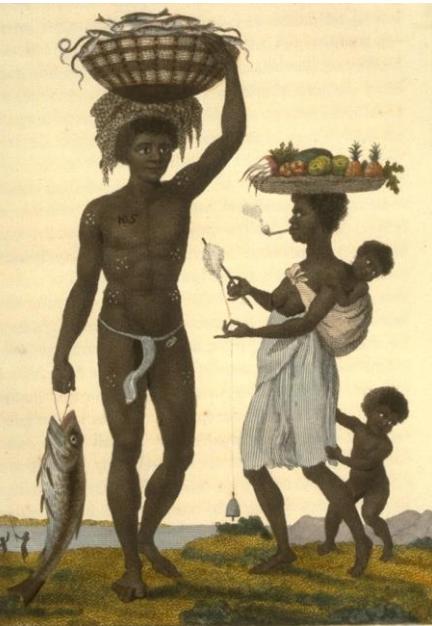
Tobacco Pipes are Useful Tools:

- Ubiquitous on many archaeological sites due to:
 - popularity of tobacco smoking in England and Europe starting in 16th century
 - pipes were relatively inexpensive
 - short-lived object (used and discarded within 1-2 yrs)



Tobacco Pipes are Useful Tools:

- Made of fired clay – durable (like ceramics)
- They are **personal objects** (as evidenced by teeth marks)

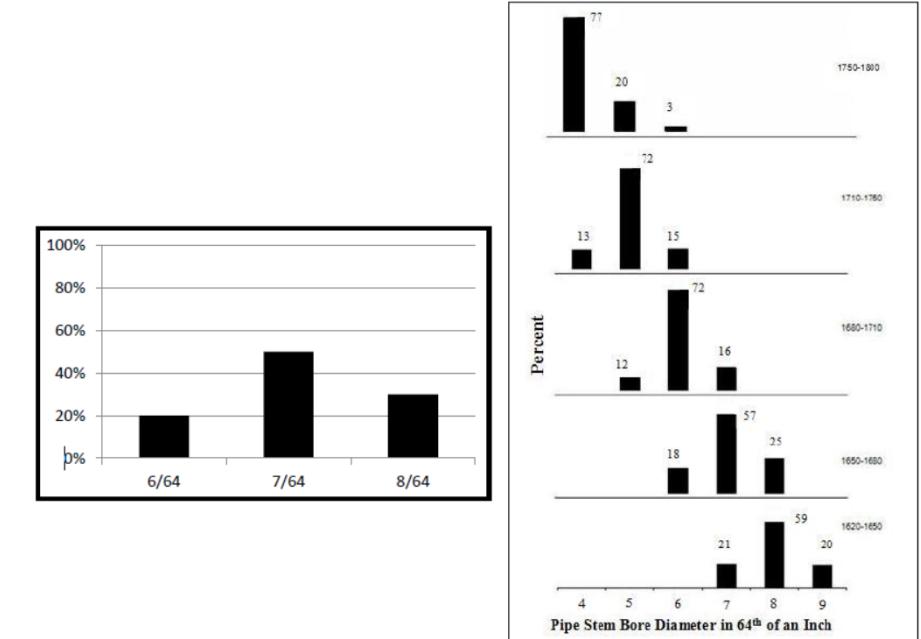
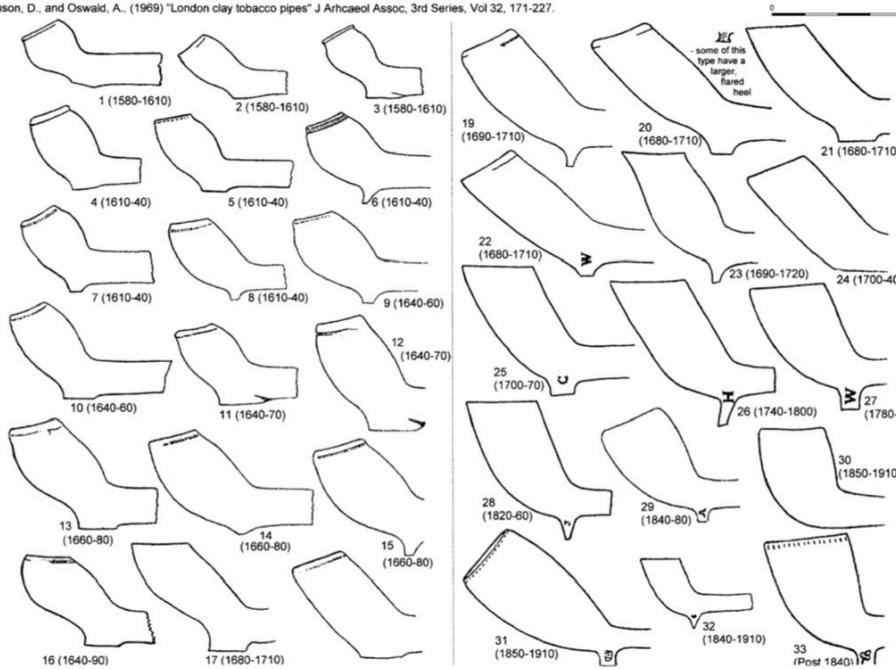


Tobacco Pipes are Useful Tools:

- Changes over time in bowl forms, decoration and stem bore diameter size provide methods for dating
- **use all these tools together for establishing dates**



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



Tobacco Pipes are Useful Tools:

- Variation in forms, maker's marks and stylistic elements provides info about producers, social status of users, and exchange networks



Locally made pipes from
Flowerdew Hundred
Plantation, Virginia, USA



Dutch clay pipe with decoration
depicting Napoleon Bonaparte,
Esthersrust Site, Suriname



Long-stemmed pipe



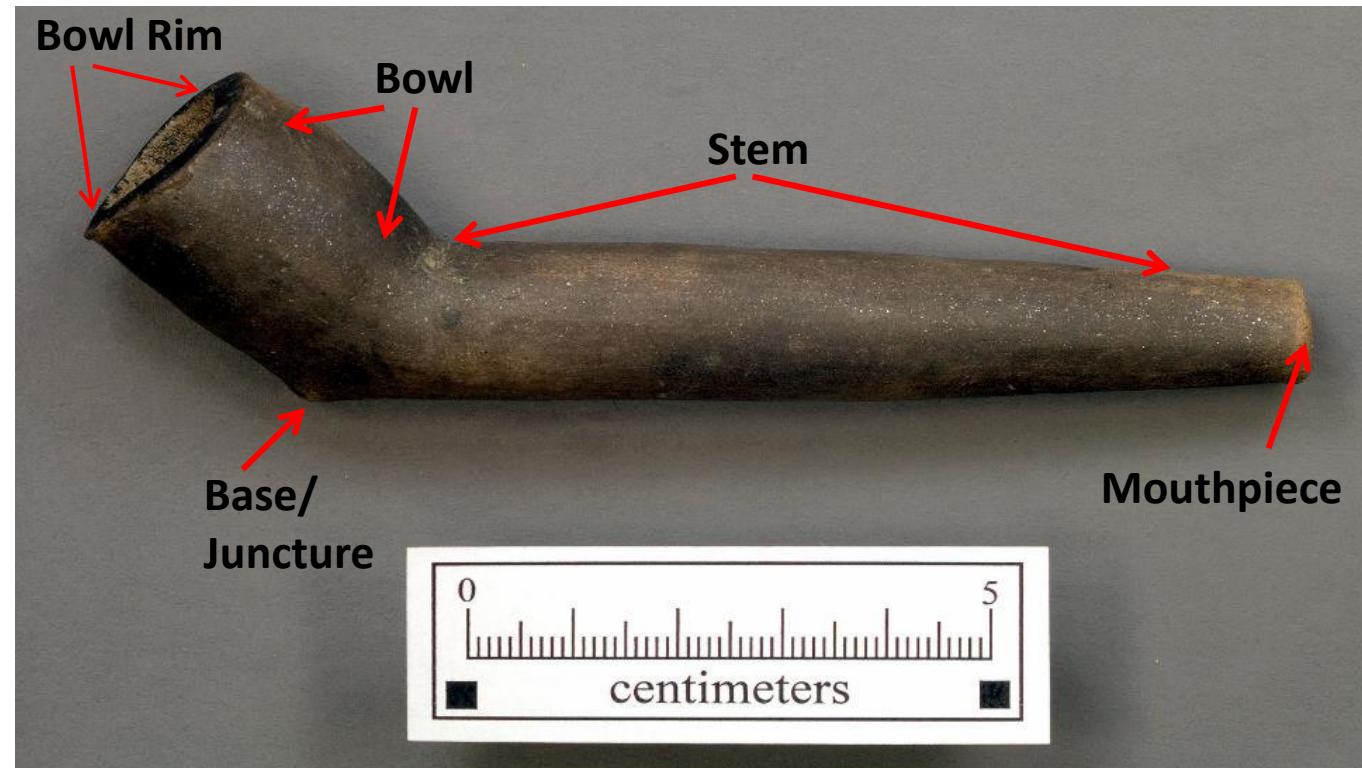
WR maker's mark
(1640 - 1660)

Tobacco Pipe Production

European pipe forms take their inspiration from Native American/Indigenous 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 17th 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

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

Delete Duplicate

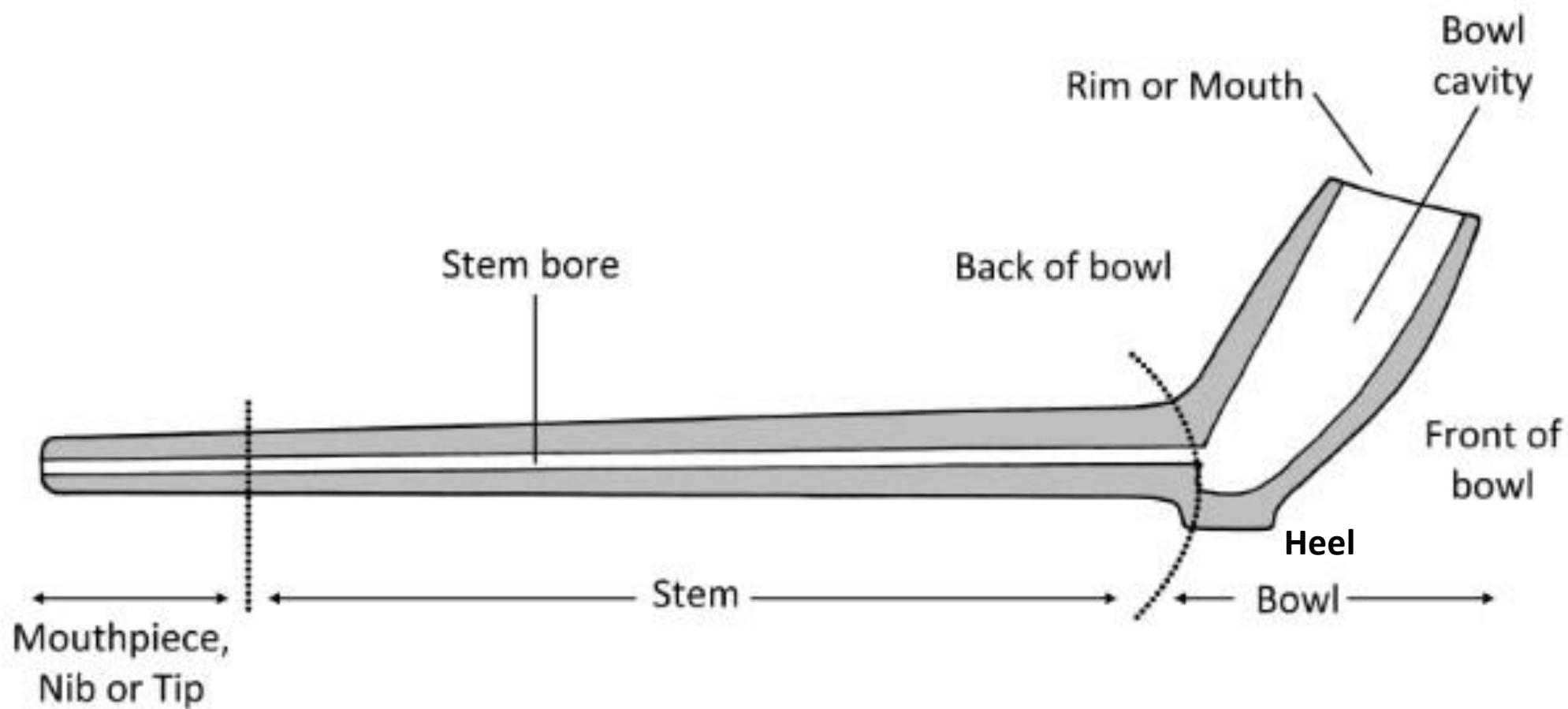
ARTIFACT ID: 1009-AL00133-FLT-00019
PROJECT: Richneck Quarter
CONTEXT SAMPLE: 1009-AL00133-FLT-
COMPLETENESS: Stem, Base, Bowl, Rim
MATERIAL: Earthenware, ball clay
MANU TECH: Molded
DECORATION: No

ALL TOBACCO PIPES IN CONTEXT SAMPLE

CATALOGER DETAILS

IMAGES

Tobacco Pipe Completeness



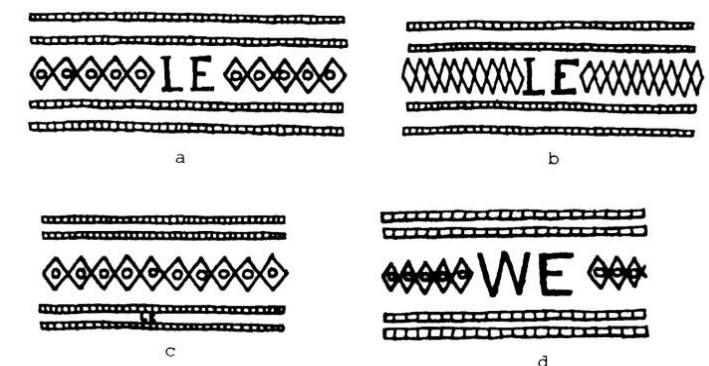
Note about how attributes are recorded in DAACS:

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

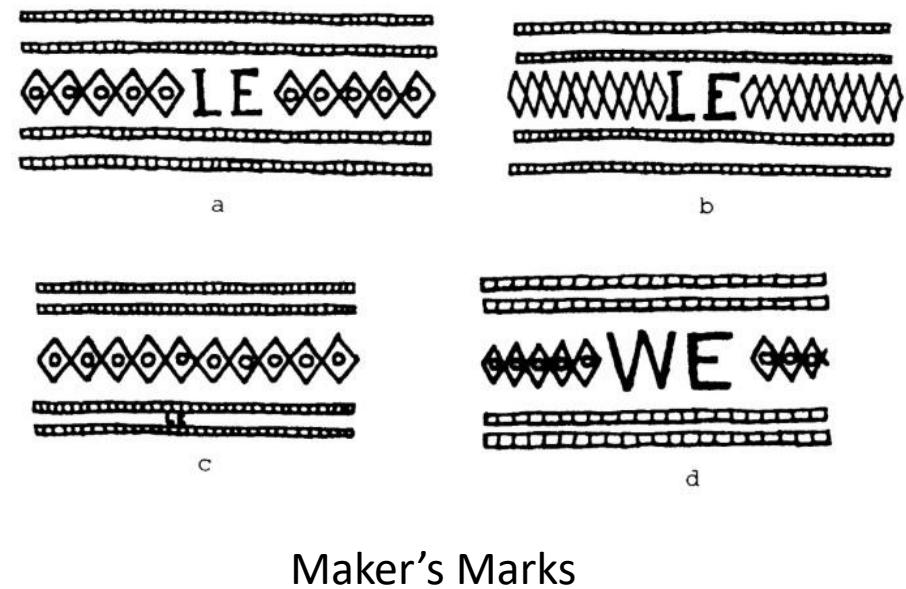


Maker's Marks

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



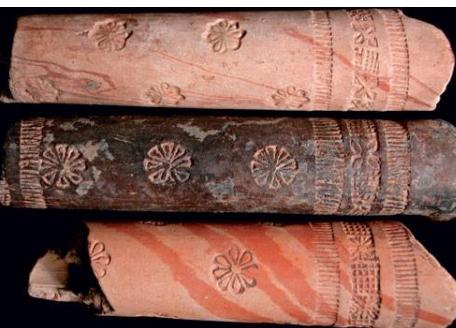
Maker's Marks



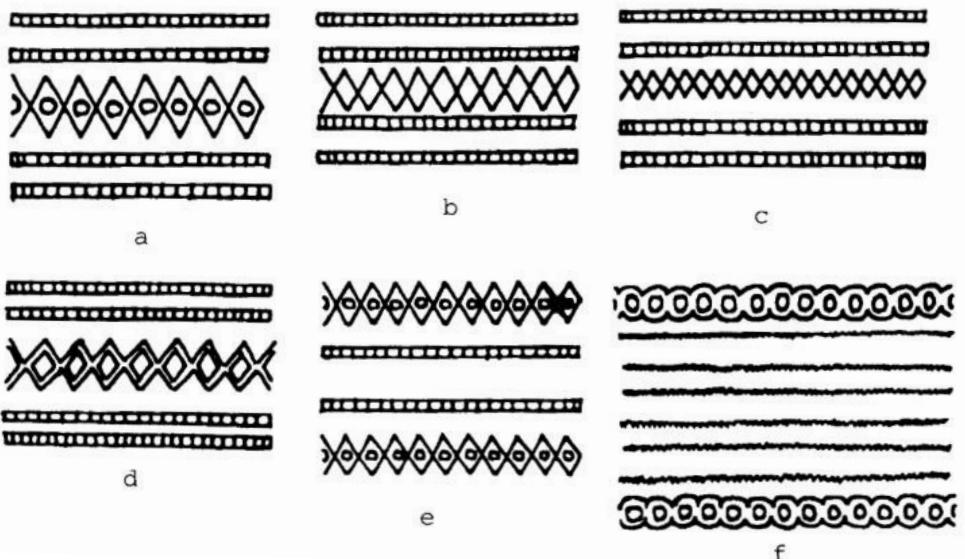
Note about how attributes are recorded in DAACS:

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



Tobacco pipe stems,
Bookbinder, Virginia,
ca. 1640.



Decoration (Hurry and Keeler
n.d.)



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

17th century

- Locally made
- English
- Dutch

18th century

- Locally made
- Mostly English

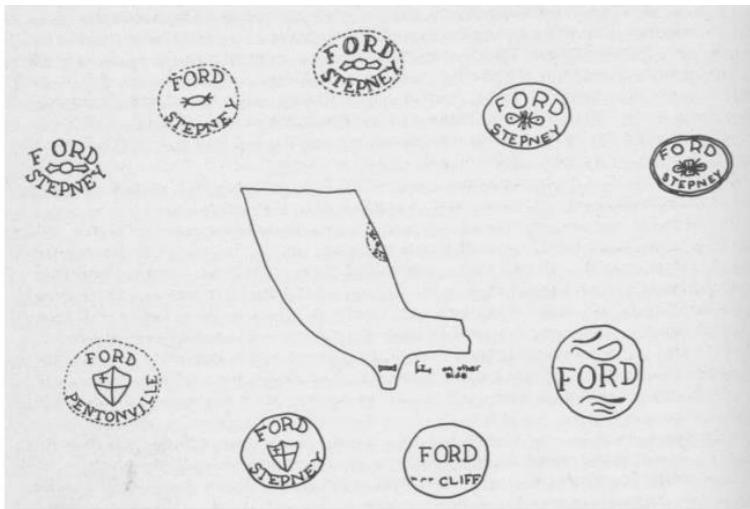
19th century

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, Germany, Scotland, Ireland, Canada, Netherlands
- 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 17th to 20th centuries
- 17th and 18th centuries mostly English and Dutch
- By 19th 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)

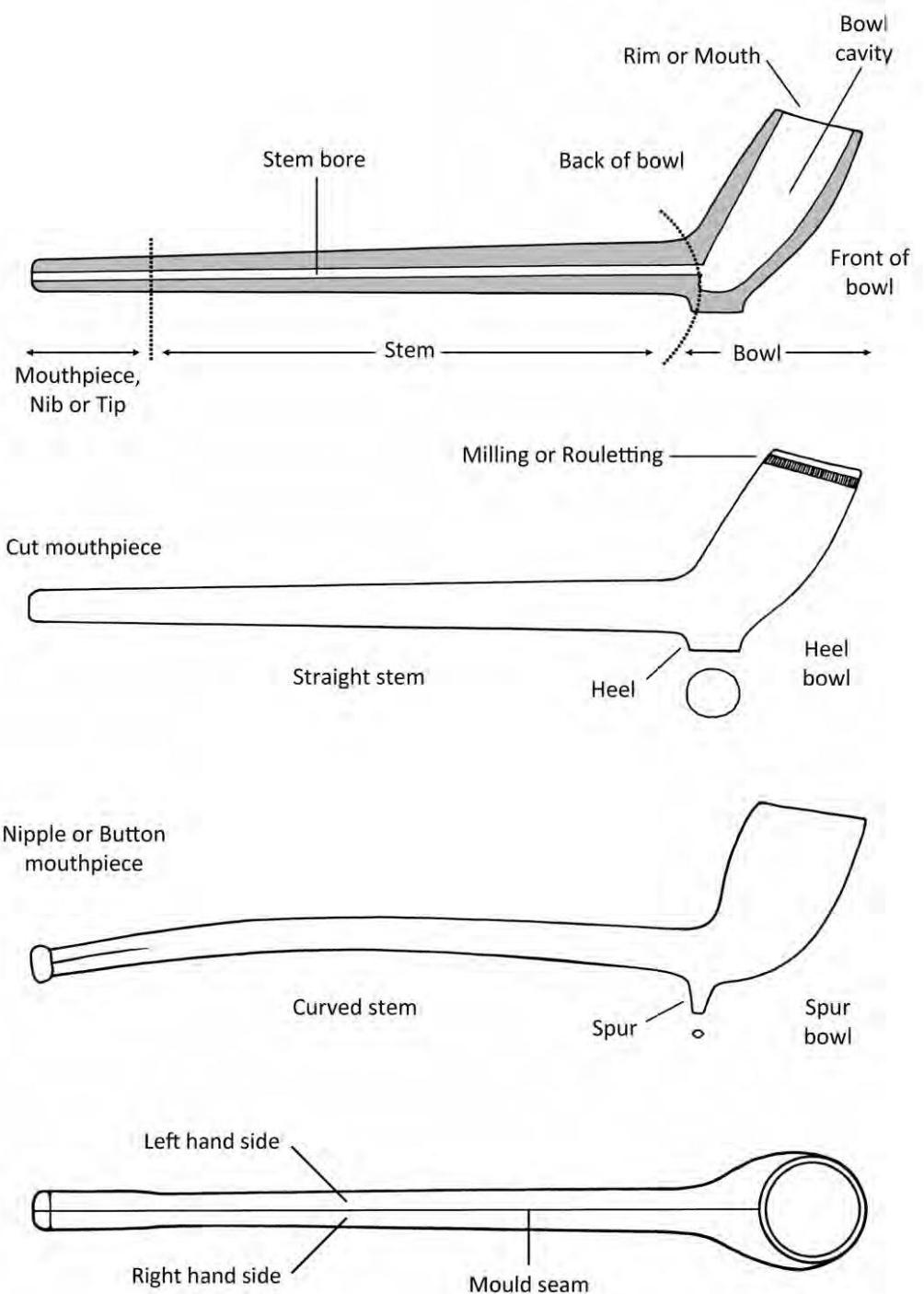
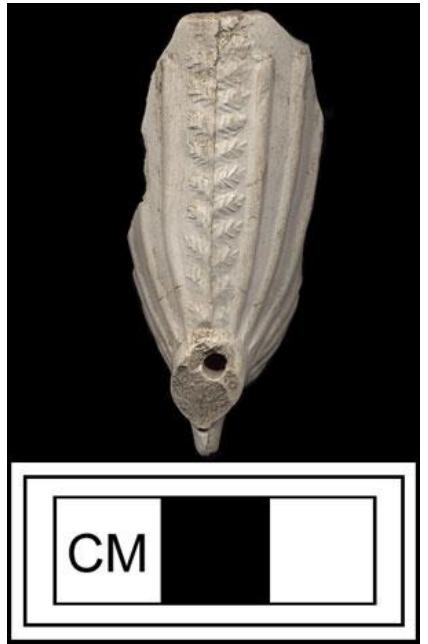


Dutch



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

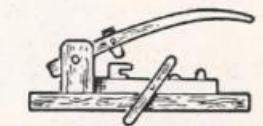


Balls of clay were rolled by hand and afterwards rolled out to form the rough shape of the pipe to be moulded. These were called 'rolls'.

3. Moulding.



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

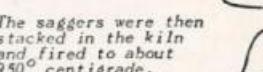


The assembled mould was then placed in a 'Gin Press' and the lever pulled down to form the hollow in the bowl. After this the piercing rod was withdrawn and the pipe removed from the mould.

4. Trimming and Firing.



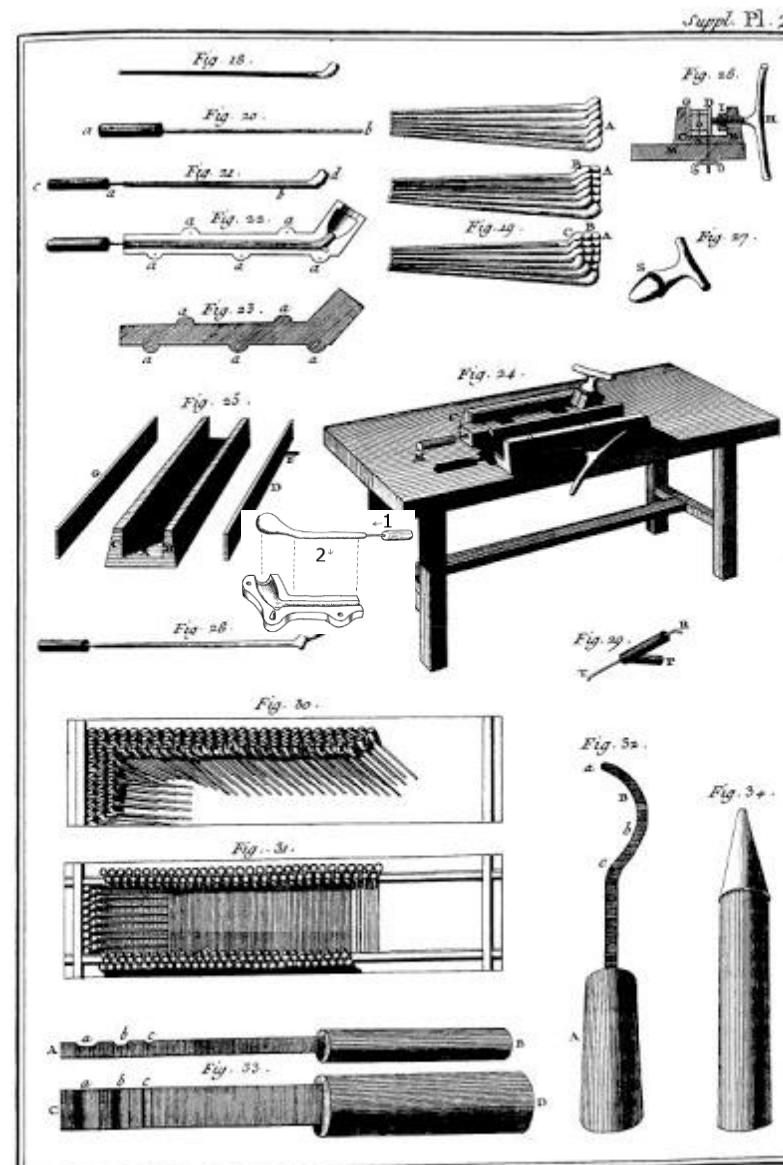
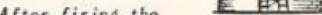
When the pipes were dry any rough edges were removed with a trimming knife and the pipes placed in saggers ready for firing.



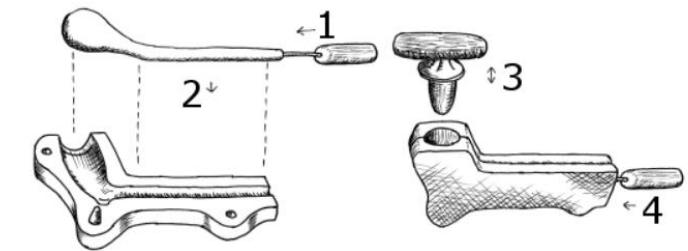
The saggers were then stacked in the kiln and fired to about 950° centigrade.

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=PLPZ4pzUQuTIMhR4ejujlbheutMr5x-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

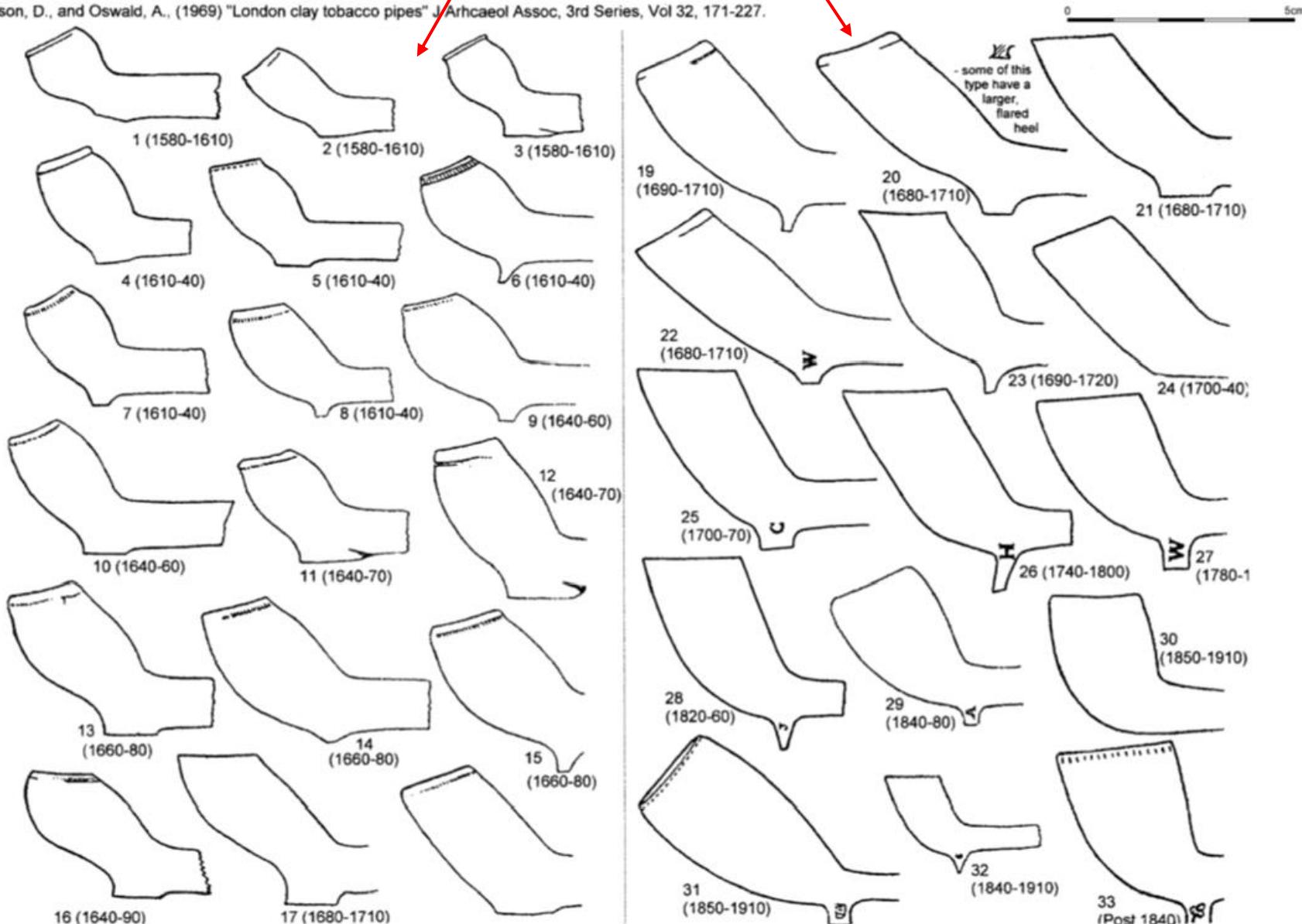
Noël Hume 1969

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 17th century to 18th century



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

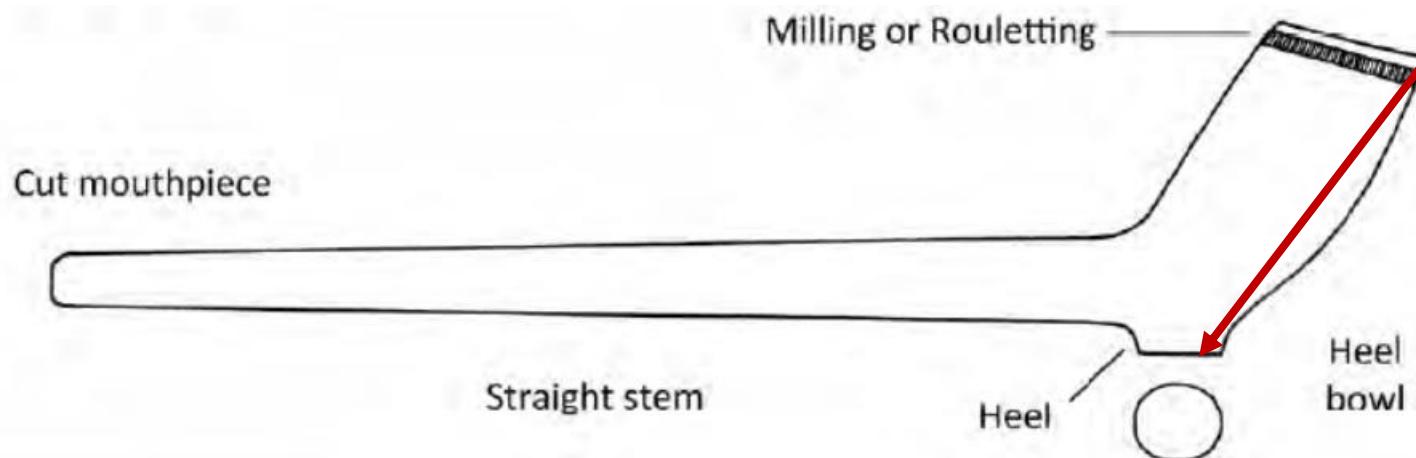
Marks on the base of the heel were primarily used on English pipes between about 1580 and 1730



(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 19th c)



(1687-1719)



1



2



3



4



5



6

Stem stamps more common from around 1680-1780 in most areas but carry into 19th century (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)



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



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

CM

7 Hanover Square (1990)

Decoration



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



Roulettes/Milled stem, DAACS -- Trents



Leaf molding starts in mid-
18th/ 1st half 19th c.

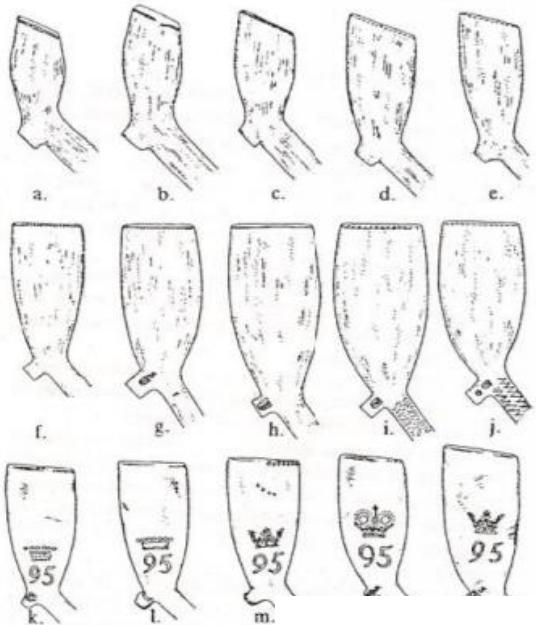


Molded Decoration, DAACS –
Montpelier House 24



Roulettes/Milled Rim (17th - early 18th 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. elegante slanke ovoidale trechtermodel met nauwe hals en dunne steel, 1715-1735.
- f. vroeg ovale, ei-vormige, zgn. ovoidale ketel, 1730-1740.
- g. ovoidale ketel, nog een weinig a-symmetrisch, 1750-1775.
- h. langgerekte ovoidale of symmetrisch model, 1775-1815.
- i. minder slanke ovoidale met nauwe hals, 1815-1900.
- j. bollere ovoidale met nauwe hals, 1850-1940

groeße 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.

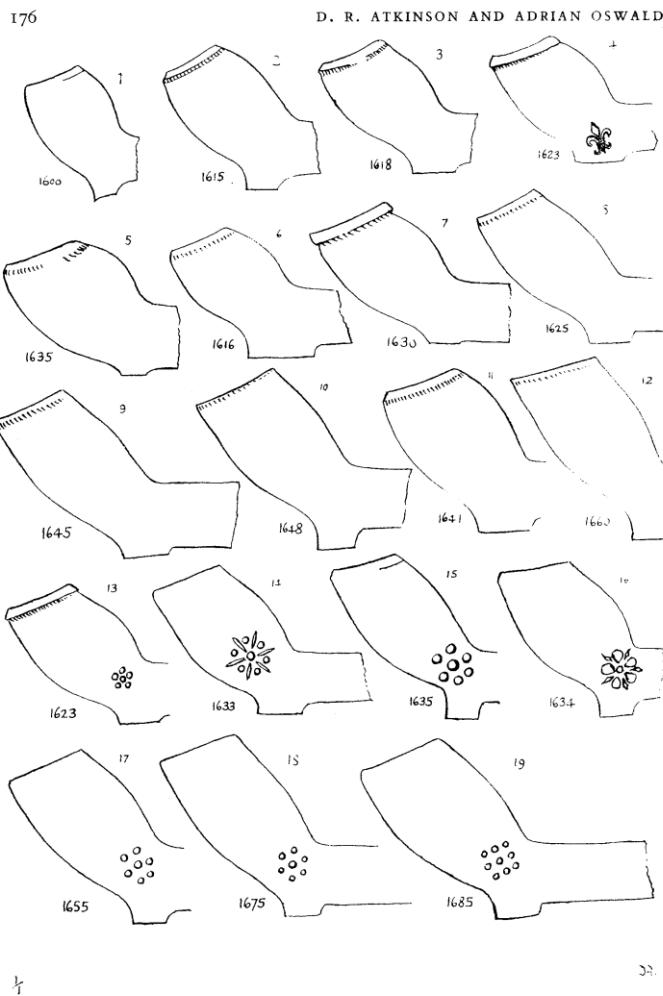


FIG. 78
THE IDENTIFICATION OF DUTCH CLAY TOBACCO PIPES FOUND IN ENGLAND
Seventeenth Century Dutch Pipe bowls. Scale: 1:1.

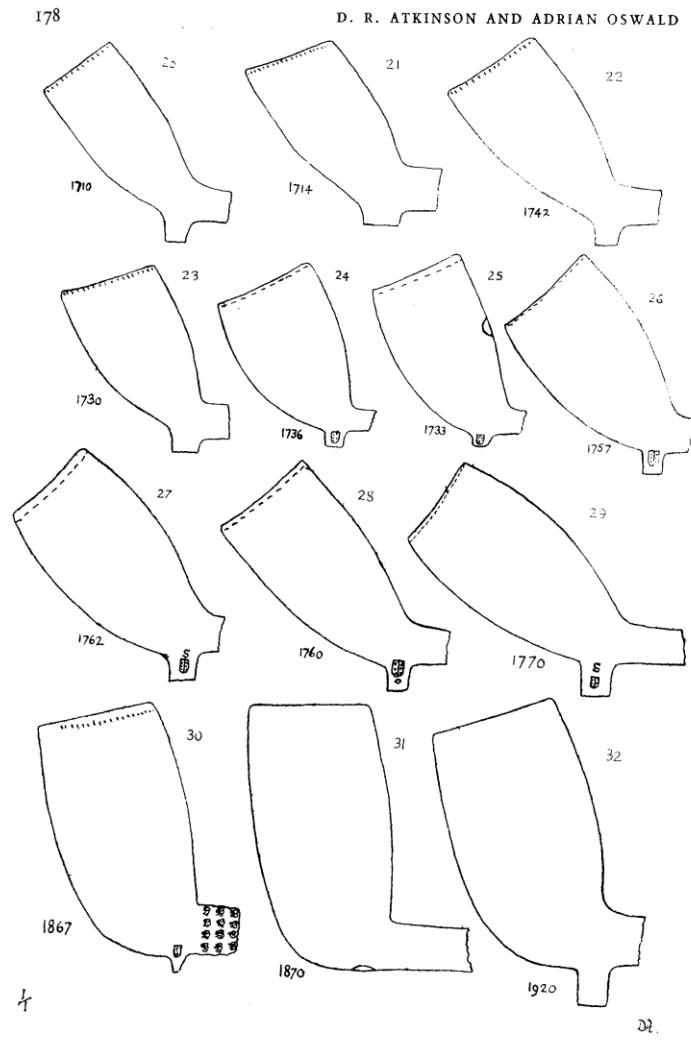


FIG. 79
THE IDENTIFICATION OF DUTCH CLAY TOBACCO PIPES FOUND IN ENGLAND
Dutch undecorated pipes, c. 1710-1920. Scale: 1:1.

Atkinson and Oswald 1972

Dutch Clay Pipes

Methods of Dating Dutch Pipes:

Bowl Shape

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



Left to Right ca. 1680 - 1840

Dutch Makers' Marks

17th century

Symbols and sometimes initials

- Base of the heel

18th and 19th 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	

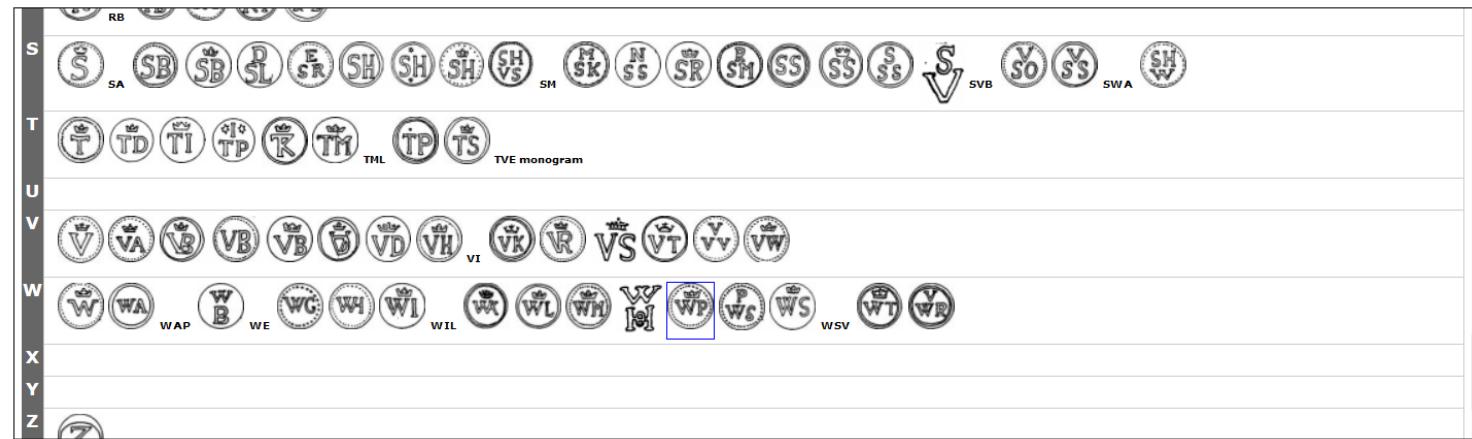


16

- 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



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



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



Boat, Hendrik van Rijst, 1860-1880



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



(Left) Example from Amsterdam Pipe Museum
<https://pipemuseum.nl/en/collection/apm-14-837>

(Right) example from Esthersrust Site, Warappa Creek, Suriname

JAN.PRINCE & CIE with shells

1875 – 1895

Manufactured in Gouda



Decoration



Ca. 1580-1640



Ca. 1650-1730



Stem rouletting – ca. 1720-32



Ca. 1700-1760

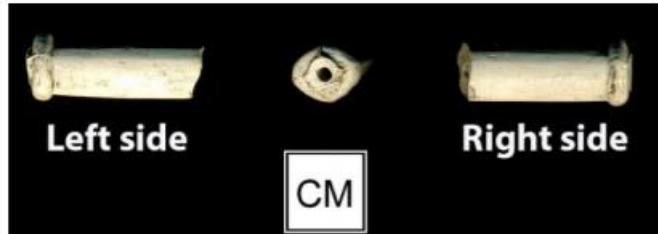
Mouthpiece Forms and Finishes



Cut mouthpiece, most common
17th-19th c., DAACS - Trents



Higgins 2017:6.6 19th 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 ($\frac{1}{2}$ " in late 16th century and $13\frac{1}{2}$ " by 1750)
- But also evidence that manufacturers were making certain lengths for particular markets
- Bore hole decreases as stem length increases.



Pipe produced in 1650s



Pipe produced in 1840s

Pipe Stem Dating

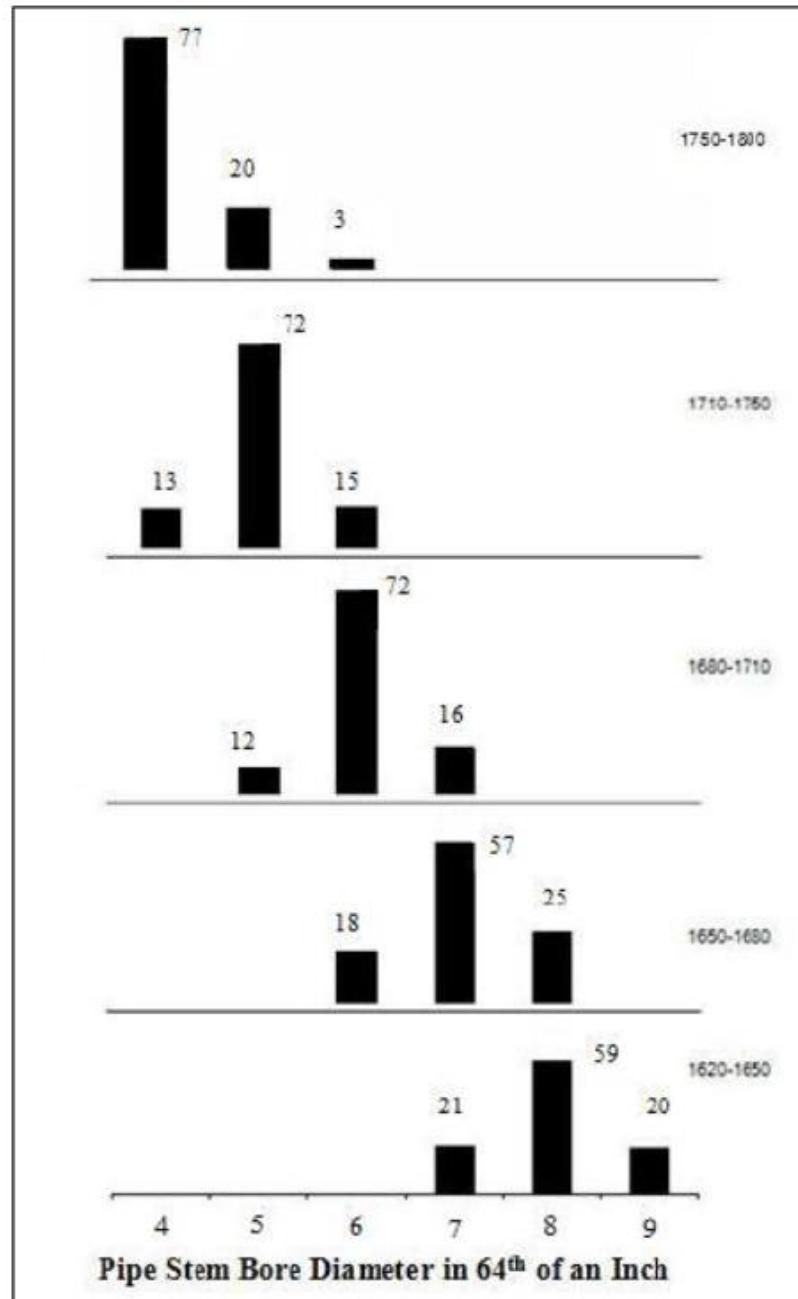
- Hole in stem made by running wire the length of the stem.
- Pipe stem length increases over time (3 ½" in late 16th century and 13 ½" by 1750)
- Bore hole decreases as stem length increases.
- Greatest accuracy for pipes produced between 1620 to 1760.
- Dates should be compared with other evidence 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= 8/64th

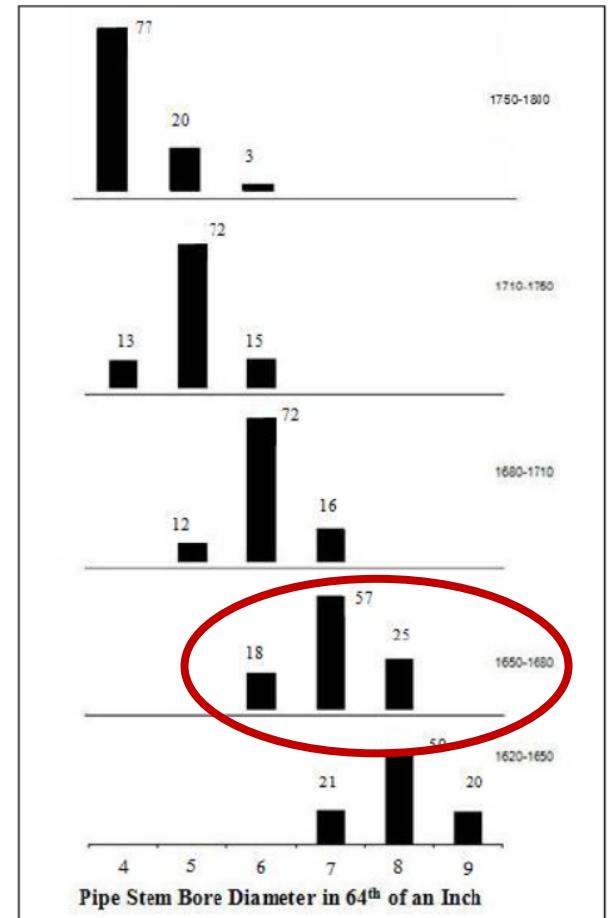
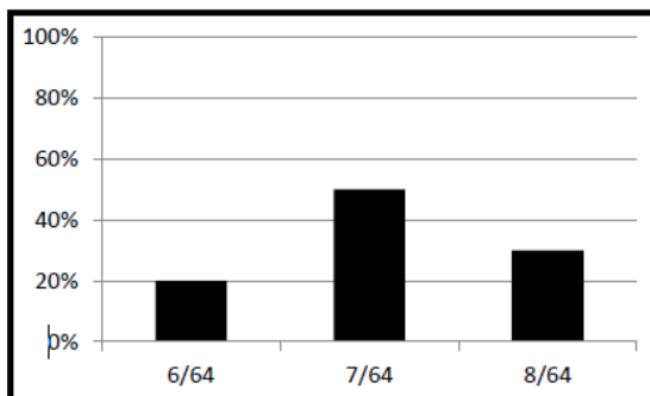
75= 7/64th

30= 6/64th

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

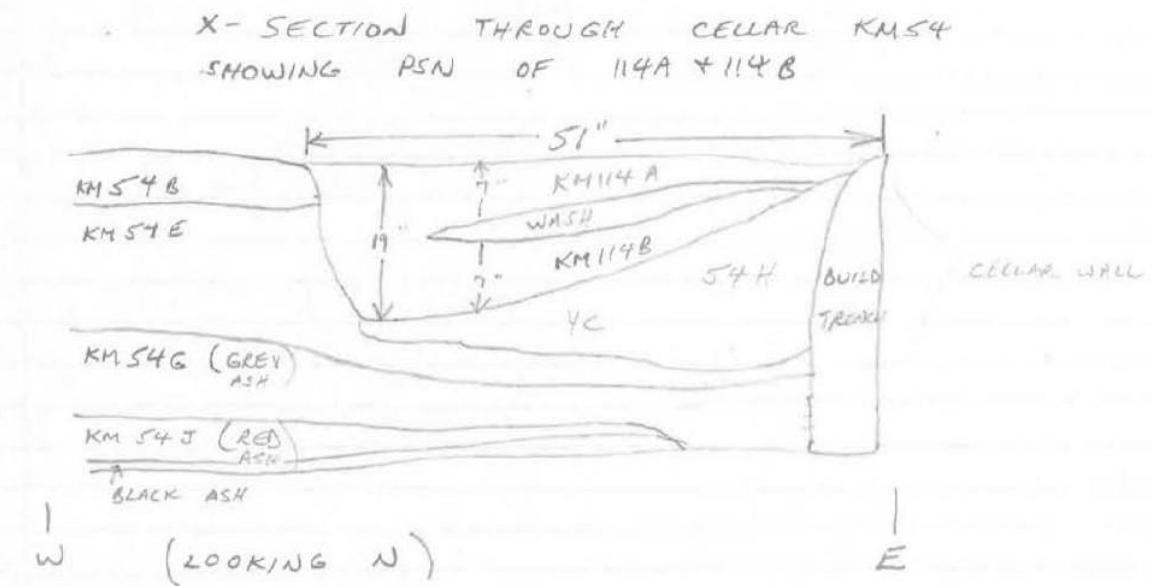
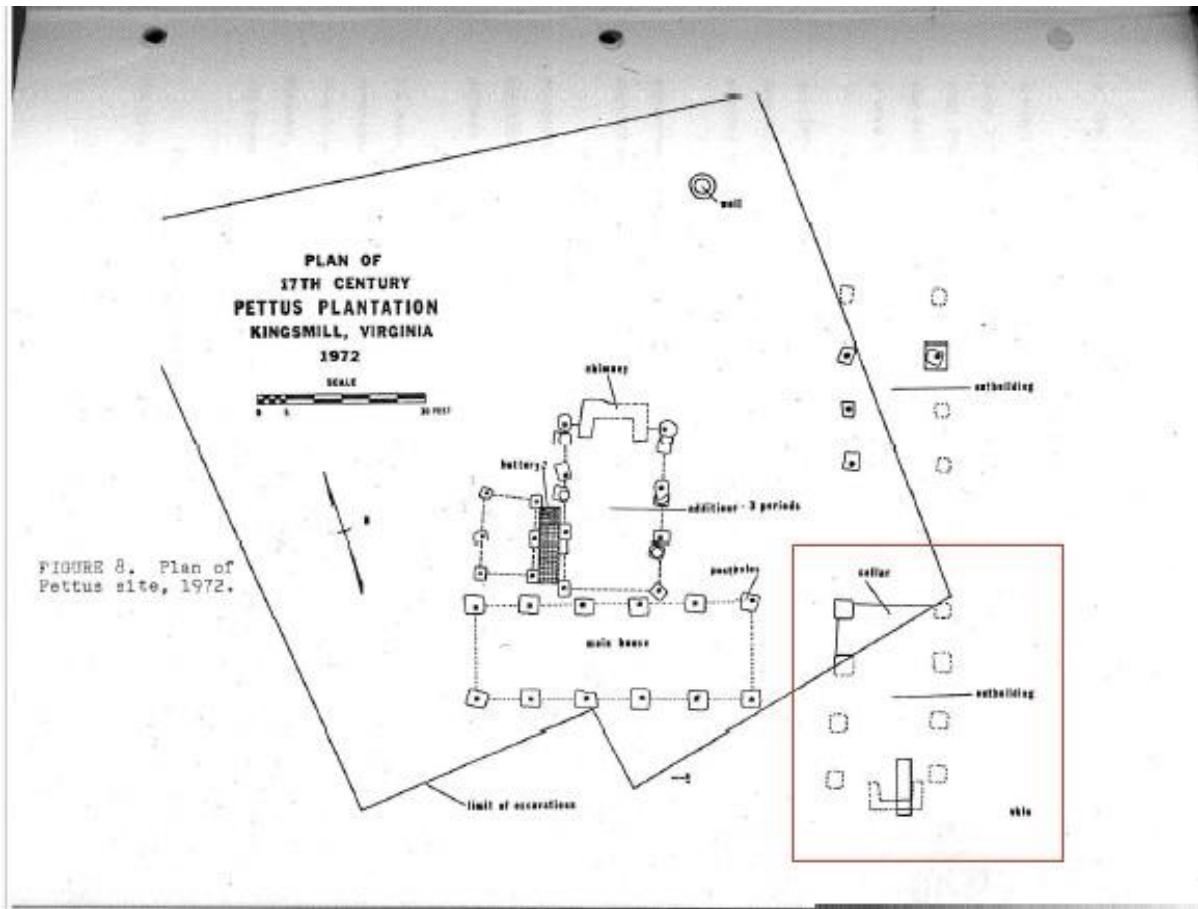
$$75/150 = 0.50 = 50\%$$

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

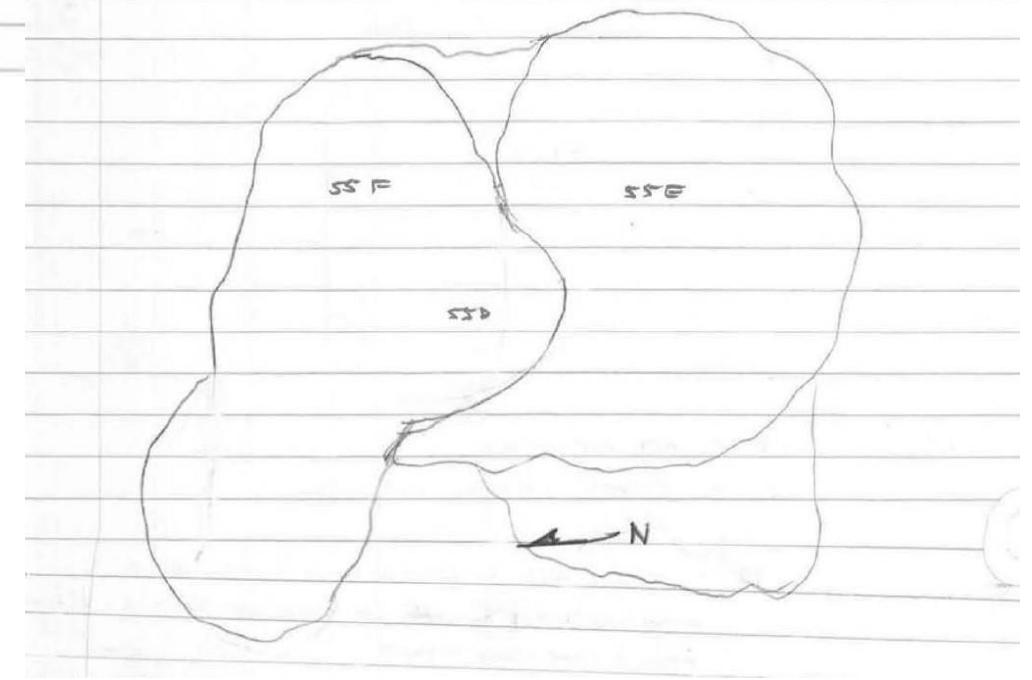
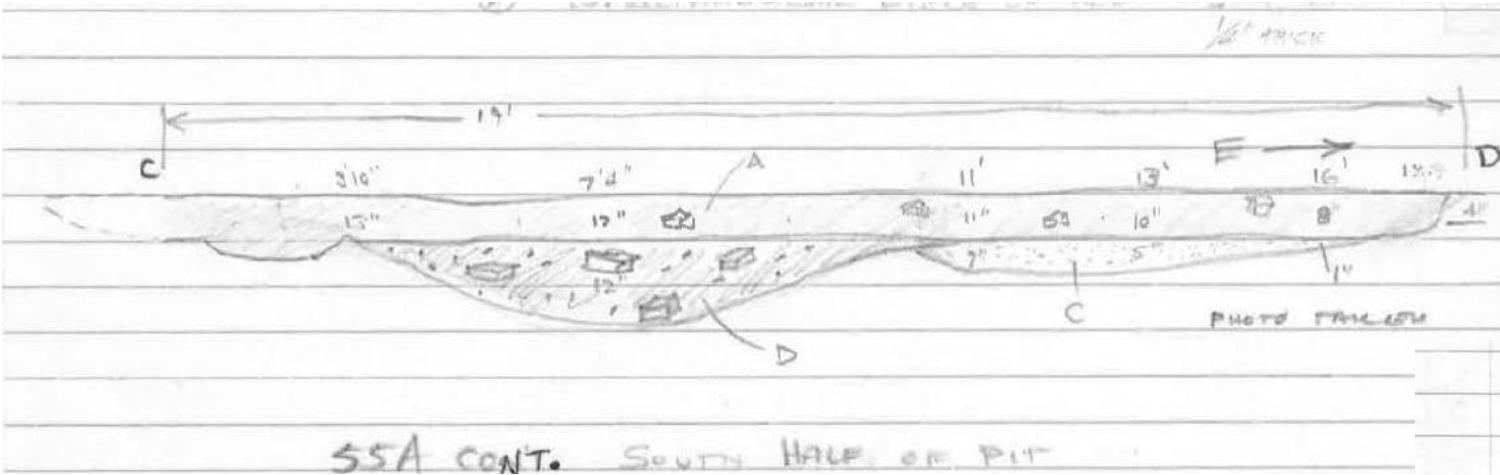


Exercise 1: Bore Diameter Dating

Pettus Plantation, Virginia



Pettus Plantation, Virginia



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



Rows 1 and 2: Fluted and Plain (DAACS Motif – Geometric)

Row 3: TD Pipe, "Tirks Head" (DAACS Motif – Anthropomorphic)

Row 4: Shield and Eagle pipes (DAACS Motif – Other, Pictorial)

Row 5: Decorated Pipe stems

Scottish Pipes

– centers of production were Glasgow and Edinburgh -- early 19th c. to first quarter of 20th 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.

Ethnic/Patriotic Motifs
(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)

Masonic Pipes

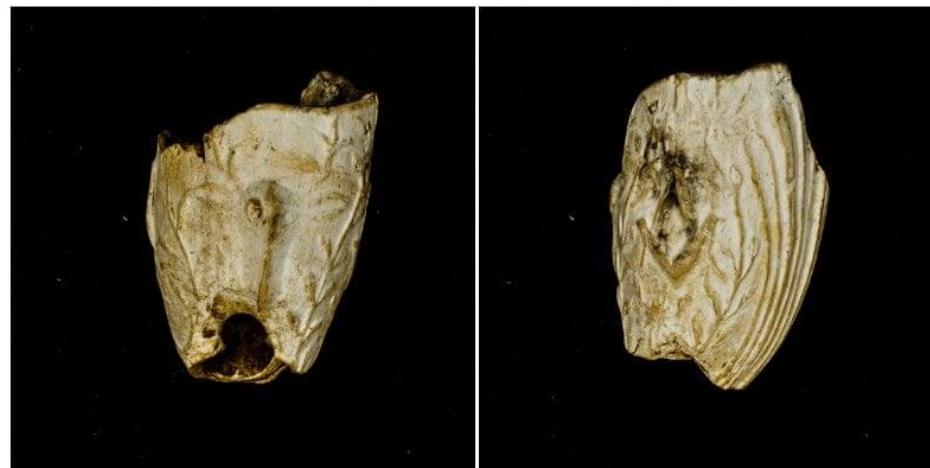
- Modern freemasonry established in England in 1717
- Society popular in Colonies by 1730s
- Pipes with emblems popular in mid-late 19th century
- Standard designs:
 - elk/stag head on the back
 - letter "G" within cartouche formed by dividers and set square (tools)
 - sunburst with Masonic cartouche
 - botanical/floral motifs



Pipe bowl with molded Freemason emblem & stag, Monticello Home Quarter Site 6



Pipe bowl with molded Freemason emblem & stag, Monticello Weaver's Cottage/Building E



Pipe bowl with botanical decoration on one side & stag on the other, Montpelier, South Yard

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 18th and 19th 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>

Moravian Anthropomorphic/ Effigy Pipes -- 19th century



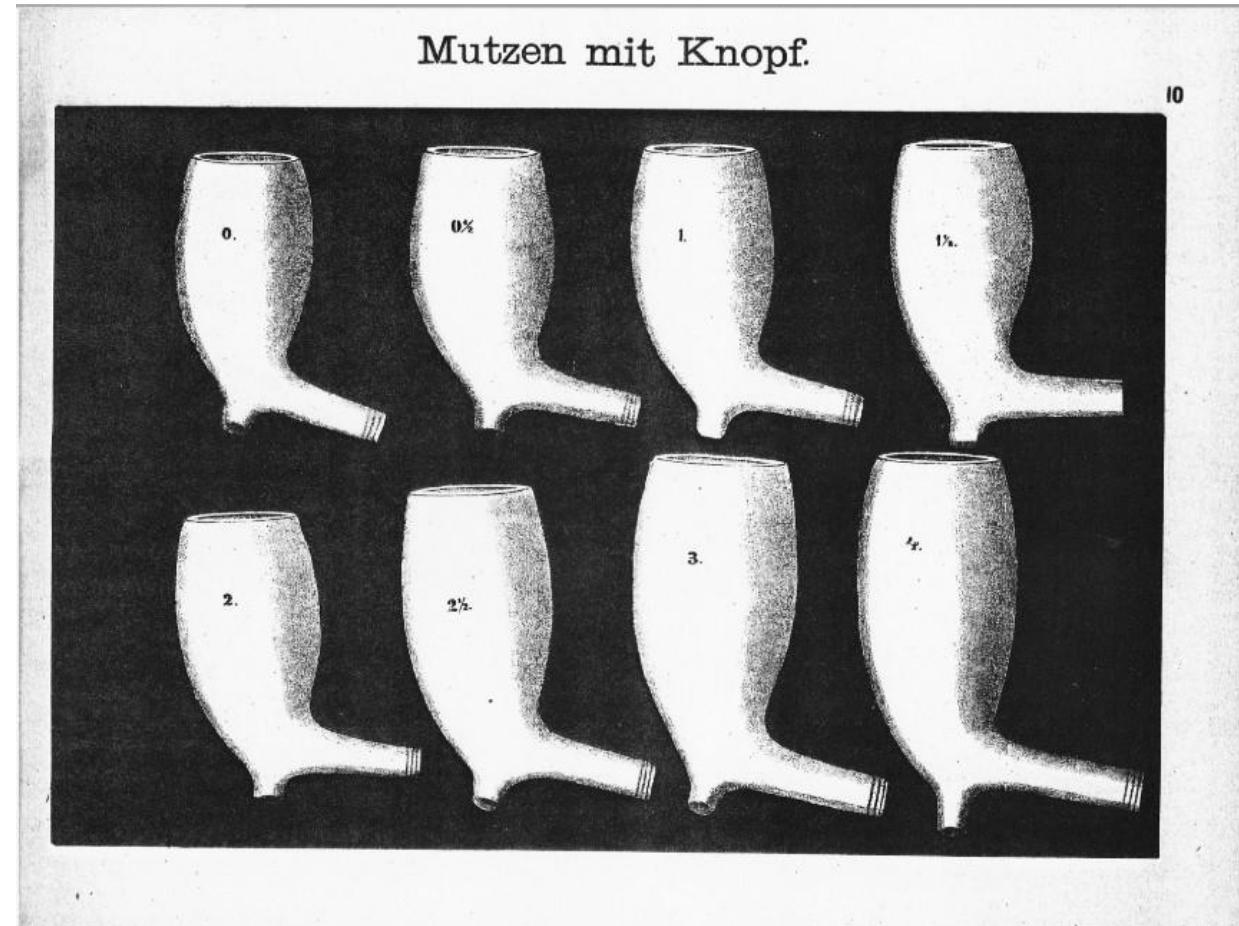
Pipes from Schaffner-Krause pottery, Salem, North Carolina, post-1834
(Ceramics in America 2009:Figures 33 and 38)

German Pipes

Pipe from São Tomé, courtesy of DAACS Fellows Dores Cruz



Germany pipe industry starts in second quarter of the 19th century



Illustrations of Anrauch pipes from the stoneware factory Grünstadt in Grünstadt, Rheinpfalz formerly Gebr. Bordollo founded in the year 1801. Edition 1908

German and American produced Presidential pipes -- 19th c.



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

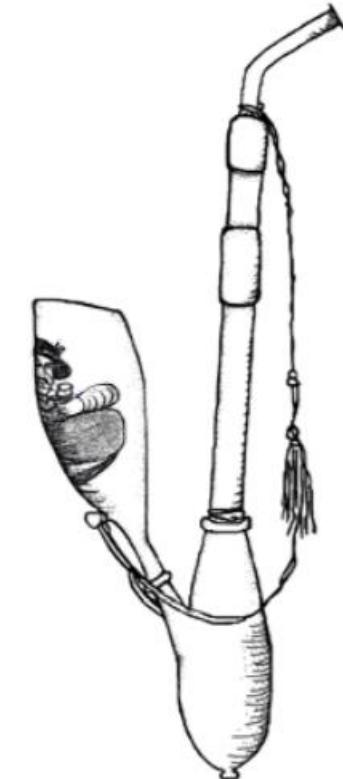
<https://www.nps.gov/archeology/sites/npsites/fortUnion.htm> - produced in Germany circa 1850s

German Porcelain “Coffee House” Pipe -- late 19th/early 20th century

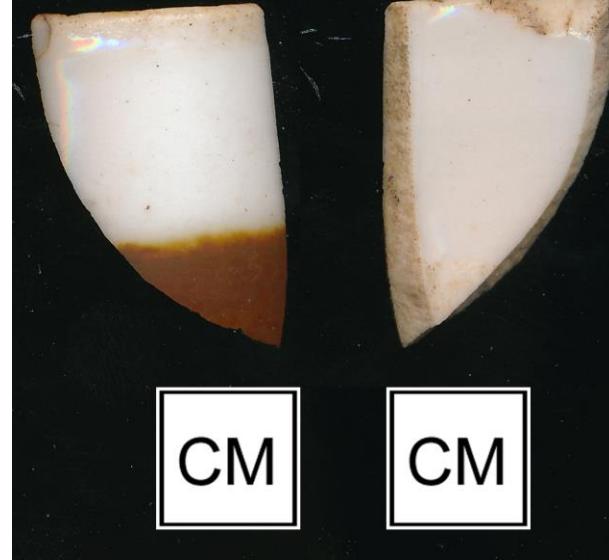
Three parts – 1)
Porcelain
reservoir, 2)
wood stem, 3)
horn, bone, or
possibly amber
mouthpiece



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



Mid-19th 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

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

Calabash Pipes



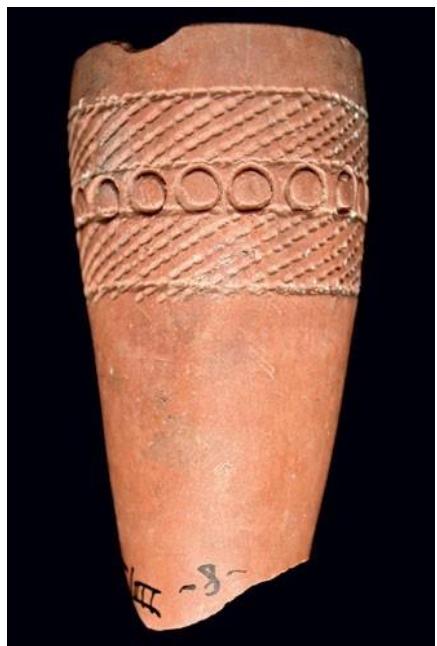
- Made of consisted of clay or meerschaum bowls inserted into gourds
- Classic style (Sherlock Holmes)
- Originated in South Africa, fashionable Europe/North America late 19th/early 20th century



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



Resources

English pipes

National Pipe Archive (UK): <http://www.pipearchive.co.uk/>

Dutch pipes

Amsterdam Pipe Museum website: [https://pipemuseum.nl/
\(NL/EN\)](https://pipemuseum.nl/(NL/EN))

Gouda maker's marks: <http://www.goudapipes.nl/>

American pipes:

Pamplin --

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

German pipes:

[Katalog tonfeifen - The website of the foundationpkn!](#)

<http://helene-bonn.info/AK/index.htm>