

Signs of literacy Kaggle Steering Committee

Wednesday, April 3rd 2019

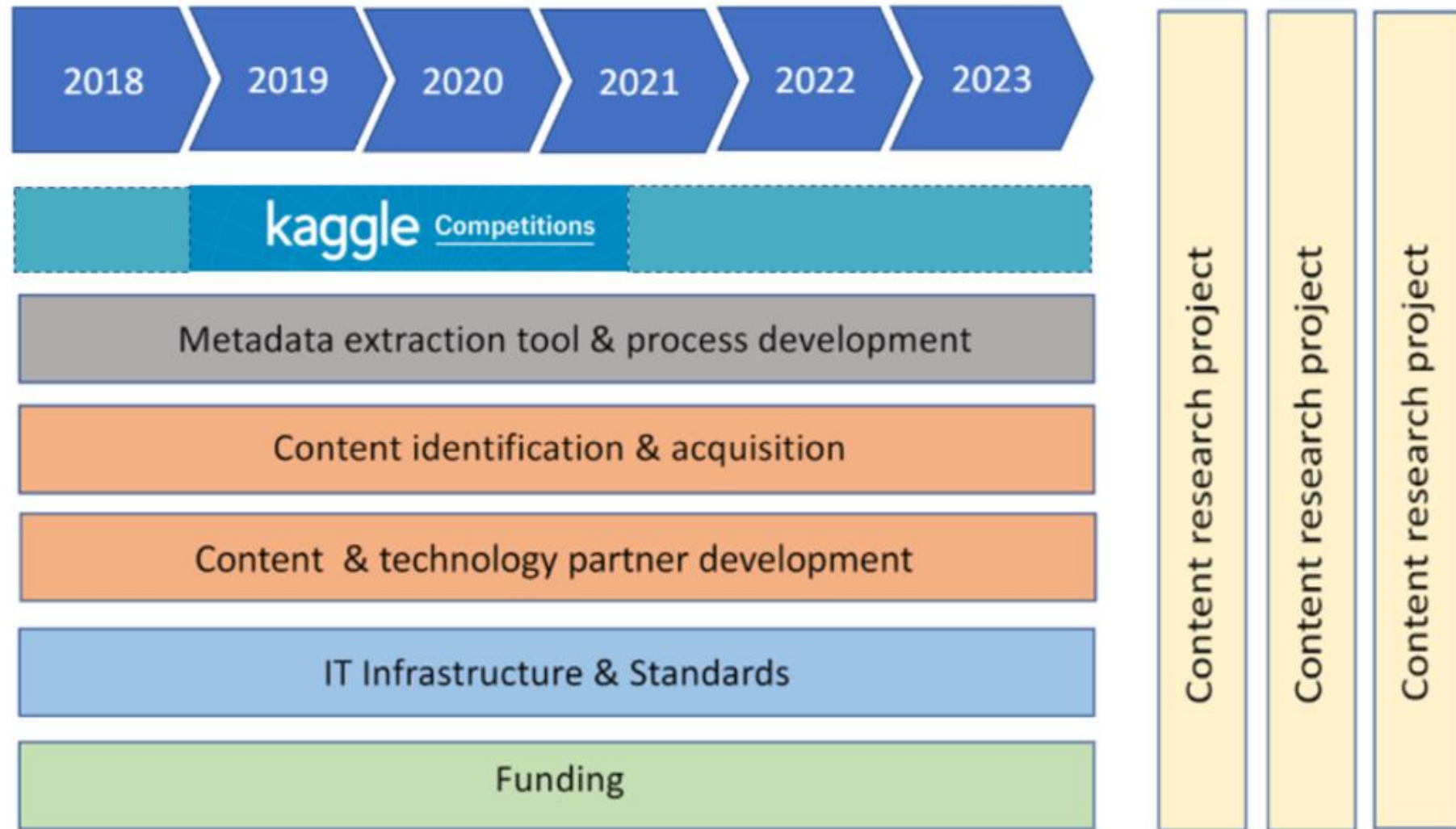
Signs of Literacy initiative objectives

- Develop tools and processes for increasingly automated metadata extraction and linkage from digitised handwritten manuscript pages
- Develop the infrastructure to deliver a highly scaleable data set of one million manuscript pages containing signoffs and front matter
- Stimulate the development of machine learning capability in multiple archival centres of excellence
- Build interest amongst historians and linguists in machine learning applications to support close reading and distant reading approaches to large scale data sets
- Answer important research questions in field of historical literacy

Planned use of AI

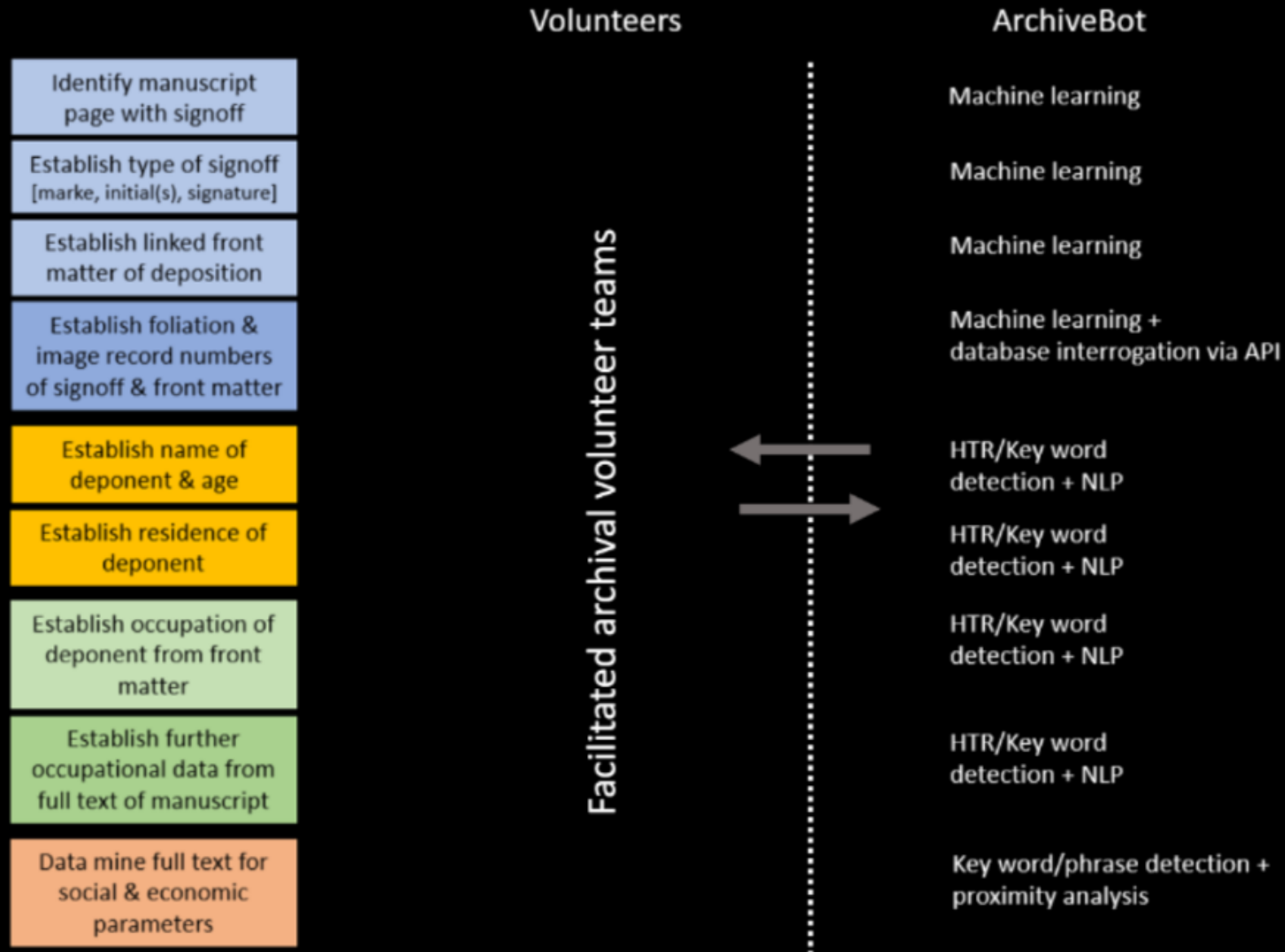
- Scale of targeted Signs of Literacy data set is 1 million manuscript pages vs. current 12,000 MarineLives manuscript pages
- Designed from get go as an exercise in collaborative intelligence, with strong focus on machine-human interface, expecting the role of machine and human to change over time
- Volunteers will be recruited explicitly for their interest in working with machines, rather than for their interests in palaeography and/or history
- Explicit measurement of user satisfaction & productivity as we introduce new tools to support volunteers in their process steps and/or automate specific process steps, allowing volunteers to concentrate on other parts of the overall metadata creation and linkage process

Proposed structure of Signs of Literacy initiative workstreams

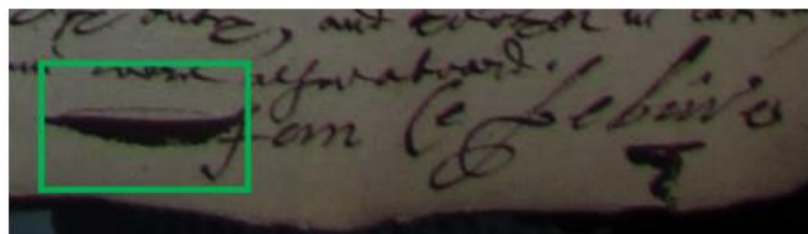
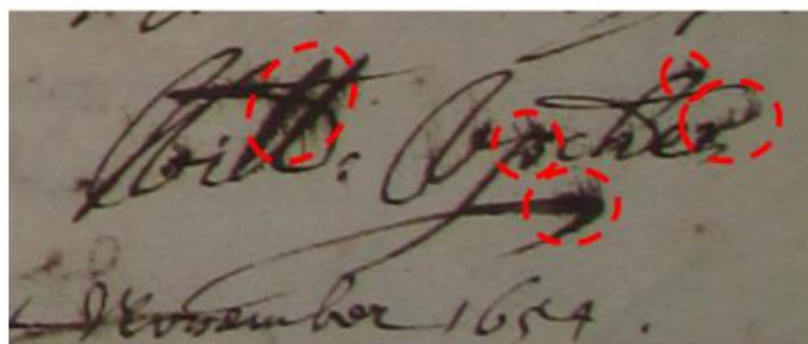
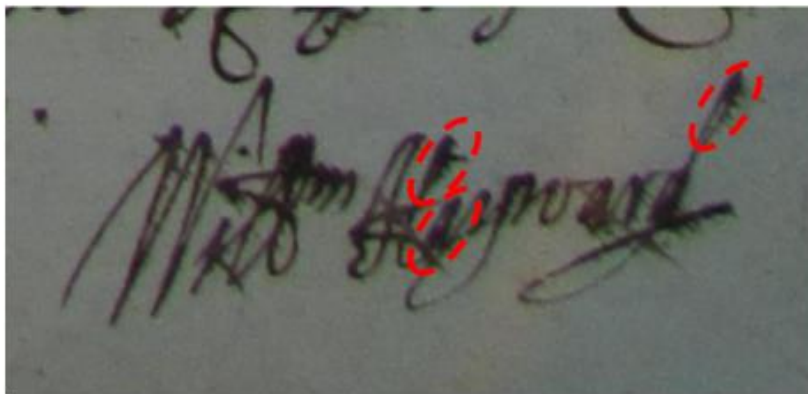
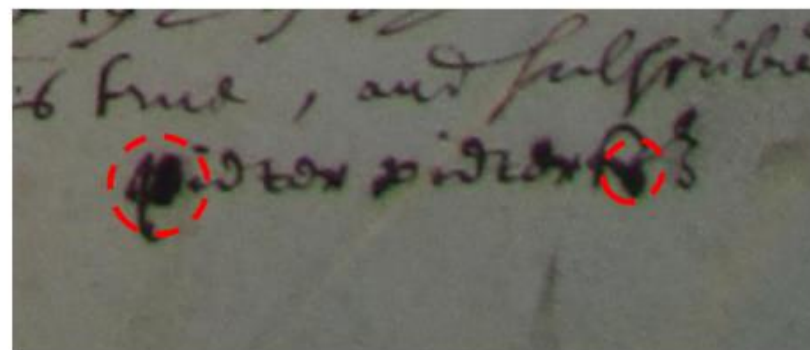
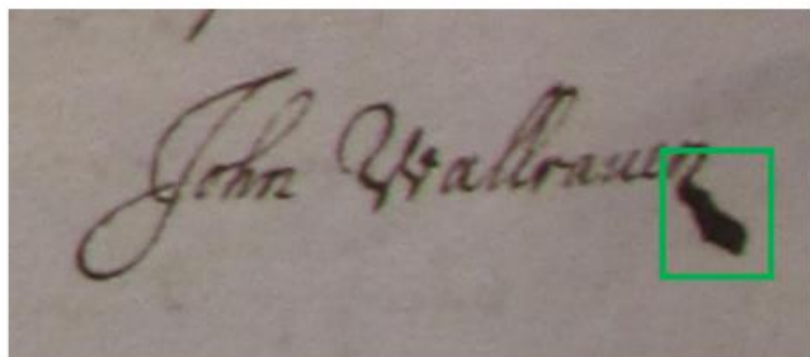
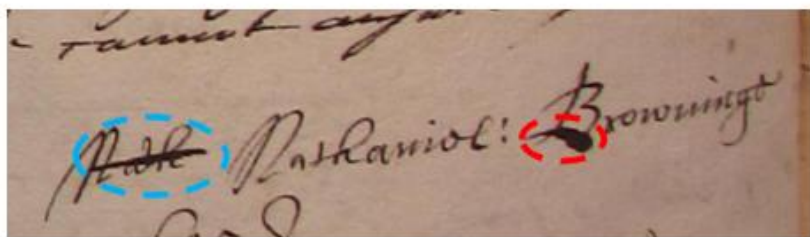


Collective intelligence

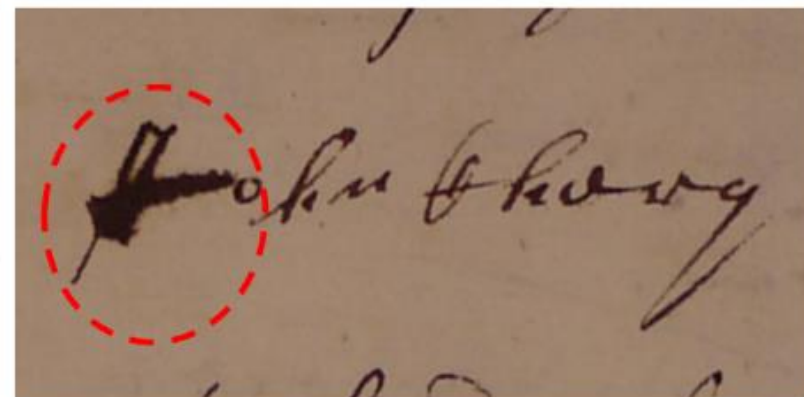
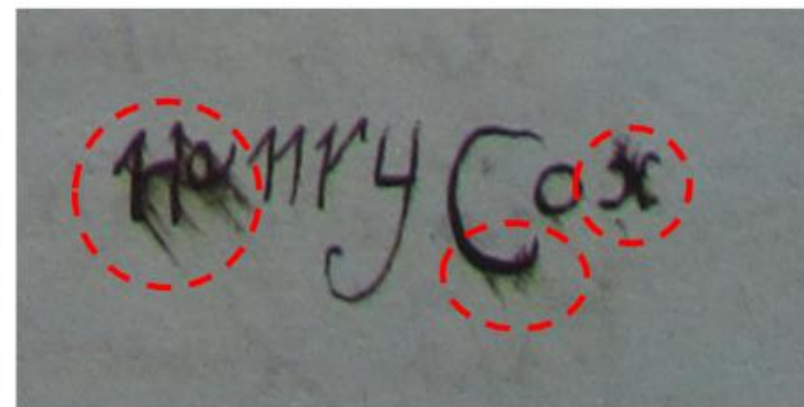
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Feature extraction: blots, smudges, stylistic features, & deletions

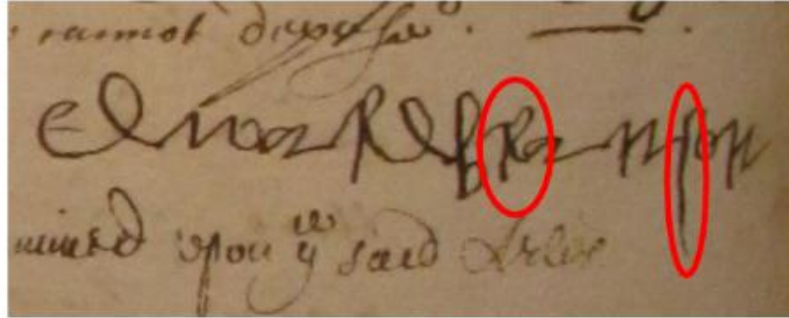
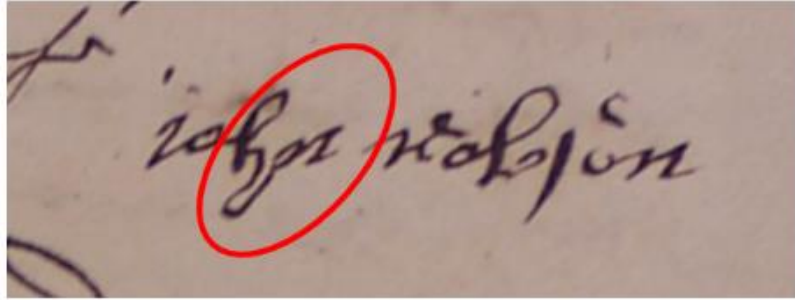


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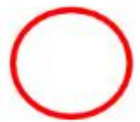
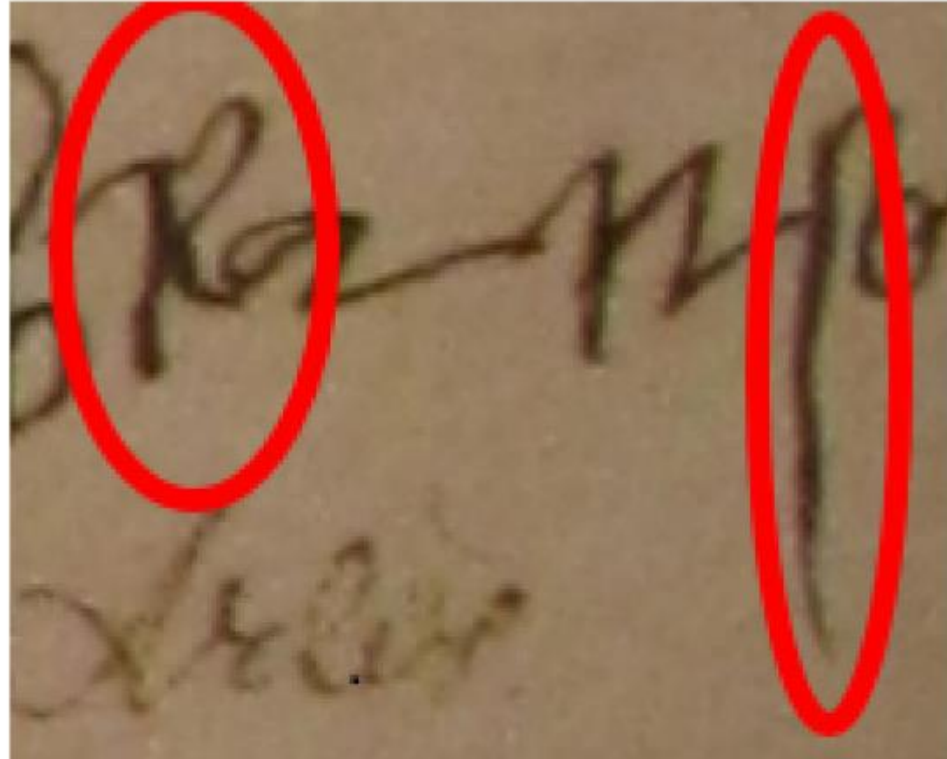
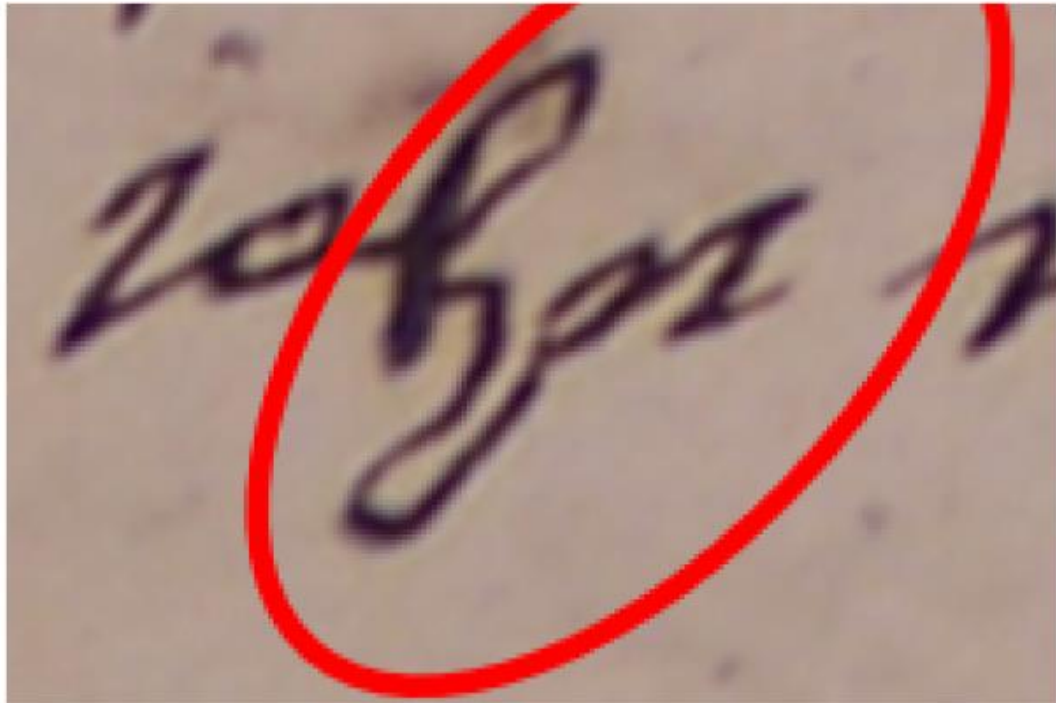


 Ink blots or smudges  Stylistic feature or smudge?  Deletion

Feature extraction: Detection of “shake” in straight and curved lines



HYPOTHESIS: Shaky lines may be a sign of poor signature execution (and by inference, poor handwriting execution) suggesting either lower level of literacy than smooth executed lines, or the effect of illness or age



Shaky straight lines and/or loops

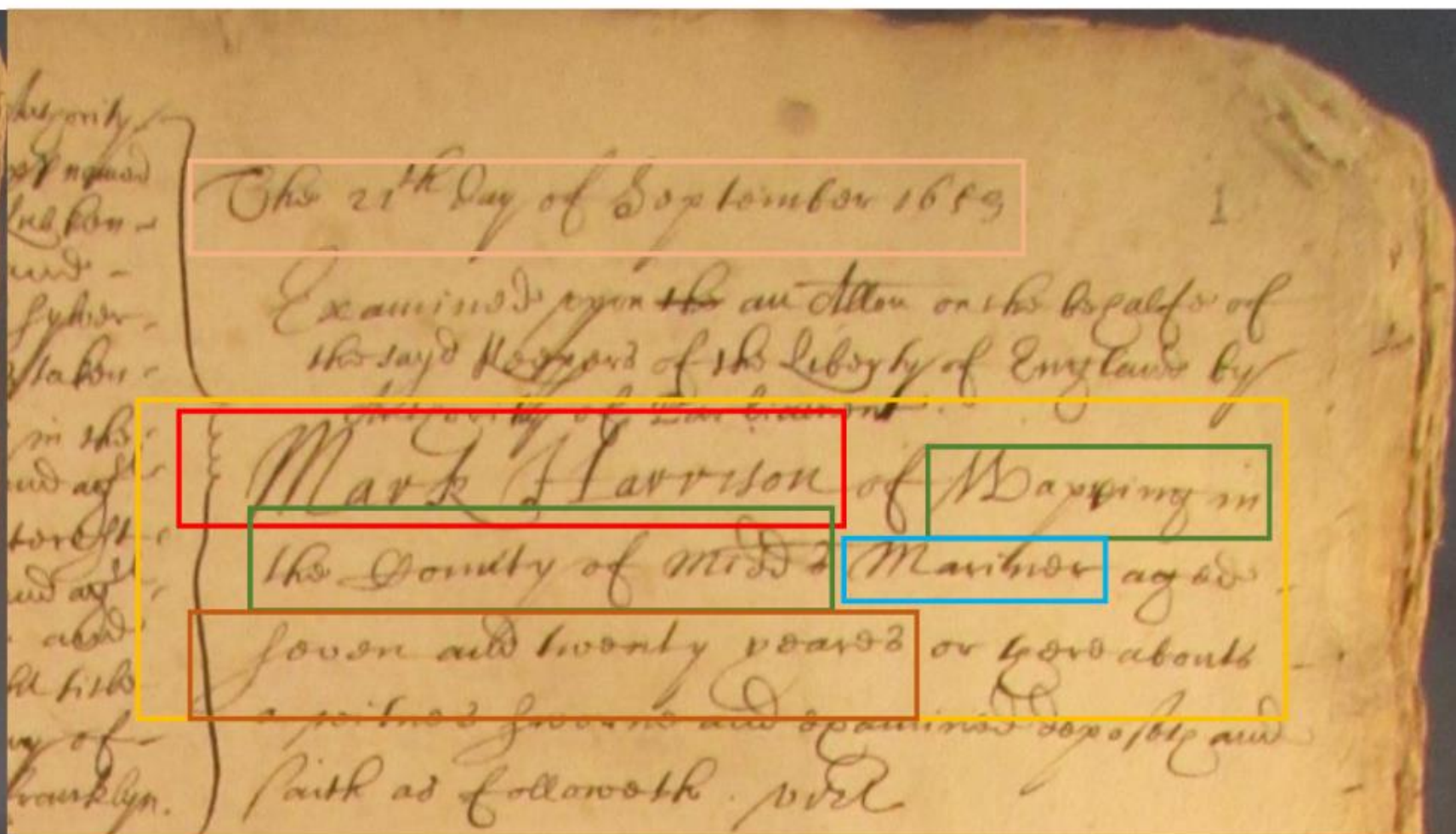
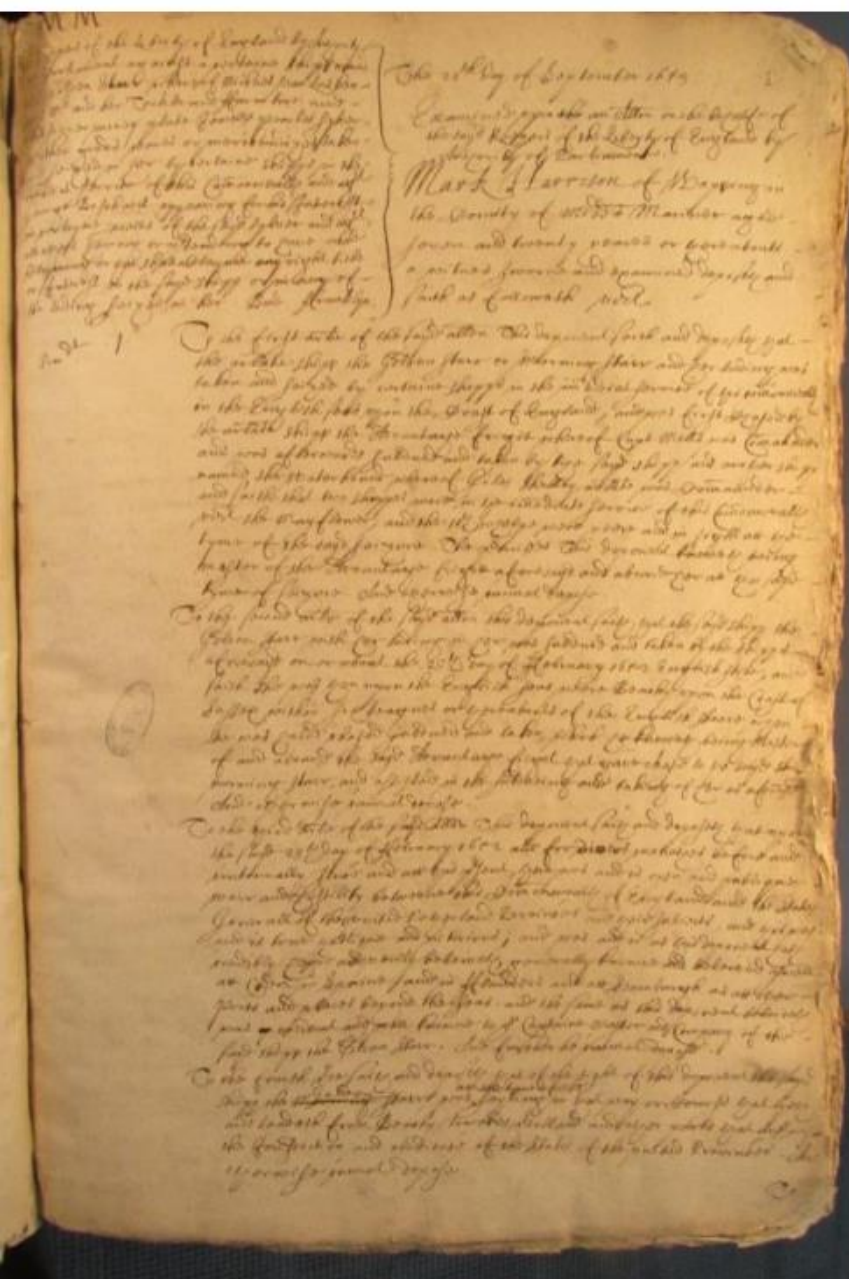
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Legal deposition

Deposition of Mark Harrison; mariner and master; resident in Wapping, Middlesex; age 27;
Dated September 21st 1659 (TNA, HCA 13/68, ff. 1r-3r)



Machine based recognition of metadata



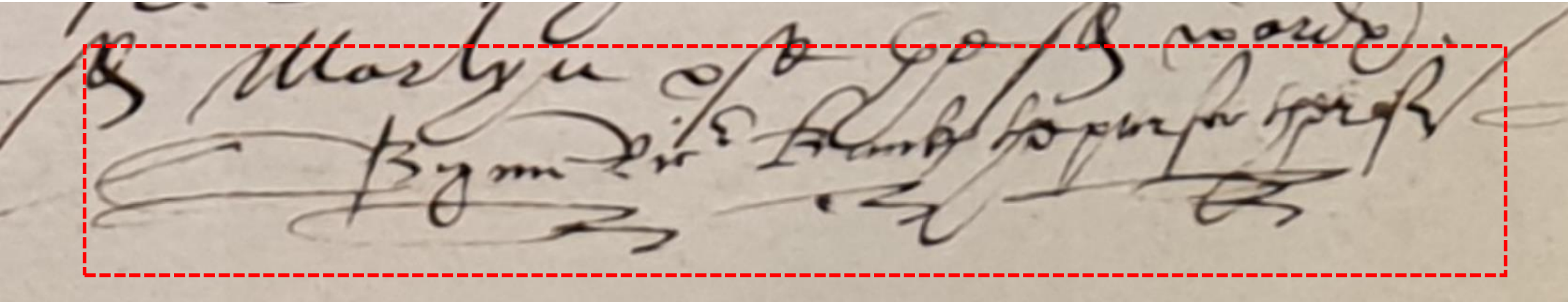
Appendix

TOPICS

1. Calibration of signoffs with reading and writing ability
1. Calibrating signoffs with numerical ability
2. Calibrating signoffs with language and interpretation abilities
3. Distinguishing signatures by execution
4. Concept of necessary and sufficient literacy and numeracy
5. Concept of literacy intensity of a supply chain
6. Mapping of literacy across kinship networks
7. Sample data from SOLM-2018: Sailmakers
8. Useful links

How representative is the character of a signature of the character of the handwriting of an individual in the C16th & C17th?
In this case, the penmanship of “by me” and “the purser therof” is consistent with the signature.

“By me Richd Banks the purser therof”

A photograph of a handwritten signature in cursive script, enclosed in a red dashed rectangular box. The signature is written on aged, slightly textured paper. The words "By me" and "the purser therof" are clearly legible in the lower portion of the signature, matching the printed text above. The upper portion of the signature is more stylized and less legible, but appears to contain the name "Richd Banks".

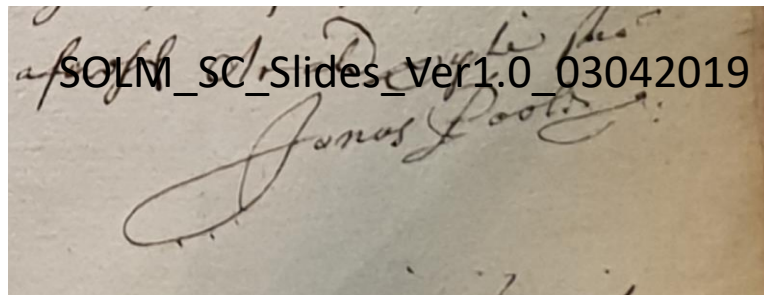
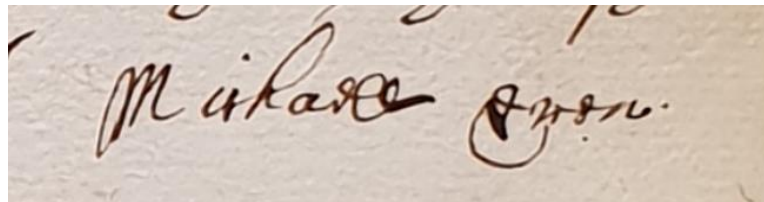
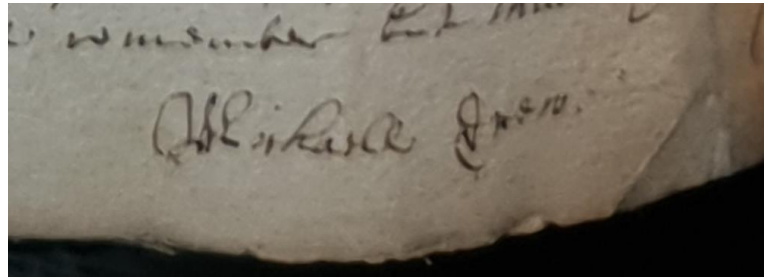
Richard Banks, forty-six years of age, born in & living in London, purser of the *Hopewell* for the last three years. Made a deposition in the English High Court of Admiralty, 1603.

Can signatures executed in different ways tell us anything about the abilities of an individual to comprehend and to write written manuscript text? One clue is what they say in Court about their abilities.

Michael Drew, eighteen year old mariner, living in the hamlet of Limehouse in Stepney. He was servant to the purser and master's mate. One of two survivors from the shipwreck in 1639 off the southwest coast of England of the *John and Dorothy*, which had been returning from a voyage to southern Spain.

The other survivor was the another Limehouse man, **Jonas Poole**, purser and master's mate of the ship. Somewhat older, at the ripe age of twenty seven.

Both made depositions in the English High Court of Admiralty in August 1639.



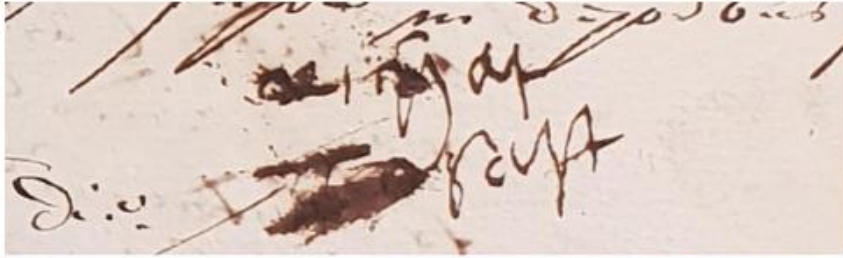
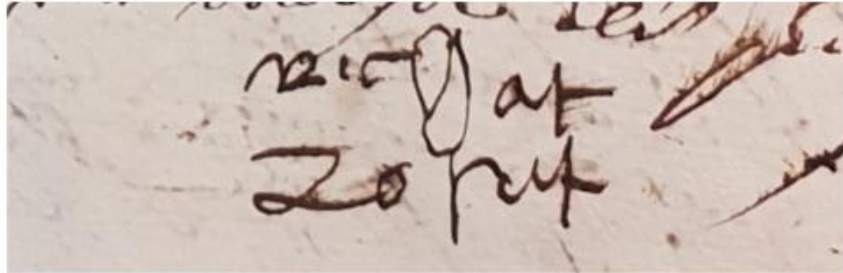
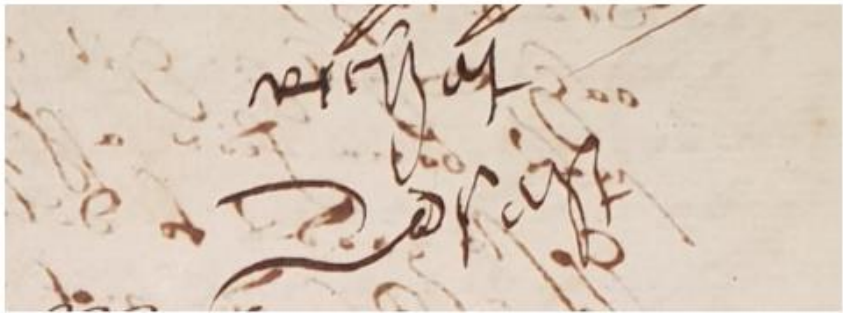
Michael Drew's signature is scruffy, with irregular characters, yet he capitalises the "M" and "D" of his first and last names.

Jonas Poole's signature is smooth, sloping, and slanting. The "J" and "P" of his first and last names are capitalised. There are clear loops and a small flourish. The more practiced hand of the two.

"The twoe schedules or bills of ladinge arlate are as hee beleeveth subscribed with the proper hand writeinge of the sayd John Tillett deceased the late master of the sayd shippe the *John and Dorothy* or at leaste the subscription to the sayd bills or schedules arlate is very like to the sayd Tilletts hande writeinge...for that **hee hath many tymes seene the sayd Tilletts writeinge and seene him write** and saieth that **hee did usually write such a kinde of hande as the sayd bills are subscribed with**" (Michael Drew, Aug. 27th 1639)

"The twoe schedules or bills of ladinge arlate are as hee this examine verily beleeveth in his conscience subscribed with the proper hand writeinge of the arlate Tillott the then master of the shippe the *John and Dorothy* which Tillott is since deceased, and all and singular the contents therein mentioned were and are true and were soe had and done as is therein contained...Hee this **examine is very well acquainted with the sayd Tilletts hand and character and manner of writeinge haveinge often tymes seene him write and haveinge received many letters from him whilst hee was upon the voyage in question**" (Jonas Poole, Aug. 26th 1639)

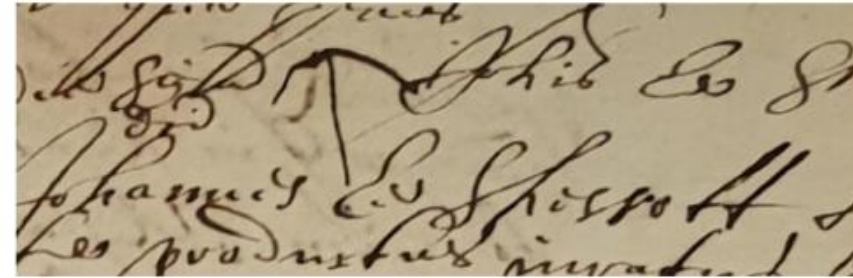
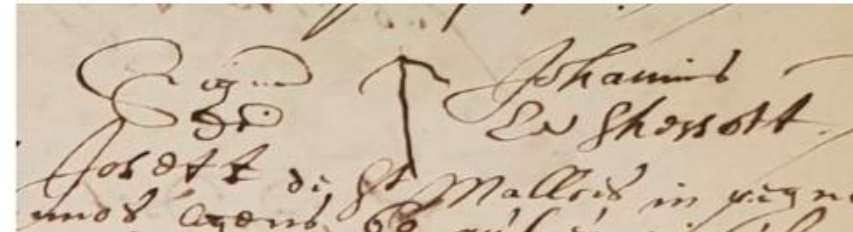
Two French mariners. Three goes each at writing their signature [the 60 year old] and making their mark [the 38 year old]. [1649]

A close-up of a handwritten signature in dark ink on aged, slightly stained paper. The signature is written in a cursive, somewhat stylized script. It appears to read 'Richard Josett' with some additional scribbles and a large, dark ink blot in the center.A close-up of a handwritten signature in dark ink on aged, slightly stained paper. The signature is written in a cursive, somewhat stylized script. It appears to read 'Richard Josett' with some additional scribbles and a large, dark ink blot in the center.A close-up of a handwritten signature in dark ink on aged, slightly stained paper. The signature is written in a cursive, somewhat stylized script. It appears to read 'Richard Josett' with some additional scribbles and a large, dark ink blot in the center.

Richard Josett [as rendered by an English Notary]
(b. ca. 1567), sixty year old mariner, of Saint-Malo in France.
Hired (allegedly) to sail in the *Golden Catt* from Saint-Malo to Rotterdam, the ship carrying figs, raisins, almonds, wines and some packs of linen cloth.

Deposed on March 17th 1627.

BASIC SIGNATURE

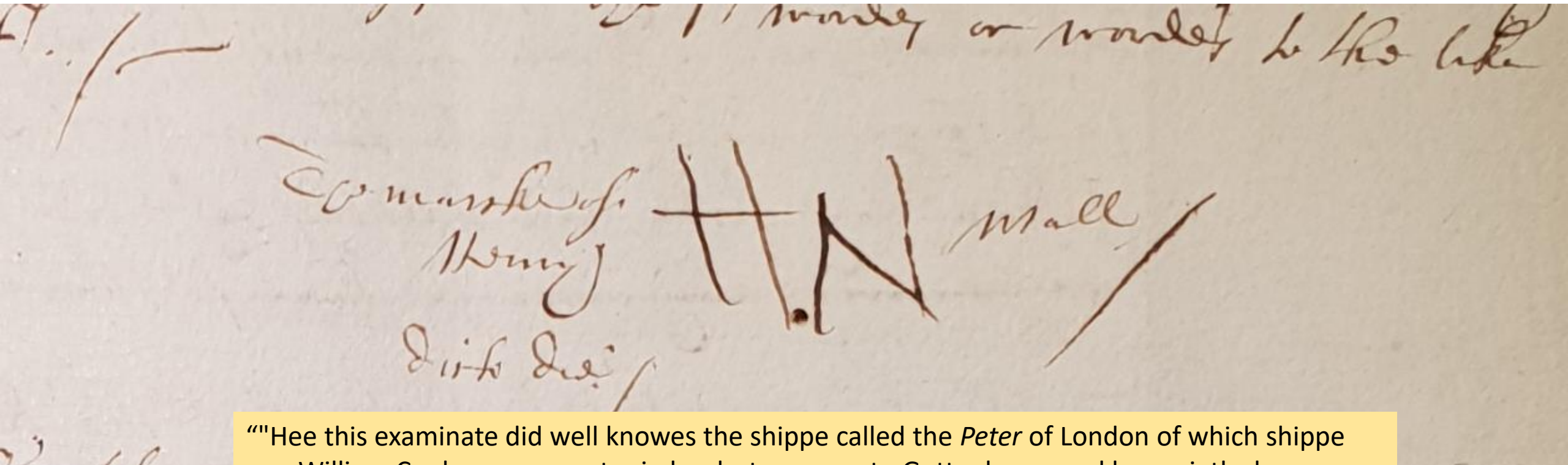
A close-up of a handwritten signature in dark ink on aged, slightly stained paper. The signature is written in a cursive, somewhat stylized script. It appears to read 'John Le Shesshott' with some additional scribbles and a large, dark ink blot in the center.A close-up of a handwritten signature in dark ink on aged, slightly stained paper. The signature is written in a cursive, somewhat stylized script. It appears to read 'John Le Shesshott' with some additional scribbles and a large, dark ink blot in the center.A close-up of a handwritten signature in dark ink on aged, slightly stained paper. The signature is written in a cursive, somewhat stylized script. It appears to read 'John Le Shesshott' with some additional scribbles and a large, dark ink blot in the center.

John Le Shesshott [as rendered by an English Notary]
(b.ca. 1589), thirty-eight year old mariner, of Saint-Malo in France. Also hired (allegedly) to sail in the *Golden Catt* from Saint-Malo to Rotterdam, the ship carrying figs, raisins, almonds, wines and some packs of linen cloth.

Deposed on March 17th 1627.

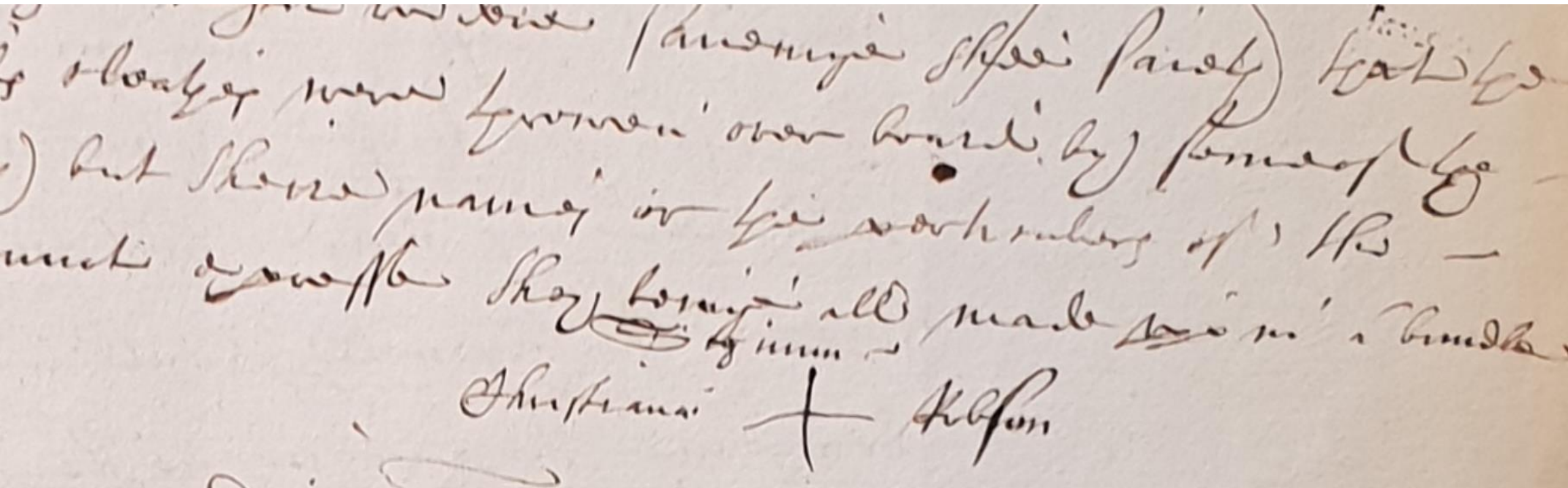
MARK. PROBABLY INTENDED TO BE AN ANCHOR

A rare opportunity to calibrate a signoff with reading and writing ability. Here a twenty-two year old Ratcliff mariner named Henry Wall concludes his oral testimony with his competent initials, but tells the Court he made no written record, being neither able to write nor read.

A close-up photograph of a handwritten document. The text is written in a cursive script. At the top, a line of text is partially visible: "...wonder or wonder to the life". Below this, the name "Henry Wall" is written in a cursive script. In the center, the initials "H.W." are written in a large, bold, and somewhat stylized manner. Below the initials, the words "Dish dish" are written in a cursive script. The paper is aged and slightly discolored.

"Hee this examine did well knowes the shippe called the *Peter* of London of which shippe one William Coulson was master in her laste voyage to Gottenberge and hee saieth shee arrived at Gottenberge about Michaelmas laste paste **the tymes more certainly hee remembreth not beinge not able to write or read and not keepeing exacte notice thereof.**"
Deposition in the English High Court of Admiralty, March 2nd 1639/40.

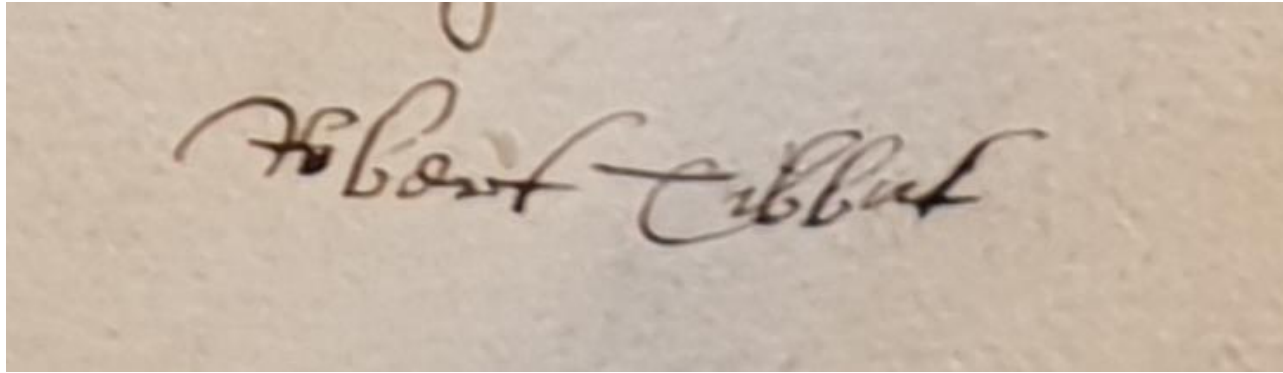
A rare opportunity to calibrate a signoff with reading and writing ability. Christine Robinson, thirty-three year old wife of James Robinson, a chandler in Wapping, Middlesex. A firm cross. She was unable to read or write.



The said Carmichael deceased in his life tyme had a little booke but whether a bible or not
shee knoweth **not beinge not able to reade or write**. Deposition in the English High Court of
Admiralty, March 2nd 1639/40.

Christiana + Robson

Calibrating a signature with writing ability. Robert Tibbett, a twenty-six year old ship's carpenter living at Limehouse, was literate and kept a note or journal of the days of arrival and departure of his ship at different ports [1633]

A photograph of a handwritten signature in cursive script, reading "Robert Tibbett". The ink is dark and the paper is aged and slightly textured.

"He kepte a note or journall what day the sayd shipp arrived at every port or place the sayd voyage and howe many dayes she stayed in every place, but kept noe note howe the wynde and weather was every day nor what goods were taken in or delivered out of the sayd shipp the sayd voyage"

Robert Tibbett was ship's carpenter on the *Mary ffortune* of London [burthen = 140 tons] on a voyage from London to La Rochelle in France and San Lucar in Spain and back to London. He had a small adventure on the return voyage (a rundlett of wyne containing eight gallons).

Calibrating a mark with numerical abilities. John Gardner, twenty seven year old shipwright living in Wapping. Made a mark, with poor control of his pen, yet capable of precise measurements of a ship expressed in the technical language of a shipwright [1633]

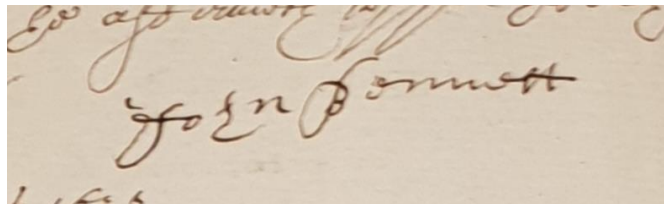


"This morninge this examine by the order and directions of William Spenser marriner the master of the shippe called the *Roberte* of London did measure that shippe rideing at an anchor in the river of Thames and findeth her to bee in length from the foreparte of her sterenepost to the afterparte of her stemm one hundred foote English measure and in breadth in her houlde from clampe to clampe nyneteene foote two ynches, and in depth, from the lowerparte of the beame to the upper parte of the kelson eighte foote five ynches, and in breadth from outside to outside one and twenty foote and tennynches."

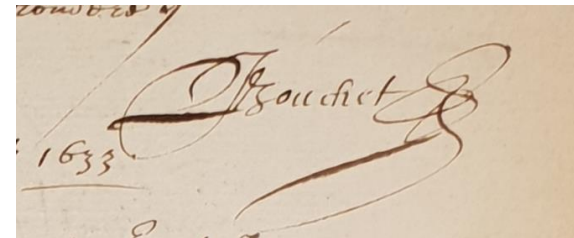
Calibrating signatures with language and interpretation skills

English mariner, forty-six year old John Bennett from Wapping, translated from English into Spanish at the Canary islands to interpret for the English master of his ship in conversation with a Spanish speaking French merchant, Isaack Bouchet. Subsequently, the mariner went with the master to a Canary island notary to draw up a protest in Spanish against the behaviour of the merchant. [1633]

"Upon a Sattirday happening in the moneth of January or ffebruary last past [1633] this deponent walkinge in the streets of Lorotaho in the Canary Islands, with the arlate Joseph Trehawke they mett with the arlate Isaacke Bouchett a ffrenchman, and the said Bouchett **demanded the sayd Trehawke in Spanish** the reason why he did not take in the wyne which he had sent to be laden aboard his the sayd Trehawkes shipp but turne them on shoare agayne, and **this examine speakinge that language, by directionn of the said Trehawke and on his behalfe**, tould the sayd Bouchett that he the sayd Trehawke did marvell at that, and then the sayd Bouchett replied that the barke men by whom he sent his wyne were tould by the sayd Trehawks men that his ship was full and could take in nor more and then this examine by the firection of the sayd Trehawke tould the sayd Bouchett that he the sayd Trehawke would goe on bord his shipp presently and would resolve the sayd Bouchett when he came on shoare agayne wheither hee could take in his wyne or not, and accordingly the sayd Trehawke went aboard his shipp and uppon his retturne on shoare agayne this deponent went with the sayd Trehawke to the sayd Bouchetts lodginge in Lorotaho, and **by the interpretation of this deponent** tould the sayd Bouchett that his the sayd Trehawks company tould him that at the tyme when his the sayd Bouchetts wyne were sent on bord , the sayd Trehawks shipp there were great store of wyne lyeinge uppon the decks of the sayd shipp which were to be stowed in her hould before they could take in any more wyne, for feare least there should happen some foule weather and that they tould those who brought the sayd Bouchetts wyne that if they would stay by the sayd shipp side with the sayd wyne untill the next morninge, they (the sayd Trehawks men) would take in the sayd Bouchetts wyne, which they which brought the sayd wyne would not doe but caryed the sayd wyne on shoare agayne, and the sayd Trehawke likewise tould the sayd that his shipp was then ready to take in his the sayd Bouchetts wyne, and therfore required the sayd Bouchett to send the sayd wyne aboard, wherunto the sayd Bouchett replied that then he had disposed of his wyne and had shipped them on bord another shipp at a cheap rate then he was to pay the sayd Trehawke, and that he would lade noe more wyne aboard the sayd Trehawks shippe and then the sayd Trehawke tould the sayd Bouchett that if hee would not lade his full complement of wyne he would make a protest against him for his freighte, and accordingly **the sayd Trehawke went with this deponent to a notary called John Gonsales to drawe up and make the sayd protest.**"

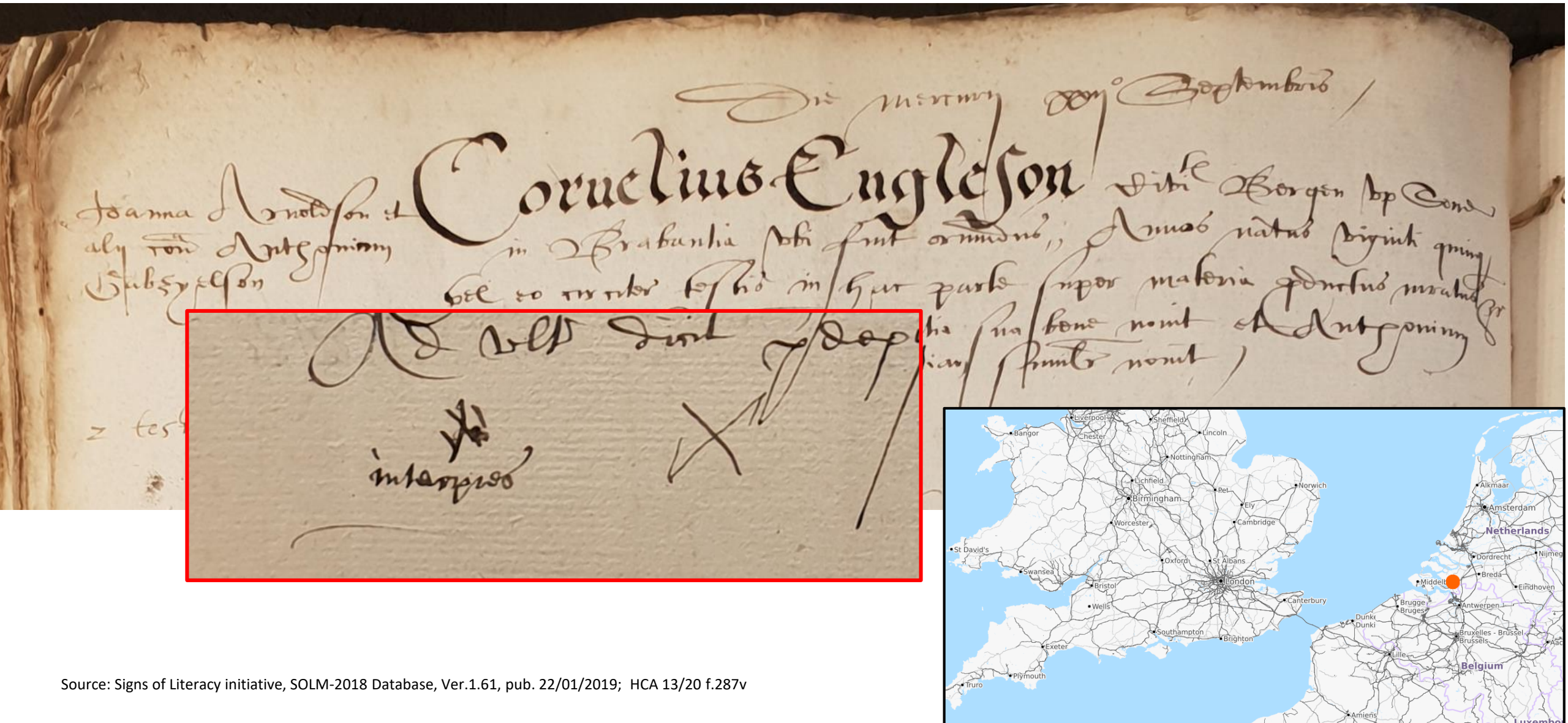


Signature of John Bennett, Wapping mariner

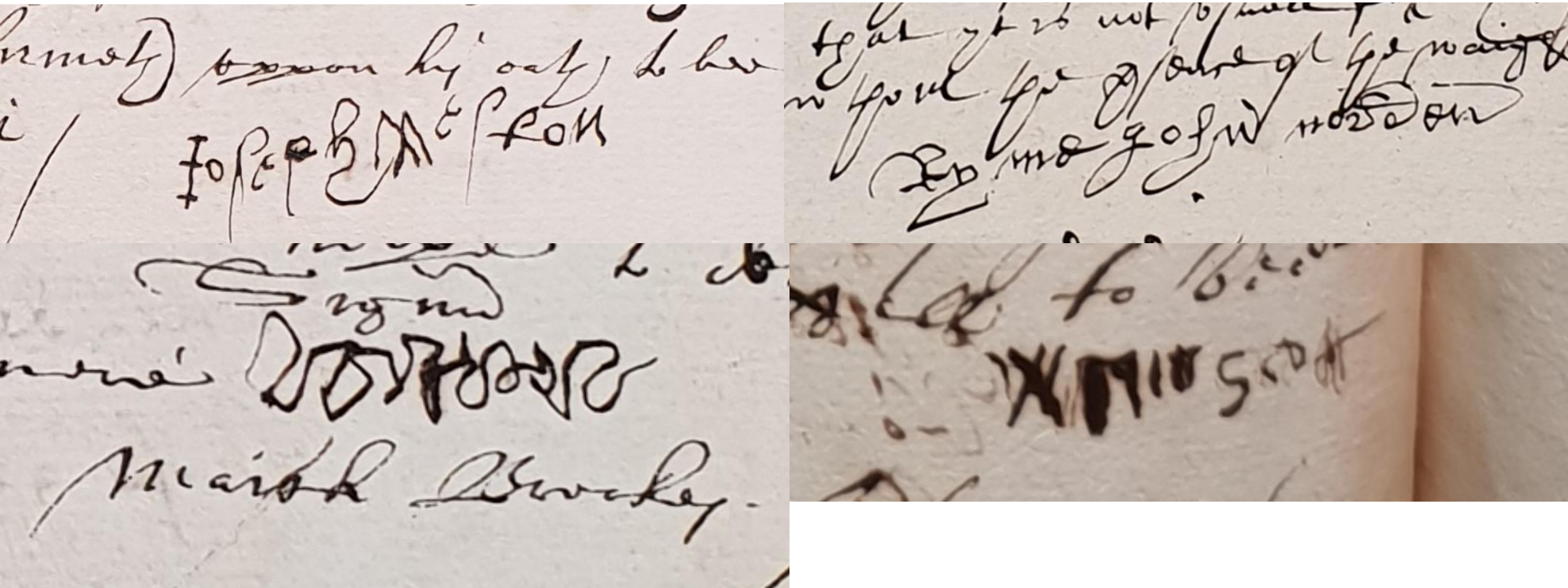


Signature of Isaack Bouchet, French merchant

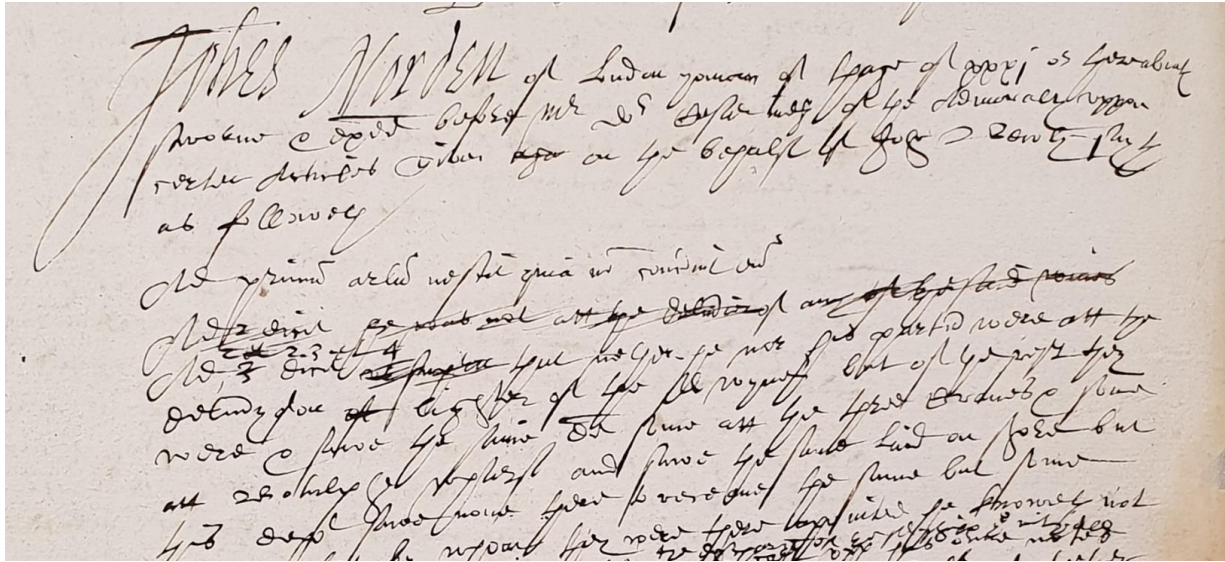
Calibrating marks with language and interpretation skills. Cornelius Engleson, from Bergen Up Zoon in Brabant, made his deposition through an interpreter, when deposed in September 1574 in the English High Court of Admiralty. Both men made their marks.



Distinguishing signatures by execution. Some borderline signatures.

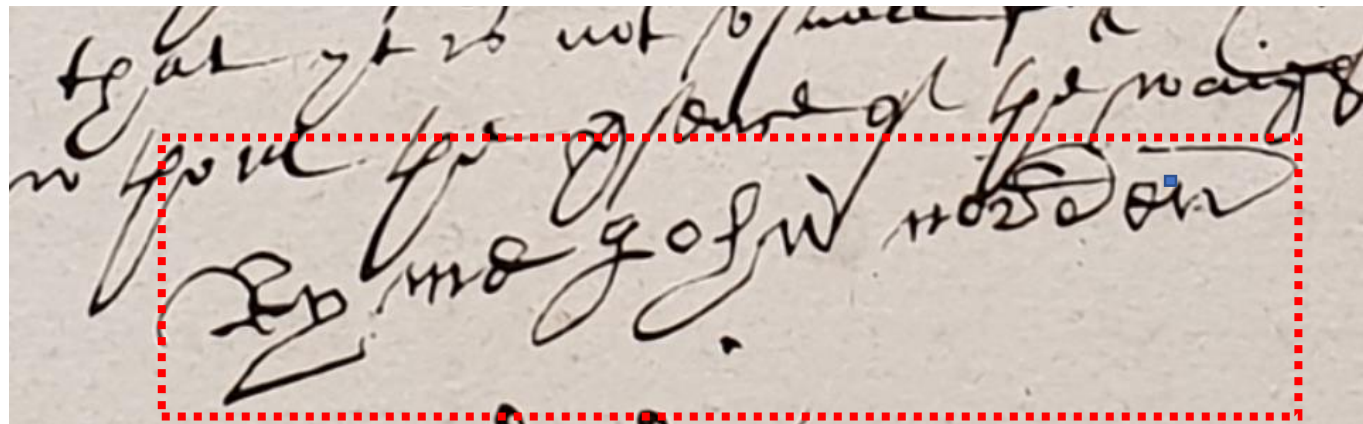


Concept of necessary and sufficient literacy and numeracy. Sufficient literacy to monitor goods inward, check tallies and examine goods received notes.

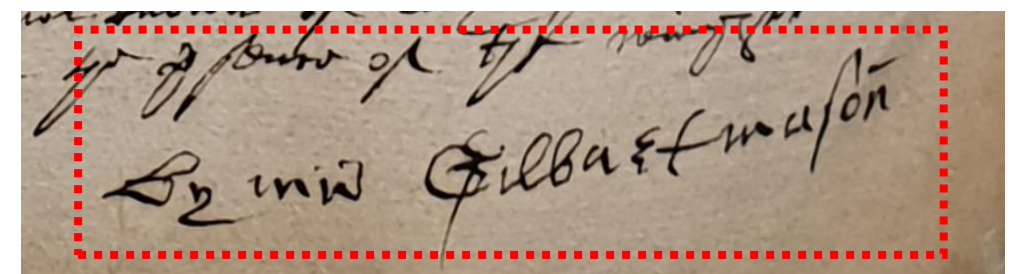
A photograph of a handwritten document in a dense, spidery cursive script. The text is written in dark ink on aged, slightly yellowed paper. The handwriting is highly stylized with many crossings and loops, characteristic of the period.

Handwriting of anonymous English High Court of Admiralty notary

Interesting to contrast the spidery, yet smooth writing, of the anonymous English High Court of Admiralty notary, with its crossings out, with the slightly shakey signature of **John Norden**, a thirty-one year old London yeoman, who was present at the discharging of wine from lighters at Botophs wharf and Three Cranes. Norden witnessed notes being taken of the wines by “one Slaughter a wharfinger”. Note the more even handwriting of his colleague, also a self-described yeoman, fifty-seven year old **Gilbert Mason**, who added that he was “one of the wayghters appointed under Mr Swynerton master of the impost”.

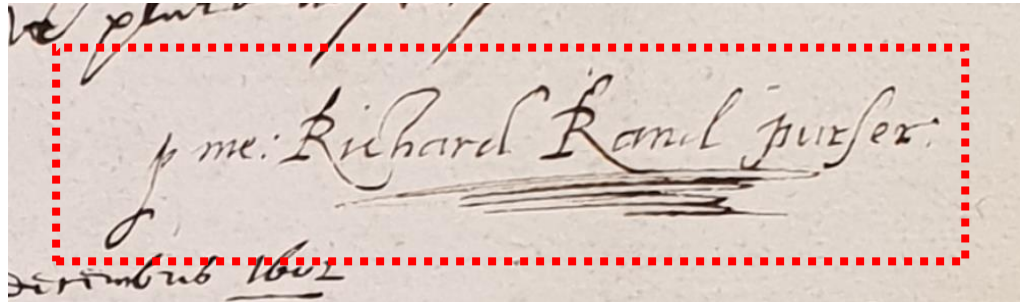
A photograph of a handwritten document. A red dashed rectangular box highlights a signature that reads "By me John Norden". The handwriting is a cursive script, appearing slightly more regular than the one in the first image but still showing some shake.

“By me John Norden”

A photograph of a handwritten document. A red dashed rectangular box highlights a signature that reads "By me Gilbert Mason". The handwriting is a cursive script, appearing slightly more regular than the one in the first image but still showing some shake.

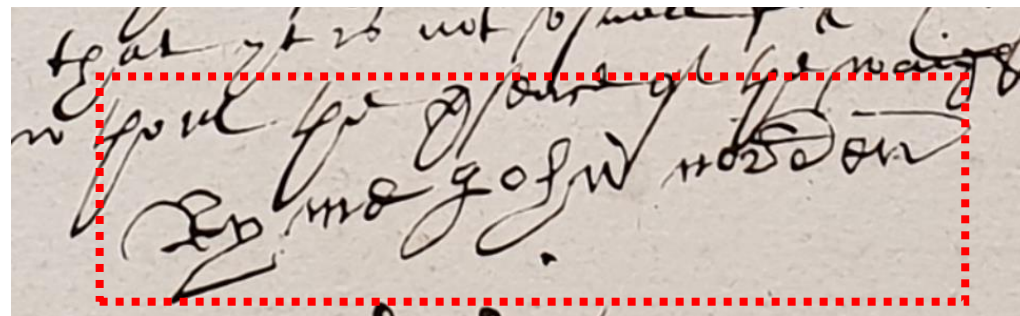
“By me Gilbert Mason”

Concept of literacy intensity of a supply chain. Three men involved in the receiving of wine at Bordeaux & the unloading of the same wine from lighters onto wharves at London form part of a supply chain stretching from vineyards of Bordeaux to the taverns & homes of 1602 London.



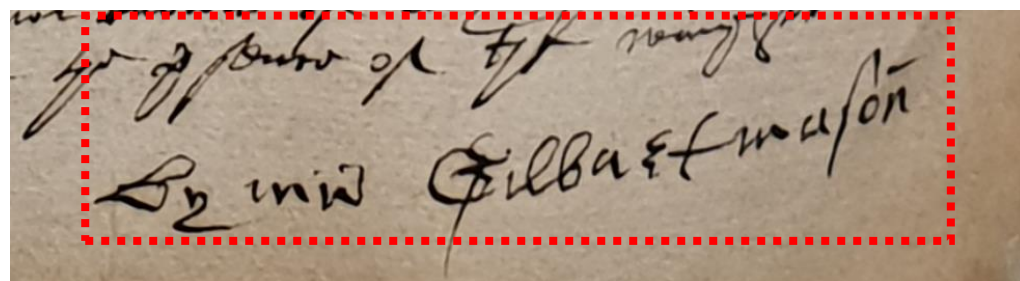
A handwritten signature in cursive script, enclosed in a red dashed rectangular box. The signature reads "p me: Richard Rand purser:" followed by a flourish. Below the signature, the date "1602" is partially visible.

Clear, regular, confident signature, of twenty-three year old mariner, **Richard Rand**, who was the purser of the *Nightingall*. The five words "p[er] me Richard Rand purser" all on a clear invisible line, with well shaped loops to the capital "R" of "Richard" and "Rand", and a pronounced flourish.



A handwritten signature in cursive script, enclosed in a red dashed rectangular box. The signature reads "By me John Norden". The script is slightly shaky and lacks a clear base line.

Slightly shaky signature of thirty-one year old **John Norden**, yeoman and waiter. No clear base line to the five words "By me John Norden". A capital "B", but lower case "j" and "n" for "john" and "Norden". Loops a little messy.



A handwritten signature in cursive script, enclosed in a red dashed rectangular box. The signature reads "By me Gilbert Mason". The script is more regular and confident than the previous two.

More regular, confident signature of fifty-seven year old **Gilbert Mason** with a complex capital "G". The curve of the folio in the digital image extract distorts the line of the four words, which is actually pretty straight.

Richard Rand the purser was present at Bordeaux at the receiving of thirty tons of wine, marked with an "F" and a "C", and was present at Bottolphs wharf and the Three Cranes in Wapping at their discharge where he **"tooke the markes and numbers of every hogshead therof"**. He noted that the waiters were present at the delivery of all the wine, except for wine on one lighter, and that **the wharfinger "tooke a note aswell as this examine"**. **"All the notes with the waiters and this examine and the wharfinger tooke for the unloading of the said wines being cast upp** they found the whole complement of the ship was put on shoer saving on[e] hogshead which said hogshead was belonging to Mr Gowen Woolcott a merchant"

We are examining the literacy intensity of different parts of Early Modern supply chains

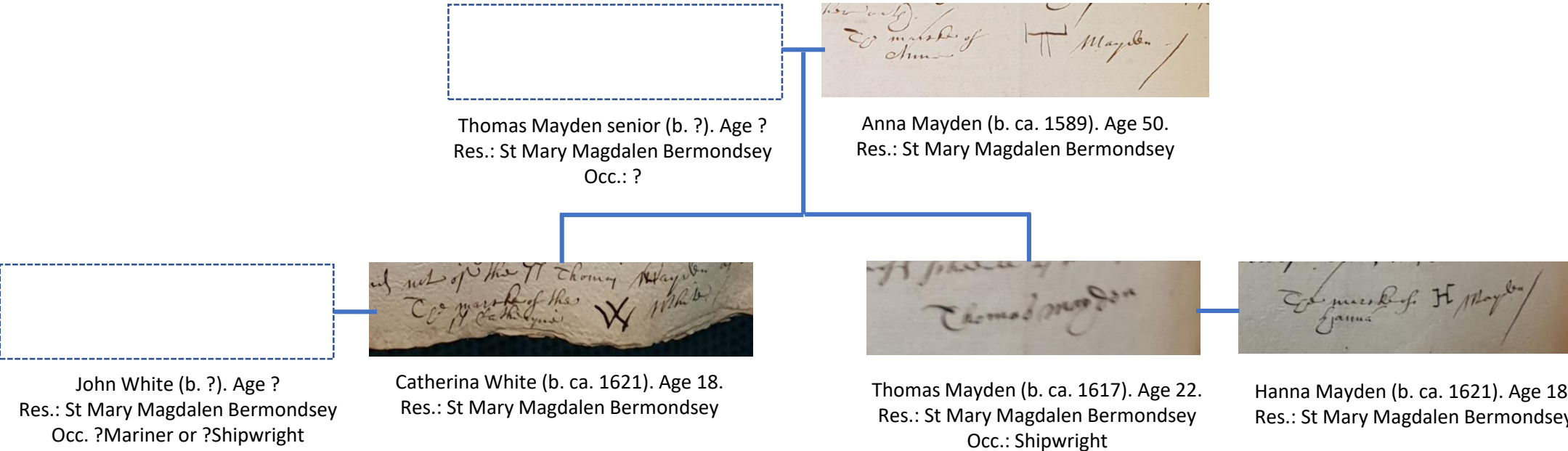
Cost structure for 100 weight of Norwegian deals sold at London in 1612

MarineLives ship economics model, ver. 10.0, pub. 25/03/2019



We are beginning to look at literacy and numeracy levels within kinship networks and across generations for mariners and marine support trades

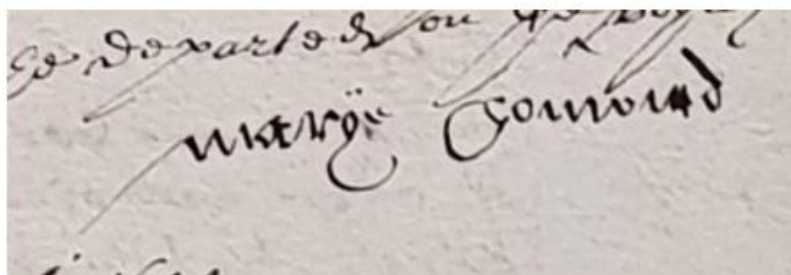
The Mayden and White families of Saint Mary Magdalen
Bermondsey in the Borough of Southwark, as of 1639



Richard Gomond: Invited by Robert Bishopp on a fishing voyage on the coast of Scotland in the ship the *Nathan* “to be his interpreter for the Dutch tongue if occasion should require” and otherwise to wait on him.^[2] Richard was Bishopp’s godson. Agreed pay was 16 s per month. His mother states Richard had served under “one Mr Rowden merchant, and afterwards on Mr Gallen”. He could “write and read well, and can speake the Spanish and Dutch tongues, and hath bene in Spayne and at Saint Christophers” ^[1] Until three week’s before going on a voyage with Bishopp he had dwelt with Mr Gallen and “had three pounds a yeare for his service besides his meat drincke washinge and lodging”.^[3]

Law suits: For reasons which are unclear, following the fishing voyage, Richard was languishing in prison at the suit of Bishopp, and had himself brough suit against Bishopp for his unpaid wages.

Mary Gomond [the mother] : Her house was in Wrestler’s Court, Bishopsgate Street. She dwelt there with her two daughters, Hanna and Mary, together with sons Richard and James. All were present in the house when Richard was visited by his godfather Robert Bishopp, shortly after Shrovetide, 1633. Mary, the mother, signed her name well at the bottom of her deposition in the English High Court of Admiralty. Surprisingly, his two teenage sisters, initialled, rather than signed their depositions, and neither sister shows particularly good pen control. Richard himself could read and write, and could speak Spanish and Dutch (at least to some degree). The case is curious.

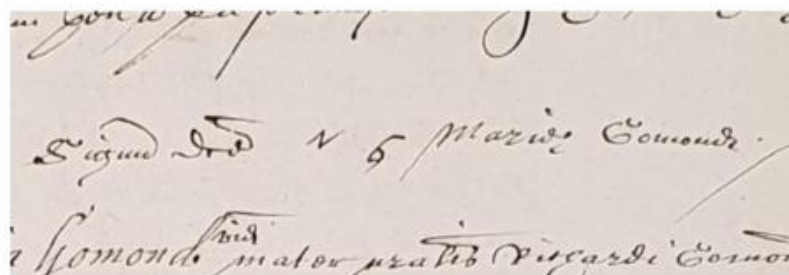


Mary Gomond, 40 year old, resident in the parish of Ethelborowe near Bishopsgate. Wrestler’s Court, Bishopsgate Street.

Mother of Richard Gomond, OF second son James, and OF daughters Mary and Hanna.

Deposed on June 25th 1634.

SIGNATURE

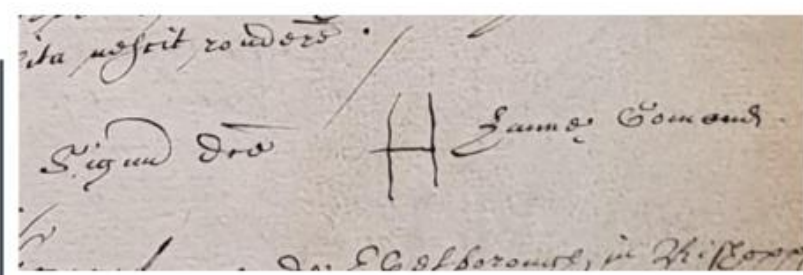


Mary Gomond, 19 year old, resident in the parish of Ethelborowe near Bishopsgate.

Daughter of Mary Gomond, and sister of Richard Gomond.

Deposed on June 25th 1634.

TWO INITIALS



Hanna Gomond, 18 year old, resident in the parish of Ethelborowe near Bishopsgate.

Daughter of Mary Gomond, and sister of Richard Gomond.

Deposed on June 25th 1634.

ONE INITIAL

C17th English sailmakers were strikingly literate in terms of their “signature literacy”

C	D	I	T	W	AB	AQ	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	
File name	Volume	Type	Script	Occupations [Synthesised]	Ship specified in which shipped or associated	Country of residence	Street/Hamlet	Parish	Town	County, Province or Region	Age	Year of deposition	Estimated year of	First name [metadata]	Middle name [metadata]	Last name [metadata]	Co-signer
KaggleTestSnippet_HCA_1336_f.16r_One.PNG - HCA 13/36		[?Signature]	[?Roman]	Sailmaker	Hope of Lubeck	Lubeck			Lubeck		19	1602	1583	Jacob		Steen the younger	
KaggleTestSnippet_HCA_1340_f.136v.PNG - CRE HCA 13/40		Marke	N/A	Sailmaker		England	Eastsmithfield				40	1609	1569	Samuell		Johnson	
KaggleTestSnippet_HCA_1340_f.138r.PNG - CRE HCA 13/40		Signature	Roman	Famulus [servant] [of Samuel Johnson, sailmaker of Eastsmithfield]		England	Eastsmithfield				21	1609	1588	Johannes		White	
KaggleTestSnippet_HCA_1342_f.40v.PNG - CREA HCA 13/42		Signature	Roman	Sailmaker		England		Saint Catherines			43	1612	1569	Robertus		Prestwoode	
KaggleTestSnippet_HCA_1350_f.19v_One.PNG HCA 13/50		Signature	Roman	Sailmaker	Bonny Besse of Londo	England		Saint Botolph	London		25	1632	1607	Gilbert		Stonechest	
KaggleTestSnippet_HCA_1351_f.72v_Two.PNG HCA 13/51		Signature	Roman	Sailmaker		England	East Smithfi	Saint Botolph	London		27	1634	1607	Gilbert	Van	Steenkiste	
KaggleTestSnippet_HCA_1352_f.137r.PNG - CRI HCA 13/52		Signature	Roman	Saylemaker [sailmaker]	Pilgrim of London	England	Redriffe			Surrey	27	1635	1608	Thomas		ffriend	
KaggleTestSnippet_HCA_1352_f.160r.PNG - CRI HCA 13/52		Signature	Roman	Saylemaker [sailmaker]	Pilgrim of London	England	Shadwell	Stepney		Middlesex	80	1635	1555	Thomas		ffriend	
KaggleTestSnippet_HCA_1352_f.204v.PNG - CRI HCA 13/52		Signature	Roman	Sailmaker	Pearle of London	England	Wapping	N/A		Middlesex	24	1636	1612	Rowland		Rowland	
KaggleTestSnippet_HCA_1352_f.266v.PNG - CRI HCA 13/52		Signature	Roman	Sailmaker	Martha of London	England	East Smithfi	Saint Botulph	London		29	1636	1607	Gilbertus	Van	Steenkist	
KaggleTestSnippet_HCA_1355_f.238v.PNG - CRE HCA 13/55		Signature	Roman	Sailemaker	Expedition	England	Wapping	N/A		Middlesex	20	1639	1619	Henricus		Deane	
KaggleTestSnippet_HCA_1355_f.242v.PNG - CRE HCA 13/55		Signature	Roman	Sailemaker	Expedition	England	Wapping	N/A		Middlesex	21	1639	1618	Johannes		Wrighte	
KaggleTestSnippet_HCA_1355_f.243r.PNG - CRE HCA 13/55		Signature	Roman	Sailemaker	Expedition	England	Wapping	N/A		Middlesex	22	1639	1617	Thomas		ffetherbye	
KaggleTestSnippet_HCA_1355_f.380v_One.PNG HCA 13/55		Signature	Roman	Sailmaker	Aeneas	England		Precinct of Saint Catherines	near the Tow		21	1639	1618	Willielmus		ffoster	
KaggleTestSnippet_HCA_1357_f.68r.PNG - CREA HCA 13/57		Signature	Roman	Nauta [mariner]; Sailmaker [of the Plough]	Plough	England		Stepney		Middlesex	42	1641	1599	Hugo		Wallis	
KaggleTestSnippet_HCA_1357_f.68v.PNG - CREA HCA 13/57		Signature	Roman	Nauta [mariner]; Sailmaker [of the Plough]	Plough	England		Stepney		Middlesex	42	1641	1599	Hugo		Wallis	
KaggleTestSnippet_HCA_1357_f.69v_One.PNG - HCA 13/57		Signature	Roman	Nauta [mariner]; Sailmaker [of the Plough]	Plough	England		Stepney		Middlesex	42	1641	1599	Hugo		Wallis	
KaggleTestSnippet_HCA_1361_f.232r_One.PNG HCA 13/61		Signature	Roman	Saylemaker [sailmaker]; Saylemaker and one of the company [of the Love]	Love	England		Sancta Catherina prope turrim	London		28	1649	1621	Willielmus		Drake	
KaggleTestSnippet_HCA_1363_f.400r.PNG HCA 13/63		Signature	Roman	Sailor; Sailmaker; One of the company		Lubeck			Lubeck		30	1650	1620	Claus		Renderand	
KaggleTestSnippet_HCA_1370_f.743v.PNG - CRE HCA 13/70		Signature	Roman	Sailmaker		England		Precincy of Saint Catherines neere the Tc			35	1653	1618	Abraham		Johnson	
KaggleTestSnippet_HCA_1372_f.223v.PNG HCA 13/72		Signature	Roman	Sailmaker		England	Tower Whar	Saint Peter Ad	London		51	1658	1607	George		Shaw	
KaggleTestSnippet_HCA_1372_f.534v.PNG - CRE HCA 13/72		Signature	Roman	Sailmaker [of the Vincent, renamed the Elizabeth]	Elizabeth, formerly the	England			Dover	Kent	30	1658	1628	Richard		Clarke	
KaggleTestSnippet_HCA_1373_f.409v.PNG HCA 13/73		Signature	Roman	Sailmaker; Servant [to sailmaker]		England	Shop of Geo	Tower wharfe	London		18	1659	1641	Richard		Hartshorne	

Sixteen out of eighteen [89%] of individual sailmakers in our SOLM-2018 dataset, born between 1555 and 1641, witnessed their depositions with a signature

Useful links

TEXT: AI & Historical literacy, TNA conference presentation, Sep. 4th 2018

[https://github.com/Signsofliteracy/ArchiveBots/blob/master/AI %26 Historical%20Literacy%20-%20The%20SOLM-2018_Text_04092018_FINAL.pdf](https://github.com/Signsofliteracy/ArchiveBots/blob/master/AI%20Historical%20Literacy%20-%20The%20SOLM-2018_Text_04092018_FINAL.pdf)

SLIDES: AI & Historical literacy, TNA conference presentation, Sep. 4th 2018

[https://github.com/Signsofliteracy/ArchiveBots/blob/master/AI %26 Historical Literacy SOLM-2018 Slides FINAL 04092018.pdf](https://github.com/Signsofliteracy/ArchiveBots/blob/master/AI%20Historical%20Literacy%20-%20SOLM-2018_Slides_FINAL_04092018.pdf)

SLIDES: Chronoscopic Education & the Signs of Literacy initiative discussion document, Feb. 6th 2019

https://github.com/Signsofliteracy/ArchiveBots/blob/master/SOLM-2018_Update_06022019.pdf