

*This article was published online on March 15, 2018
Final version June 30, 2019*

Essays in
**ECONOMIC &
BUSINESS
HISTORY**

The Journal of the Economic & Business History Society



Editors

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ISSN 0896-226X
LCC 79-91616
HC12.E2

AVOIDING “MUSTY MUTTON CHOPS”:
THE NETWORK NARRATIVE OF AN AMERICAN
MERCHANT IN LONDON, 1771-1774

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Historians have increasingly been using network and narrative analysis as a means by which to explore their data. By doing so, they are able to explore how actors of interest used their relationships to undertake business and economic endeavors, and how, in turn, these were shaped by the discourse to which they had access. This paper presents a novel methodology using visual analytics to combine both social network (relationship) and textual (sentiment) analysis to visualize the information contained in historical sources over time. The definition of network narrative posited in this paper allows the historian to quantify and therefore assess the impact of, and reaction to, endogenous and exogenous events on actor networks. In order demonstrate the applicability of this approach, we apply it to the case study of Joshua Johnson, an American merchant in London during the 1772 credit crisis. This paper builds on the more recent network studies which show that networks were not only complex, but changed over time in reaction to events.

Network Narrative of An American Merchant in London

“Exert yourselves, buy or borrow ten thousand pounds and remit me three immediately and the other seven in all June and July or expect to hear I am fast in some damned dungeon living on musty mutton chops.”¹

Historians, Networks, and Narratives

Joshua Johnson’s plea was written in the spring of 1773, less than a year after the credit crisis of summer 1772 around which this article is centered. Written from London to his partners in Annapolis, Maryland, this letter is typical of many sent in a period of crisis, and playing at the heartstrings of one’s correspondents was not unusual. At the same time, those merchants at the top of the network felt strongly the obligation not to bring that network down by pressing too hard on their debtors (Sheryllyne Haggerty 2012). Such reciprocity has been one of the themes in the newer historiography which has complicated the use and abuse of networks. In the past those such as Mary Rose (1994) and James Walvin (1997) have placed much emphasis on the ascribed trust of familial and religious networks, such as the Jews or Quakers.² Avner Greif (1989) and Douglas Hamilton (2005) have also, quite rightly, seen ethnicity as a prominent factor in trusting others. Of course, in the eighteenth century, these networks often overlapped. However, more recently others such as Kenneth Morgan (2007) and David Hancock (2005) have shown the problems associated with familial and ethnic networks.³ Andrew Popp (2007) and Tim Crumplin (2007) have also shown that networks could be both time-consuming and self-serving. This can also be said of commercial groups; Sheilagh Ogilvie (2004) has shown how guilds could be retrogressive, and many people joined trade associations for social rather than commercial reasons, as shown by Richard Goddard (2017).⁴ Most

¹ Joshua Johnson to the firm, April 26, 1773, Jacob M. Price (editor). 1979. *Joshua Johnson’s Letterbook, 1771-1774: Letters from a Merchant in London to his Partners in Maryland*. London Record Society, 15, hereafter *JLL*.

² Ascribed trust is sometimes called “characteristic based trust”. Lynne G. Zucker (1986). See also Ann Prior and Maurice Kirby (1993) and Frederick B. Tolles (1963).

³ See John Haggerty, Sheryllyne Haggerty, and Mark Taylor (2014).

⁴ See Haggerty and Haggerty (2017). A nice précis of the literature on networks and clusters can be found by Emily Buchnea (2017).

recently historians have used Social Network Analysis (SNA) and Visual Analytics (VA) to further analyse and measure networks. Katie McDade (2011) has compared how networks developed in different port cities and Buchnea (2015) has used SNA to show how New York-Liverpool networks developed over time. Others have used SNA to look at interlinking networks.⁵ We discuss the uses of SNA and VA further in our methodology section below.

A similar re-imagining has also been occurring in business history with the ‘narrative turn.’ Those such as Mads Mordhorst and Stefan Schwarzkopf (2017) have been asking us to think about the performative nature of historical narratives; that ‘Narratives do not ‘exist.’ They ‘become.’ That is, as Popp and Susanna Fellman (2017) have noted, that in writing history we produce our own narrative above that already ‘constructed’ for us by the extant archive. Firms have created their own narratives for strategic purposes, to change or maintain company culture, or to create legitimacy or authenticity—such as Jack Daniels and Arla.⁶ Cadbury has created its own ‘traditions’ for example. Politicians and political groups have also created their own narrative.

Pamela Laird (2017) has shown how the neo-liberalist turn since Margaret Thatcher has turned to a story of the self-made man to exclude any sense of community and put individualistic profit at the top of the agenda. Such ‘power’ stories usually exclude women of course.⁷ Yet such ‘a narrative also has to be viewed as truthful to its target audience;’ or at least to have credibility.⁸ Yet historical texts, or what is in the archive, ‘do not provide direct access to events of the past, but rather mediate those events through language;’ including that of Joshua Johnson, whose readers (his partners) had ‘a stake in the events described’.⁹ Strangely however,

⁵ Haggerty and Haggerty (2010). Philip Garnett and Simon Mollan (2015).

⁶ William M. Foster, Diego M. Corailola, Roy Suddaby, Jochem Kroezen and David Chandler (2017); Mordhorst (2014). See also Andrew Brown and Edmund Thompson (2013) and Michael Rowlinson, John Hassard and Stephanie Decker (2014).

⁷ Gabrielle Durepos, Alan McKinlay and Scott Taylor (2017).

⁸ Mordhorst (2014, 119).

⁹ Elizabeth M. Tyler and Ross Balzaretta (2006, 2); Ross Balzaretta (2016, 190).

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historians have not brought these two strands, networks and narratives created by the author(s), together. This is the aim of this article.

We posit a new methodology using SNA and VA together to explore the network narrative of Joshua Johnson. We not only look at those within his network (the network actors), but also the events discussed in that network (the network narrative). Moreover, we do this over time to show how both the network actors and the network narrative changed over time. This was often iterative, as who was in the network changed what was talked about and vice versa; indeed, Joshua Johnson was in many ways creating his own ‘rhetoric’ for his audience, as indeed, to some extent, are we as authors of this history.¹⁰ We could find no accepted definition of a network narrative. However, in the wider literature, a network comprises a set of actors and the relations between them and the network itself; narrative is the discourse in relation to network events or effects. We therefore define a network narrative as “*The discourse with regard to a set of actors, their relationships and events pertaining to them over time.*”

The discourse changes network relationships, and vice versa, in reaction to exogenous and endogenous events. The network narrative is therefore something that evolves over time rather than remains static. In this paper, we take snapshots of this evolutionary process to demonstrate the dynamic nature of network narratives.

The rest of the article is organized as follows: the first section introduces the case study of Joshua Johnson; the second sets out the methodology. The third and main section analyses Johnson’s letterbook using SNA and VA over time; the fourth discusses and proves the veracity of this methodology; the last briefly discusses its wider use and concludes. We argue that using SNA and VA together to discuss network narratives over time produces a unique methodology, and one that is particularly suitable for digitised sources and ‘big data’. It is designed to highlight trends in network actors and network narratives simultaneously, to provide a focus for the more in depth and iterative research of digitised sources.

¹⁰ Mordhorst and Schwarzkopf (2017, 1157); Popp and Fellman (2017, 1243).

Case Study

Joshua Johnson (1742-1802) was born into a large Maryland family.¹¹ He set up in business with his partners Charles Wallace (1727-1812) and John Davidson (1738-1794) on April 22, 1771. They had all been active businessmen in Annapolis beforehand, but this partnership, setup with equal shares, was intended to take advantage of the growth in Atlantic trade in the eighteenth century. Wallace and Davidson were to stay in Annapolis and remit bills of exchange for the goods Johnson exported from London. Johnson was to go to London and buy goods in person for a competitive price, and to ship them to Annapolis.

Johnson arrived in London in June 1771. London was a good choice. Despite the rise of out ports such as Liverpool and Bristol, London remained dominant. This was partly because with the crown and courts being located in the same area as the largest port, social and business life centered around London. Furthermore, the ‘mercantilist’ political economy of the period meant that the major trading monopolies such as the Royal African Company and the East India Company also had their offices located there.¹² Indeed, London’s markets were helping to ‘nationalise’ Britain, even more than any ‘linguistic’ engineering through the increased publication of grammars and dictionaries such as that of Samuel Johnson in 1755.¹³ Johnson joined some 1,300 individuals and firms involved in overseas trade that, by 1770, was worth £19.1 million.¹⁴ In the Royal Exchange, one could purchase goods from all around the world: Indian silk, Chinese tea, Barbadian sugar, and Virginian tobacco.¹⁵ During the eighteenth century, the revenue generated by items such as sugar, tea and tobacco increased fivefold.¹⁶ Indeed, imports of tobacco

¹¹ This potted history is based on *JLL*, introduction. For a wider history of the firm and trade in Annapolis see Edward C. Papenfuse (1975).

¹² Elizabeth Mancke (2005).

¹³ Johnson was part of a homogenisation process of the English language started by Dryden, Defoe and Swift. Manuel De Landa (2000, 232-234).

¹⁴ Perry Gauci (2007, 82-83).

¹⁵ Gauci (2007,11). For more on London’s seventeenth-century trade see Nuala Zahediah (2010).

¹⁶ William J. Ashworth (2003, 47). For the importance of tropical goods to empire see also Carole Shammas (2000, 163-185).

rose from a value of £395,000 in 1770 to £526,000 in 1774.¹⁷ Johnson and his partners therefore made a good decision to have direct contact in London, and things went well until the 1772 credit crisis, an event they could not have foreseen. The 1772 credit crisis was precipitated by the closure of the Scottish banking firm Neal, James and Fordyce in June 1772. Panic quickly spread around Britain and the Atlantic world more generally as credit contracted and many firms went bankrupt.¹⁸

Source and Methodology

Joshua Johnson wrote regularly and in length from London to his partners in Annapolis. As none of them had been to London before Johnson felt the need to be expansive about the people he met and the business practices he encountered. This, and the fact that he was writing to his partners means that the letters are comparatively open as compared to normal business letters. They tend not to follow a ‘normal’ business format in that they mix private and personal matters and have more gossip than those that might have been written for a formal business associate—some of which were meant to be read openly in coffee houses or taverns, as Toby Ditz (1994; 2000) suggests. These letters were clearly for private consumption. We could argue therefore, that they are more unguarded and honest. Coupled with the fact that these letters were written during a period of crisis further adds to the anomalies with this source. We also have only the letters Johnson sent to his partners, the letters sent to him in return have been lost.¹⁹ We have only a one-sided conversation; an ego-centric view. We also acknowledge that there may have been other people in Johnson’s network that he did not talk about in his letters; but we cannot know this.

We are lucky however, that many of the letters sent by Johnson have been collated by historian Jacob Price.²⁰ Furthermore they have been

¹⁷ B. R. Mitchell and Phyllis Deane (1962, 288). Despite the fall in tobacco prices, the crop remained an important source of government revenue and was increasingly and controversially taxed and regulated. Ashworth (2003, esp. 67-82, 170-176).

¹⁸ On the causes and consequences of the 1772 credit crisis see Henry Hamilton (1956, esp.405-406) and Richard Sheridan (1960).

¹⁹ The original letters are held at the Maryland Hall of Records, Private Accounts, 1507.

²⁰ *JJL*.

digitized and are freely available.²¹ This makes them particularly suitable for a textual analysis using SNA and VA (discussed below). The edited collection covers the period from when Johnson arrived in London in June 1771 to when the American colonists' Non Importation Agreement came into force in August 1774.²² In order to analyze change over time we have imposed a series of time periods to Johnson's network narrative. In many ways this is an arbitrary process (a researcher analyzing a diary of one month might analyze by the week or day for example) but argue that periodization is an essential element in analyzing networks. We have chosen, in order to make the data both manageable and meaningful, to separate the data into six periods of six months and a seventh period of three months to the end of the letters.²³ These roughly correspond with important contextual exogenous events as per Table 1. Our methodology therefore assumes some contextual knowledge of the researcher's period in order for them to impose their own periodization, but not knowledge of the wider contents of the source.

In order to visualize and analyze Johnson's network narrative, we developed *TagSNet*.²⁴ This software enabled us to conduct both types of analysis with one application. However, freely available online software such as Pajek or Gephi and Wordle could likewise be used by others to the same end.²⁵ Such tools and techniques are important as they quantify and summarise data to create new information (or narratives) from data sources. Moreover, data visualization may be used to alleviate the

²¹ Available online at British History Online, <http://www.british-history.ac.uk/source.aspx?pubid=233>, accessed June 13, 2017.

²² The original letters continue to 1777 which was when Johnson left London. He did rather well for himself, and his daughter married John Quincy Adams. For more on the various Non Importation and Non Exportation Acts and agreements see Arthur Meier Schlesinger (1918). Price also edited out many of the personal details when transcribing the original as they may have been seen as unimportant to business historians. However, these personal relationships were an integral part of Johnson's network, even more so when he was conducting business from afar and facing personal difficulties. This is yet another level of the historian creating the narrative.

²³ In fact, the analysis was conducted on a monthly basis, but the resulting discussion would be overly long and obtuse.

²⁴ For further details of this software see Haggerty, Haggerty and Taylor. (2014).

²⁵ "Wordle", available from <http://www.wordle.net/>, accessed June 13, 2017.

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overheads of interpreting textual information, to identify trends and relational information, and improve the researcher's ability to make sense of patterns contained within their sources that would not be obvious when reading a text document normally.

Table 1
Context for Periodization of Johnson's Letterbook

Period	Events
Jun 1771-Nov 1771	Boom and calm in colonies following end of Non Importation
Dec 1771-May 1772	Continued credit extension and political calm
Jun 1772-Nov 1772	Credit crisis following closure of Neal, James, Fordyce & Brown on June 10; bankruptcies
Dec 1772-May 1773	Tobacco prices fall; bankruptcies continue
Jun 1773-Nov 1773	Tobacco prices remain low in Virginia and Maryland
Dec 1773-May 1774	'Boston Tea Party', December 16
Jun 1774-Aug 1774	Non Importation agreement re-introduced

The online version of Johnson's letter book contains approximately 96,000 words, not including the headers, introduction and footnotes, and covers 450 network actors. As mentioned above, Johnson's network is ego-centric. To counteract this, when analysing these actors we have not used a simple frequency analysis. Rather, the actors are considered in relation to one another. Importantly then, the actors' node size in the visualizations below reflect when they are mentioned within the same period in relation to other actors. The actor node size is therefore a measure of the level of concern of that actor in relation to other actors at the same time.²⁶ For example, if an actor was mentioned in relation to other actors

²⁶ Other network tools such as Pajek or Gephi do not perform this type of "bubbling" analysis. The closest measure would be "closeness", though this is still based on frequency. V. Batagelj and A. Mrvar (2015), "Gephi.org" (2015); J. Feinberg (2014). We are aware of "R" and "Palladio", which do make social

within a single time period (i.e. six months in this study) then their node size reflects the number of other actors with which they were mentioned. If they were mentioned in the next period with yet more actors, the node size increases to reflect the other new actors with which they were mentioned, and so on. Using Price's index, we were able to locate the actors spatially, although this is not necessary. In the visualizations below, Johnson is center right; his London networks to the right; his captains in the middle; and his American networks to the left.²⁷

In terms of Johnson's narrative, the words *are* analyzed simply in terms of frequency. However, as is usual with text mining software, *TagSNet* introduces sensitivity levels which reduced the level of 'noise' of common words and definite or indefinite articles. This is common practice in computer science-known as 'stop lists'—whereby words or data items are ignored during data processing to filter out those that do not affect the results. Their omission does not detract from the analysis and facilitates the easy identification of concerns in the narrative. The text is shown with the most frequent words in a larger font size, akin to tag clouds commonly found on the Internet.²⁸ We did not try to link or analyze 'suites' of words or to impose specific meanings on them at this point. This would assume previous knowledge of the text and would, to some extent, force a narrative onto that text. It would also periodize the methodology itself. In most cases, the words are contextualized by other words in the tag cloud for that period. In the visualizations below, the larger the node or word, the more important, or of concern, the actor or content was to Johnson. We argue that, together, these visualisations facilitate a novel analysis, over time, of the people and concerns within Johnson's (and indeed, anyone's) network; the *network narrative*. Throughout our analysis below we highlight which actors or themes would require further investigation as

network analysis more easily accessible, but they do not perform anything that Pajek or Gephi do not already do. See <http://kateto.net/networks-r-igraph> and <http://hdlab.stanford.edu/palladio/>. Neither argue for network analysis by time period.

²⁷ Where the locations of actors were elsewhere or not known they were placed centred above or below Johnson.

²⁸ See for example "Wordle", available from <http://www.wordle.net/>, or "tagxedo" at <http://www.tagxedo.com/gallery.html>.

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part of this iterative methodology. We did not visit the archives and resolve these queries here, but in the discussion section we do use Price and Papenfuss to discuss some of the actors to prove the methodology.

Joshua Johnson's Network Narrative Analysis

Period 1: June 1771- November 1771

This section considers Johnson's network between his arrival and his setting up of the London house, a period of general calm and boom in the American trade. There are 97 actors shown in Figure 1. Clearly Johnson built up his network quickly in London during his first six months, although he may have corresponded with some of these actors previously from Annapolis. Of note in London (to the right) and worth further research are those with larger nodes and, therefore, relatively more important (from top to bottom): Zachariah Hood, John Buchanan, Mathias Gale, J. Hobson, Thomas Philpot, William Molleson, James Russell, and O. Hanbury & Son. Note Osgood Hanbury alone as a smaller node top left of the right column, and Hanbury, Taylor, Lloyd & Bowman middle left; clearly Osgood Hanbury was very important overall. David and John Barclay are also present. Mr Crisp (top) was a crimping agent (agents used for recruiting servants) and was clearly important for setting up the house, although he does not appear again. All these actors deserve further research. Johnson was quick to start arranging shipments. Twelve ships' captains (center) were already being discussed. Of these, W. Carcaud, Thomas Williamson and Capt Blackwell appear as the most important. In Annapolis (to the left), it is clear that the firm and family members were important to Johnson. For example, Wallace, Davidson, Johnson (the firm) and John Davidson and Charles Wallace, to whom he wrote separately as well. Mr Love, Anthony Stewart and John Dorsey also appear as relatively important. However, many of the larger nodes are members of his immediate family and circle: Mrs Nelly Davidson, master William Davidson, Mrs Cathy Wallace, Mrs Nancy Johnson (his mother?) and Thomas Johnson jnr (his brother?). There are also a few women who may have been family friends: Mah Strahan, Miss Peggy Strahan and Miss Turner.

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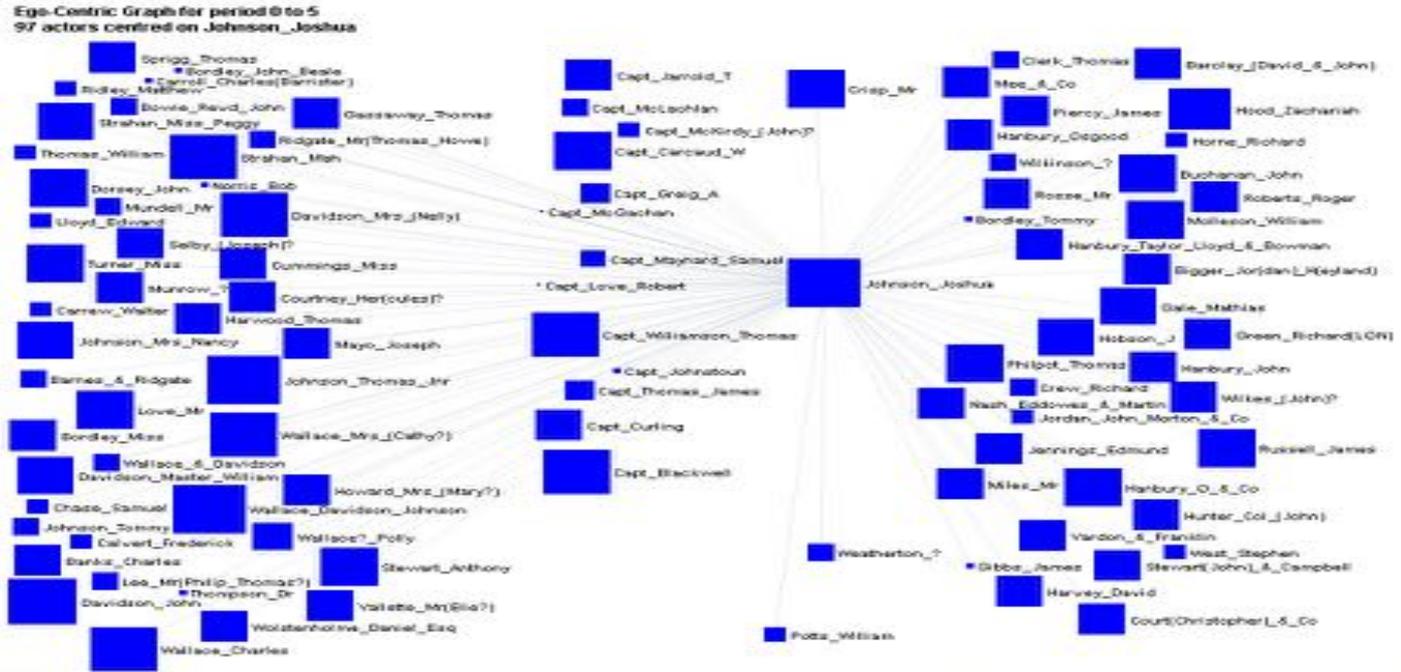


Figure 1

Network Actors Period 1

Key: North America to the left; Ships' captains center; London to the right; others centered above and below Johnson: Larger nodes denote a higher level of concern.

concerns.²⁹ Wallace and Davidson appear, but so does Hanbury, Capt, and goods, which also point to the importance of getting commodities shipped to Annapolis from London. Figure 2 clearly highlights a sense of putting the vessels for shipments into motion and the urgency of getting things correct and these themes require further attention.

Period 2: December 1771- May 1772

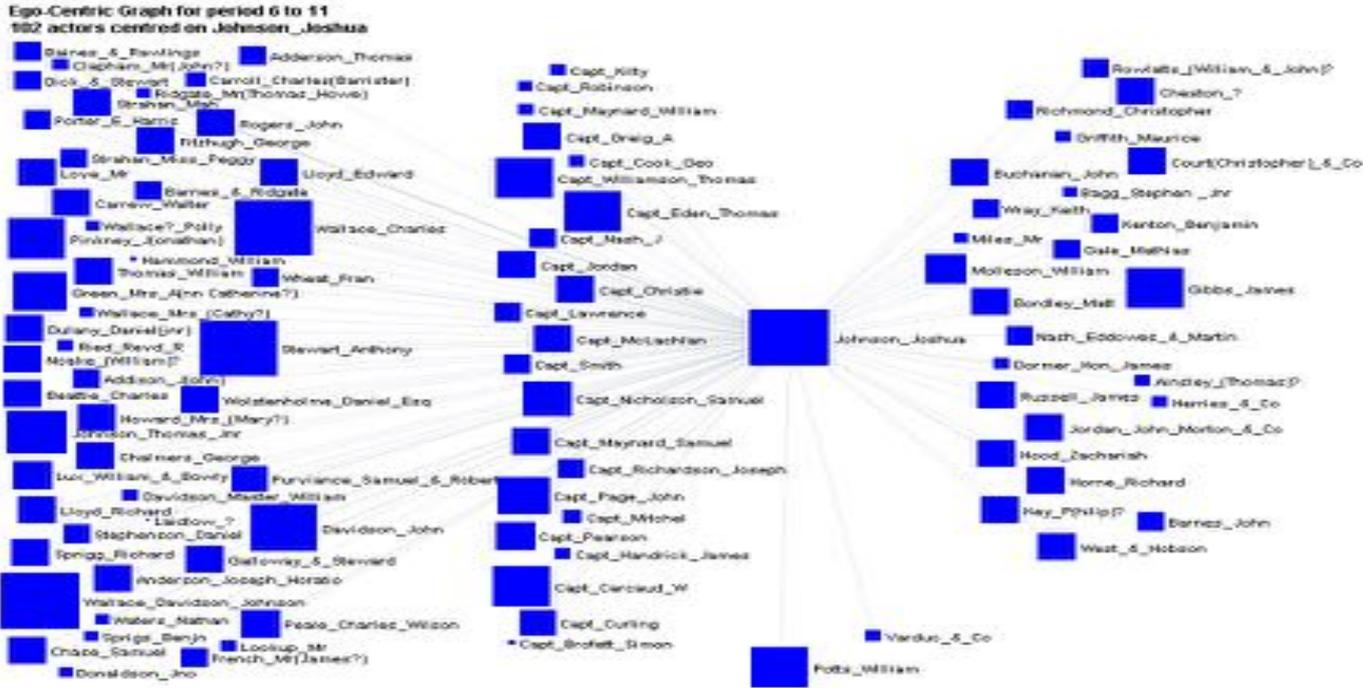
During the latter part of Johnson's first year, his network increased slightly to 102 actors, much of which seems attributable to the large numbers of captains used to convey the letters and goods to Annapolis. Indeed, his London network appears to have shrunk slightly, despite the continued credit extension during this period.³⁰ Many of the actors that were important to Johnson when he was setting up seem less so in period 2. This suggests that actors earlier identified as useful for setting up the business became less so as Johnson established himself in London and the focus moved to shipping goods to Maryland. James Gibbs was clearly the most important actor, despite being a very minor actor in period 1. John Buchanan, William Molleson, James Russell, Zachariah Hood and Hobson (as West & Hobson) are still present, but less important. Christopher Court and Co. is still present, but no more or less important, whilst Matt Bordley appears as a new, relatively important addition. Osgood Hanbury is notably absent and this requires investigation. William Potts, Johnson's lone correspondent in Barbados (bottom center) has become far more important. Perhaps Johnson was trying to increase trade with the Caribbean or to extend his network beyond London and Annapolis. Vardue was a merchant of Cadiz who went bankrupt. It would be worth checking whether this had any adverse effect on Johnson's finances.

In terms of ships' captains, there were nearly twice as many as in period 1, 23 in total. Thomas Williamson remained important, as did W. Carcaud, whilst Capt. Blackwell has disappeared from view. In his place was Thomas Eden, not mentioned in period 1. Others who appear as

²⁹We have assumed bill(s) refer to bills of exchange as we do not see lading referred to as reference to bills of lading. Our thanks, however, to Peter Buckles for raising this issue.

³⁰See Table 1.

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Key: North America to the left; Ships' captains center; London to the right; others centered above and below Johnson: Larger nodes denote a higher level of concern.

Figure 3
 Network Actors Period 2

relatively important are Samuel Nicholson and John Page. Clearly many more ships and shipments are being discussed as Johnson's trade increased. An eye should be kept on these captains to see who is reused and presumably trusted. During the second half of Johnson's first year in London, his networks in Annapolis clearly expanded, although it is clear that the firm and his partners remain dominant. His family were also still present, and his brother Thomas more so. Anthony Stewart also appears as very important and we would need to investigate why this was so. Jonathon Pinkney (center left) was not present in period 1, but Johnson was now quite concerned with him. Mr Love was still present, but had declined in importance during this period. Again, these actors with larger nodes require further research—especially as to why their importance changes over time.

In terms of *what* Johnson was talking about, Figure 4 shows that goods became even more important than in period 1 as he tried to increase his trade. Out is presumably linked to goods shipped out.³¹ Captains have also become more important as he arranged the shipment of those goods. Interestingly, hope is important—a sense that Johnson is hopeful about his future in London and the partnerships' success, and shall is perhaps linked to this.³² His partners also appear as important words, as do sent and account. Smaller than in period 1, but important together, are words such as invoice, money, letter, bill, bills, credit, order, business and enclosed, which all point to normal business activity. Overall, however, a sense of hope for the future seems to pervade. Figures 3 and 4 demonstrate the way in which the network narrative has moved on from early plans in the previous period to one where business is conducted with customers.

³¹The software identifies single words rather than phrases.

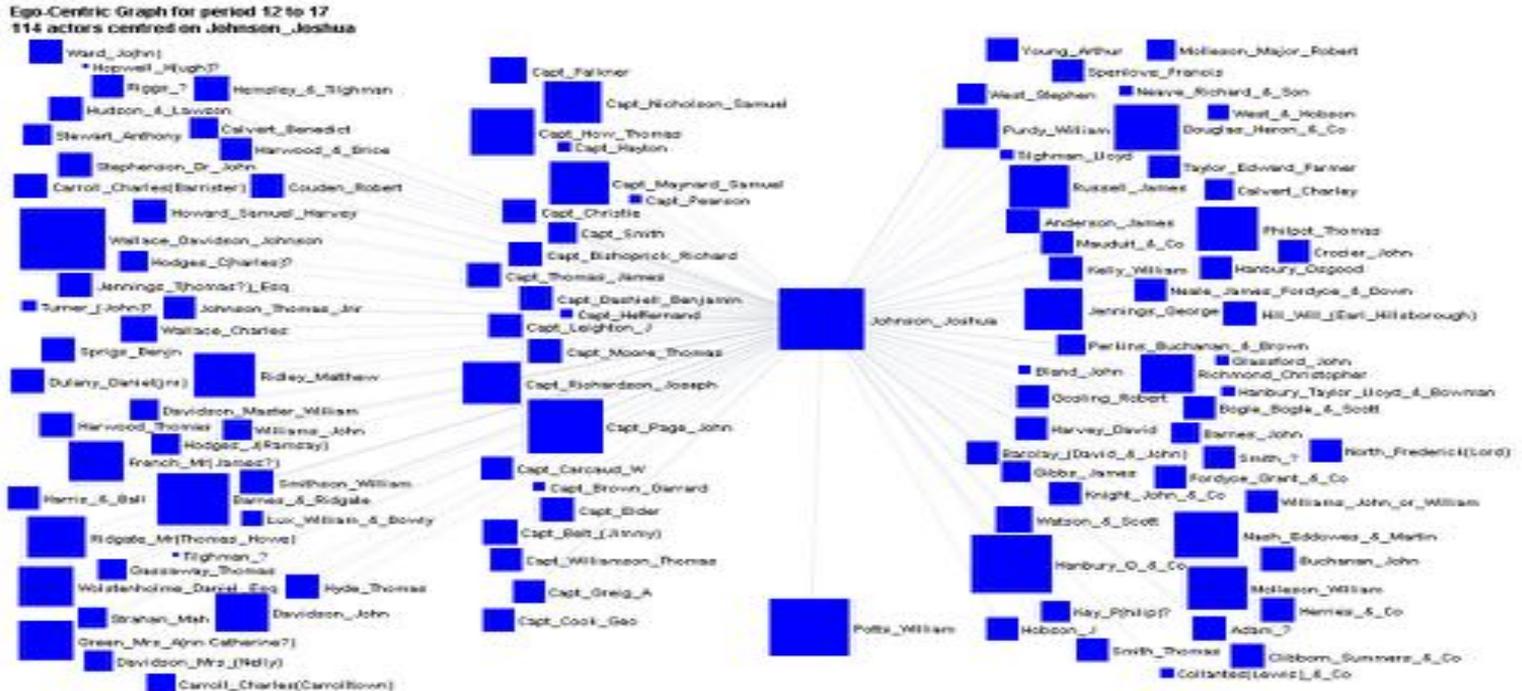
³²Shall denotes a future condition that some future event is inevitable. Clearly Johnson intended to act as this is an authoritative declaration. A. H. Tolman (1892, 112-14).

business developed. James Russell and William Molleson remain important, but others have come into the frame too. These include Douglas, Heron & Co. (who were closely linked to James, Neal & Fordyce, the banking house that failed), Nash, Eddowes & Martin, George Jennings and William Purdy who all should be researched, as should Thomas Philpot (middle right) who reappears as relatively important as in period 1, but was absent in period 2.³³ It would be beneficial to find out in which commodities these actors dealt to determine whether Johnson's concerns with them were as competitors or customers. The Barclay brothers (center-bottom left) were still in his network if not much discussed, as was John Buchanan. William Potts in Barbados remained very important perhaps due to his location outside the main areas affected by the credit crisis and the possibility that Johnson was attempting to extend his network in the British Caribbean.

Twenty-two captains (down from 23 in period 2) were mentioned in this period, suggesting that Johnson was still expanding his shipments of exports. However, W. Carcaud and Thomas Williamson now appear as relatively unimportant. This may suggest a falling out or be simply due to the seasonal and temporal nature of shipments. For example, Thomas Eden, so important in the previous period does not appear. In turn, John Page is clearly the most important captain in this period, with Samuel Nicholson, Thomas How (Ridgate?), Samuel Maynard and Joseph Richardson appeared as relatively important. Again, it would be good to know if these changes were due to personality clashes or simply a change in trade destinations and/or who was available. In Annapolis, the firm was still the most important actor, as were Charles Wallace and John Davidson separately. Barnes & Ridgate (bottom center) was present in periods 1 and 2 but unimportant here. This needs investigating, especially considering that Thomas How Ridgate was also noted as quite important separately (bottom left). Matthew Ridley (center) was also relatively important, whilst [Anthony] Stewart faded into relative insignificance. Daniel Wolstenholme was also important in period 3, as was a female correspondent, Anne Green (both bottom left). We can see therefore that as the business developed, so did the Maryland end of the network. Again, the new and re-emerging actors require further attention.

³³Hamilton (1956).

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Key: North America to the left; Ships' captains center; London to the right; others centered above and below Johnson: Larger nodes denote a higher level of concern.

Figure 5

Network Actors Period 3

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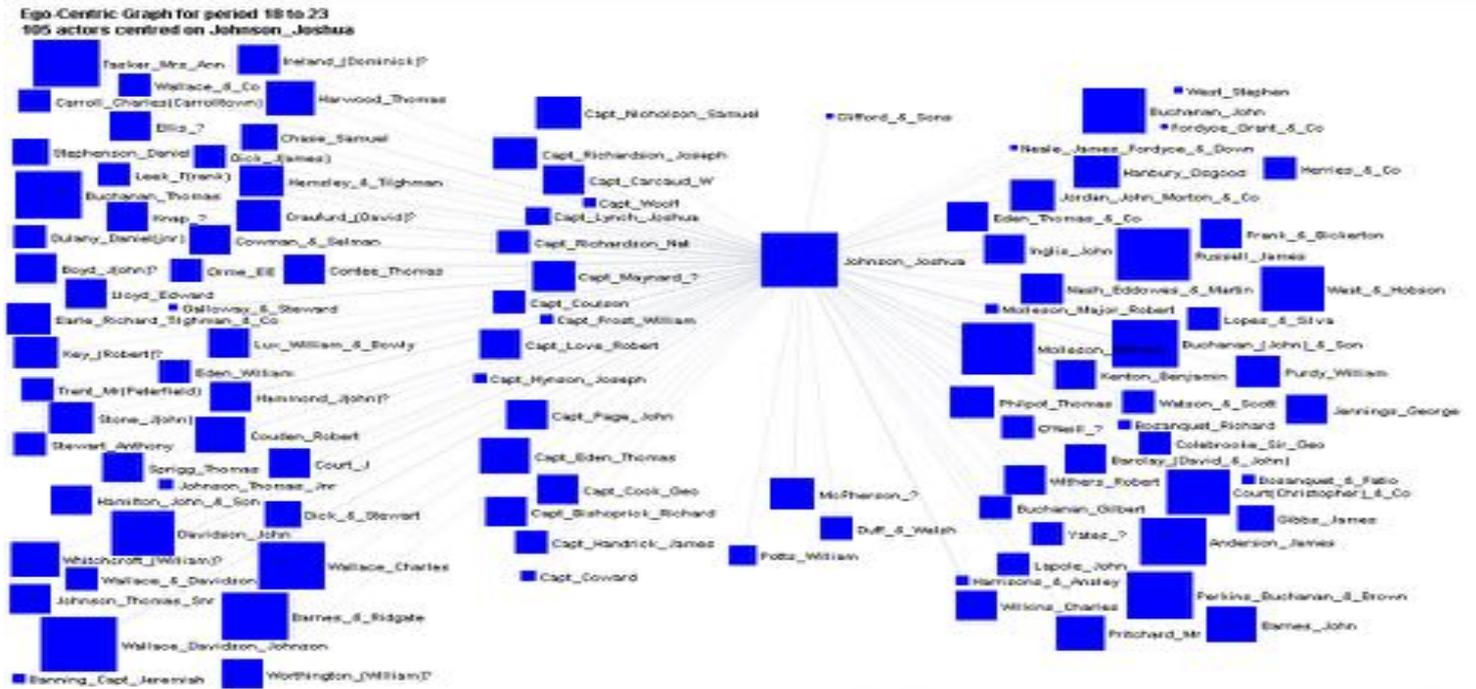
and commodities to overcome the credit crisis. Tobacco's absence in period 1 and 2 is noteworthy considering that tobacco was Maryland's export. We have to ask why this appeared only now. Figures 4 and 5 together demonstrate that exogenous events are driving the network concerns and the network itself, as Johnson attempted to minimize the effects of the credit crisis on his business endeavours.

Period 4: December 1772 – May 1773

It is clear from Figure 7 that during the winter of 1772-73, Johnson's network decreased slightly, to 105 actors. In London however, there were a large number of people who were important to Johnson. This may be because he was talking about them with regards to the continuing widespread bankruptcies. They included James Russell, West & Hobson (J. Hobson?), and William Molleson (and major Robert Molleson). Interestingly, John Buchanan, and his firm John Buchanan & Son, returned as significant actors and require further research. Relatively important were Christopher Court & Co., James Anderson, and Perkins, Buchanan & Brown (John Buchanan in another firm?). Osgood Hanbury and the Barclay brothers are also still present, but relatively unimportant compared to period 3. Perhaps Thomas Eden & Co., was the captain already noted, or his father's mercantile house, as Thomas Eden was still named as a captain. William Potts in Barbados has declined in importance; Johnson did not seem to want or be able to expand his business in the Caribbean. However, he was discussing Duff & Welsh of Cádiz, so perhaps he was trying once again to inculcate trading relations there. Clifford & Sons (top center) were an Amsterdam firm. There is a suggestion here that as the credit crisis came into effect Johnson was looking to diversify markets, and this needs confirming.

As a group, the captains appear to be slightly less important than in the previous period; indeed, there are only 17 of them in this period. This may have been because trading activity declined in the aftermath of the crisis and Johnson had fewer goods to ship. More significant were Samuel Nicholson, W. Carcaud (again), Capt Maynard, Robert Love, John Page, Thomas Eden, George Cook and Richard Bishoprick, a relatively wider spread than in previous periods. In Annapolis, the firm and its partners remained important. However, John Buchanan and Barnes & Ridgate

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Key: North America to the left; Ships' captains center; London to the right; others centered above and below Johnson: Larger nodes denote a higher level of concern.

Figure 7

Network Actors Period 4

ask, why, when Johnson was trading with Maryland, a tobacco colony, this word only appeared in periods 3 and 4. It certainly suggests that he was going into a new line of importation. This might help to explain the increased size of his network in North America, which would be required for such a venture.

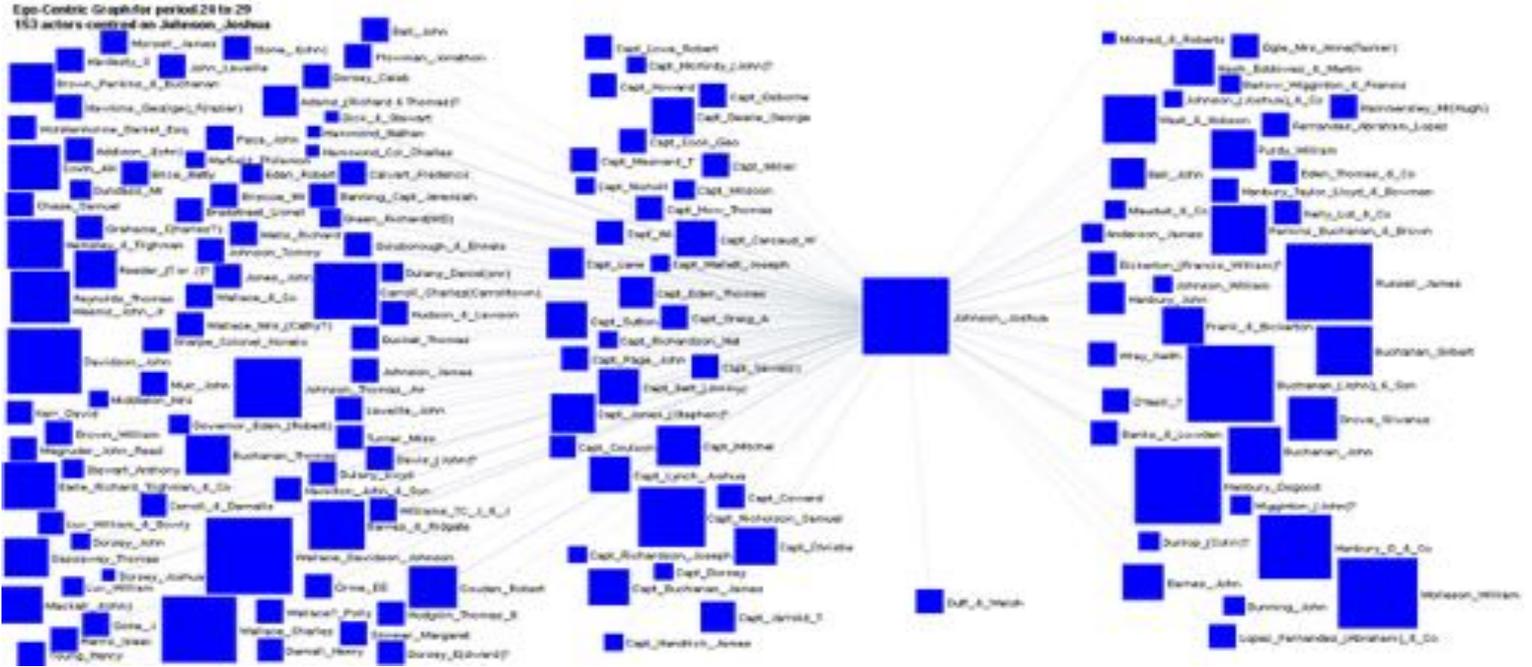
Period 5: June 1773 – November 1773

Figure 9 shows that Johnson's network significantly increased in the latter half of 1773, up to 153 actors. It appears to have grown most significantly in terms of captains and in North America, possibly in line with a new trade in tobacco as noted above. Tobacco prices were low at this point in Virginia, so it may have been a good time to invest in it—compared to those who lost out having already been invested in tobacco.³⁶ In London, James Russell, John Buchanan & Son (and John Buchanan alone), Osgood Hanbury (and O. Hanbury & Co.) and William Molleson all appear as significant, and relatively more so than in period 4. This group deserves more attention. West & Hobson's London firm are again present, as are Perkins, Buchanan & Brown but they appear to be less important. Nash, Eddowes & Martin reappear too. Silvanus Grove appears as a new actor as well. William Potts of Barbados is missing in this period. Duff & Welsh of Cádiz remain, if not as important. Perhaps, as Johnson moved into the tobacco market, he was less concerned with diversifying his business beyond Maryland and London into the British Caribbean.

The number of captains has jumped to 34, suggesting a significant increase in the volume of Johnson's trade or at least a reaching out to potential business contacts within the wider network. Samuel Nicholson is clearly the most significant captain, but other favored (presumably reliable and trusted) captains remain too: Robert Love, W. Carcaud, John Page, Capt Coulson, and Capt Christie. There are various other new captains too. It is worth noting Capt James Buchanan who was possibly related to John Buchanan of London, and was possibly undertaking to learn the Atlantic trade first hand. If so, this network was becoming more important to Johnson. As ever, the firm and his partners remain the most significant

³⁶See Table 1.

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Key: North America to the left; Ships' captains center; London to the right; others centered above and below Johnson: Larger nodes denote a higher level of concern.

Figure 9

Network Actors Period 5

actors in America, despite the fact that his networks there have increased dramatically, possibly due to the interest in tobacco. Charles Carroll of Carrolltown (center right), present before but not worth mentioning, was now relatively important. Also relatively important were Thomas Reynolds and John Weems (center left) and Robert Couden (bottom right). Anthony Stewart remains insignificant, as do Brown, Perkins & Buchanan (top left). These actors all require further investigation. Noticeably absent were the female family and friends, although Betty Brice (top left), Mrs Cathy Wallace (center), Mrs Middleton (center left), and Miss Turner (bottom right) are present.

Tag Cloud of jan1773 to nov1773 in P:\JL\letterbook\MonthTags.txt
 19122 of 95945 words searched in file
 Sensitivity level: 3 | Font Size: small



Key: A larger node reflects the relatively higher usage of the word in the period.

Figure 10
 Tag Cloud Period 5

Figure 10 clearly highlights the word would, which together with must, most and make, points to a sense of insecurity. Hope, fear and distress add to this understanding. The many captains are also highlighted, but other

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words of importance include bills—which alongside credit, creditors, and protested (bills of exchange) demonstrate that credit was still an issue as the bankruptcies and insecurity continued. Business is also quite prominent—as are goods—so there are signs of hope amongst the insecurity. Tobacco is again clearly highlighted and still prominent—again, this needs following up. Also noteworthy are the names Hanbury (Osgood) who has been noted previously, but also Buchanan and the captain, Nicholson. Clearly together these actors are important to Johnson's story. Philadelphia is also noted, probably another sign of an increasingly varied business portfolio.

Period 6: December 1773 – May 1774

The number of actors declined slightly to 140 in period 6, perhaps things were settling down a little after the credit crisis. Alternatively this could be a reflection of the increasing tension following the 'Boston Tea party' in December 1773. Overall, however, quite a number of people seem relatively important. In London, William Molleson and James Russell appear as the most significant actors, further confirmation that a relationship was building in that regard. However, West & Hobson, Hanbury & Loyd (and also O. Hanbury & Co. and Osgood Hanbury) appear again as important, possibly due to their roles in the provision of credit in an otherwise turbulent market. Others actors remaining from previous periods are James Anderson, Thomas Eden & Co., and Silvanus Grove. In contrast, Christopher Court had declined in importance, as had Nash, Eddowes & Co. and John Buchanan & Co (but see text on captains below). Worth noting are Fernandes Abraham Lopez (top), his firm (Abraham) Fernandes & Co. (towards bottom), and Moses Israel Fonseca, which together further suggest a renewed interest in the Spanish connection noted earlier with Duff & Welsh—who are still present, if not very significant. William Potts is present once again, suggesting the Barbados relationship was still in play, even if connections were not increasing in that area.

Quite a few of the captains remained important, even within the increased number, now 36. George and James Buchanan appear as the most important – a relationship noted in period 5, which appeared to be

In terms of conversation, the increased number of captains is reflected in Figure 12, as is the significance of the Buchanan family. Ship, goods, and capt point to a further increase in the volume of trade. Other prominent words are shall and would; importantly, tobacco has also become more significant. Nelly and kitty appeared, if not as very important (kitty was present in period 5 but was insignificant). It would be good to know who or what were Nelly and kitty were. Bills, business, sales and insurance all point to finance, but as protested is now much less significant and hope larger, we get a sense in a change of fortunes, of positivity. This is interesting given the increasing tension between Britain and the American mainland colonies following the ‘Boston Tea Party’ of December 1773. It also highlights the fact that we cannot be anachronistic and read the past backwards.

Period 7: June 1774 – August 1774

The smaller number of actors (75) reflected in Johnson’s network in Figure 13 is partly a reflection of the fact that this period covers only (the last) three months of the edited letters. It may also be a factor of the increasing tension between Britain and the mainland colonies which resulted in Non Importation being re-introduced in August 1774. The number of actors in London has significantly reduced which would suggest allegiances were being formed and/or points to the heightened tensions between colonists and Britons. However, some familiar names persist. These include William Molleson, who definitely deserves more attention, as does James Anderson. The relationship with the latter may have developed, as a Mrs James Anderson is also noted. Thomas Eden & Co., relatively important, was joined by Stephen West, Kelly Lot & Co. (both bottom) and Thomas Williams. Christopher Court & Co. also remained, but were not significant. Hanbury & Loydare mentioned, but not Osgood Hanbury alone or as his firm. Herries & Co. make a small reappearance. William Potts of Barbados was once again absent, but so too were any references to the Cádiz connection—perhaps that did not work out. Lanton & Brown (top) is the first time Cork appeared as a new connection.

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Ego-Centric Graph for period 36 to 38
75 actors centred on Johnson_Joshua



Key: North America to the left; Ships' captains center; London to the right; others centered above and below Johnson: Larger nodes denote a higher level of concern.

Figure 13

Network Actors Period 7

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In terms of narrative, Figure 14 shows another hopeful picture, despite the tensions. Capt, as in period 6 is still dominant, as are goods and out—presumably together talking about exports (cargo is also present but less significant), as is peggy. Tobacco was still prominent, as are would, should, and shall—plans for the future? Hope was also prominent (and better too, if less prominent). This could be seen as a sign of positivity and investment. Fear is present, but so is pleased. Stewart is also present and suggests concern with Anthony Stewart of the Annapolis network.

Discussion

Using SNA and VA together demonstrates that even within a relatively small network, the number of actors can change significantly over time, and that the importance of those actors can change relative to one another over the same period. It is also noticeable that what was being discussed by the network, the *network narrative*, also changed temporally. Clearly there is a life cycle of the actors but also of the narrative.³⁷ Moreover, this iterative methodology raises questions about those actors and their narrative. With regards to this case study for example:

- Who was Osgood Hanbury (and his associates), and why was he important to Johnson's firm?
- Who were the Buchanans, and in what way were they connected to Johnson?
- How and why did Johnson's network in North America expand so much?
- Why did Johnson not appear to be involved in Maryland's main export, tobacco at first; and why did he move into it at some point?
- Was Johnson's sense of panic and hope justified?
- Who or what were peggy, nancy and kitty?

Such questions should form part of an iterative approach driving the researcher back to the archives to look for those individuals and themes highlighted. To prove the veracity of this approach we revisited Price's introduction, index, the letters themselves and Papenfuse's *The Pursuit of*

³⁷John Haggerty and Sheryllyne Haggerty. 2011.

Profit. It is not possible or necessary here to go through all the actors and narratives identified, but taking a closer look at some of them is illustrative.

A good place to start is in London with Osgood Hanbury and his various firms. Hanbury was one of an elite group of Quaker merchants trading to North America, along with Silvanus Grove and Mildred & Roberts. Osgood Hanbury & Co. was the wealthiest firm importing tobacco into London at this time and it may be that, in exchange for his support, it was expected that Johnson's firm was not to import that commodity. Indeed, Johnson took a letter of introduction to Hanbury with him to London, along with various bills of exchange drawn on him. However, Hanbury was not that helpful to Johnson, becoming suspicious when Johnson prospered. This is reflected in the network diagrams with Johnson's level of concern regarding Hanbury changing from period to period depending on his business activities. This despite the fact that Hanbury started withdrawing from tobacco and moved into banking from 1770 onwards, along with the Lloyds and Barclays—setting up his own bank along with Taylor, Lloyd & Bowman. Hanbury was also instrumental in the demise of Johnson's friends Barnes and Ridgate. Hanbury and James Russell (see below) also began protesting many Bills of Exchange following the crash of 1772. Hanbury's significance, yet reluctance to help, is probably one of the reasons he featured so often, if fluctuating in importance, throughout Johnsons' letters.³⁸ His lack of helpfulness may have meant that Johnson felt no loyalty to him with regards to their agreement over tobacco. However, Hanbury's influence within the wider mercantile community meant that Johnson remained concerned with him over time.

The Buchanans, William (and Robert) Molleson, James Russell and Perkins, Buchanan & Brown all formed another important group of merchants involved in tobacco—they were all Scots. The first three monopolised trade in the best tobacco from the Maryland ports of Patuxent and Patapsco. Johnson may have been jealous of William Molleson, whom he felt always managed to ship in spring and fall to North America first, and also received the first shipments of tobacco in London. However, Johnson clearly worked very closely with John Buchanan and his wider

³⁸In this regard Hanbury was a negative strong tie. Granovetter (1973).

family who may have been well connected to the Glasgow ‘store system,’ although it is not certain without further research that the two Buchanan families were connected.³⁹

Also noted above were Thomas Philpot and James Anderson who were amongst the *old* English firms and also important in the Maryland tobacco business. Most of the other old English firms had better networks with Virginia rather than Maryland, so Philpott and Anderson may have been perceived as competitors. Thomas Eden & Co. and Christopher Court were both part of the *new* English firms—also considered by Price to be quite aggressive in their tactics. As Johnson worked with the latter he may have, being new, employed the same stance in business.

Other minor actors noted include Zachariah Hood, a customs comptroller for Philadelphia in London, and Sir Robert Herries, the French tobacco buying agent, both noted briefly when Johnson was trying to expand his trade. The presence of Iberian names in the last few periods points to a Spanish connection. However, Abraham Lopez Fernandes was one of the few Anglo-Jewish merchants dealing in tobacco during this period. He was the nephew of Moses Israel Fonseca, who had been trying to break into the tobacco trade since the 1750s. Johnson gave them a letter of introduction when they went to Maryland in 1774 to collect debts so they must have befriended each other. William Potts also requires further investigation.

It is clear that as a group the ships’ captains were extremely central to Johnson’s network. Unfortunately the ships’ captains W. Carcaud and Thomas Williamson were not discussed as such in the letters, simply mentioned in passing. However, they were clearly an important part of the network, and we have to assume that their comparative longevity, however fluctuating in the records compared to other captains, was a reflection of their trustworthiness and seasonal trade patterns. Other prominent captains were George and James Buchanan (brothers to Archibald Buchanan of Baltimore), possibly but not necessarily related to the major London merchant John Buchanan (Price does not make this connection). Thomas Eden was also an important captain. Price has him as brother to Thomas

³⁹Archibald Buchanan was from Baltimore. On the “store” system by the Scots in the Chesapeake see Price (1954).

Eden of Annapolis, but also of T. Eden in London. As the T. Eden in London is a Thomas Eden, this requires further investigation.

In North America, Johnson's partners and the firm were the largest nodes in the network, which does not require an explanation. Johnson also mentioned Thomas Johnson, which mostly refers to his brother (though he notes a 'young Tom' on September 4, 1773, who could be a nephew). Other important actors were Barnes & Ridgate, who came from Maryland, but also occasionally had a house in London. Archibald Buchanan of Baltimore was a brother to Captains James and George (noted above). Gilbert Buchanan took over from John Buchanan in Baltimore. Isaac Harris was a merchant and ship owner of Annapolis for whom Johnson occasionally arranged insurance. Thomas Reynolds and John Weems came from Calvert County and were noted as good correspondents. Earle, Richard, Tilghman & Co. (the latter mentioned below) were also prominent in Johnson's network. Further research into these men and their place within Johnson's network is required, as their centrality does not reconcile with their frequency in the letters.

When Johnson talked about goods—he was most likely referring to linen which was his main initial export which he gained through the Barclays (noted above), Nash, Eddowes & Martin (noted above) and David Harvey (not noted). He also purchased woollens and silks from Maudit (mentioned briefly in period 3), and Wright & Co., until they became more stringent in their credit provision in 1773 following the crisis. The clear expansion in the narrative of the importance of goods in the early period was no doubt helped by the fact that Johnson arrived in London with £3,000 in bills of exchange, presumably at short date. This allowed him access to good prices and no doubt earned him a good reputation, facilitating an expansion in trade. After this he was reliant on bills of exchange from Annapolis, which unfortunately came rather intermittently. This may account for the slight reduction in the number of actors in period 4.

Tobacco is first mentioned in period 3, presumably as Johnson started to be annoyed by Hanbury's lack of assistance; but he also seems to have sensed it as a good opportunity. (A feature of this methodology is that we are certain we have not missed such important events in the text in previous periods). However, his partners do not agree with the move into

tobacco until they see a disparity in the prices between Maryland and London after the credit crisis, and when prices are really low in Maryland. Ironically, the situation that caused the failure of many houses already involved in tobacco, seemed to save Johnson, who entered the market just as many others were being forced out in period 5. His Maryland partners purchased tobacco from various firms and plantations, including Archibald Buchanan and (Earle), Richard, Tilghman & Co. (noted above) who were located in Queen Anne County, Maryland, demonstrating the importance of personal networks in both locations. Wallace and Davidson also purchased tobacco from them and other merchants for export, much to Johnson's chagrin. He would have preferred them to deal directly with the planters to save money by buying at source.

Johnson's sense of panic in periods 3 and 4 is quite understandable—most merchants around the Atlantic were also anxious and panicking. Whilst Hanbury and Anderson were busy protesting bills, including those for payment to Johnson's firm in London, many of Johnson's smaller creditors were dunning him. This possibly accounts for the vast number of small actors in Johnson's network in period 3 when there were short-lived concerns around the payment of bills due. At the same time Johnson was still trying to honor bills drawn on him; these included those drawn on him by William Potts to pay for shipments of sugar and rum from Barbados. Johnson was in fact helped out by the leniency (or obligation of forgiveness) of various warehousemen and linen drapers who would rather wait for their money than force people into debtors' prison.⁴⁰

In early 1772 Wallace and Davidson in Annapolis commissioned a ship to be built for their own use. This saved the firm a lot of money in freight—and earned them commission on the same in turn. This vessel was called the *Kitty and Nelly*—highlighted in the tag clouds. She arrived in London in December 1773 and was probably named after Mrs Cathy Wallace and Mrs Nelly Davidson; so these words represent both people and ship. The *Peggy and Stewart* (possibly owned by Anthony Stewart?) mentioned in period 7, were not in fact people, but other ships on which Johnson transported goods.

There are a few actors who appeared as quite important under this methodology, but did not warrant comment by Price. This is a function of

⁴⁰Haggerty (2012).

our software *TagSNet*, which, as noted above, does not look at frequency, but when actors are mentioned alongside, or in the same period, as other actors to elucidate an actor's relative level of concern within a network; for example, Anthony Stewart. When looking at the text of the letters, there is a sense that Johnson was in competition with Stewart, and also that he did not trust him. It would appear that Stewart visited him in London, but withheld information. Similarly, Charles Carroll was a lawyer, but also received shipments from Johnson in Annapolis. Although he was not mentioned very often, he was clearly a central node in the network perhaps due to his influence in the Maryland end of the network. Duff & Welsh were also not really discussed by Price, and yet they were clearly important to the firm. This again was a point highlighted by this particular methodology. The letters demonstrate that Charles Wallace shipped provisions, presumably trans-shipped wheat to the firm in Spain; payment came via Johnson. Lastly, Governor Hutchinson is only mentioned once in the letters, but appears as very important under this methodology; clearly he was mentioned alongside important events possibly due to the frayed relationship between Britain and the mainland American colonies. One last event is also missing, Johnson's marriage to Margaret Nuth—but this is not a reflection on the methodology, but that fact that he tried to keep it secret from his partners. He did not mention it in this set of letters.⁴¹

Using this novel methodology has highlighted both the major actors in his network—the *who*—and the major themes narrated—the *what*. Both network actors and their concerns have been identified using this methodology for further research.

Conclusion

This paper has used the case study of Joshua Johnson, an American merchant in London, in order to demonstrate that using SNA and VA *together* can highlight the network narratives of an actor or actors as part of an iterative methodology. Whilst a case study has been used here several points can be made for adopting this methodology for other research areas.

First, due to the text mining software that has been developed, it is ideal for digitised sources of a textual nature, such as online repositories. This is particularly useful as 'a way in' to large data sets in our age of 'big data.'

⁴¹She does not warrant an Index entry in Papenfuse either.

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Whilst *TagSNet* uniquely allows for the analysis of ‘levels of concern’ of actors, a similar methodology could be used using free online software such as Pajek, Gephi (if not an ego-centric network, use closeness measure for actor relationships) and Wordle (for textual analysis). Second, the approach proposed here brings together both actors (the who) and the narrative (the what) to demonstrate the way in which a network develops in reaction to endogenous and exogenous events. Third, this approach highlights change over time; it is clear that even within short time periods the ‘who’ and the ‘what’ change significantly over time. Fourth, by analysing the data in this way, the *who* and the *what* are highlighted independently of what we expect to see; it is therefore a foil against confirmation bias (for example, tobacco, which we might have expected to see earlier). Finally, it provides an iterative methodology which helps to shape the historians’ research. In this way, historians are able to explore their sources, especially large online data sets, and whilst the analysis may not provide answers to research questions *per se*, it will help shape those research questions.

Networks should not be seen as static; they are dynamic in terms of actors and the narrative concerning the network, constantly changing over time. Furthermore, what that network is concerned about—the narrative—also changes over time. Joshua Johnson was creating his own narrative for his partners, and we are aware that we have indeed also created our own narrative around what he wrote. However, using SNA and VA together and adding a temporal element has highlighted the most important actors and narratives—Johnson’s network narrative.

Acknowledgements

The authors are grateful to the insightful comments of delegates at the British Group for Early American History conference, August 2017, and those of two anonymous referees.

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