



ARTICLE



<https://doi.org/10.1057/s41599-022-01116-5>

OPEN

Women's work on small change: privately issued currency by women in mid-17th century London

Idit Ben-Or¹✉

This paper focuses on privately issued currencies by women in mid-17th century London. These currencies appeared across England as part of a large wave of minting which began during the English Civil War as a result of severe shortages of low value coinage ('small change'), used for purposes of petty trade. In London alone over 4200 tradesmen and businesses issued tokens, only around 140 of these issuers were women. The tokens are a rare visual and material source on the daily life of working women and their self-representation. By contextualizing the issuers' occupations and token designs within the history of women's legal status, this paper will demonstrate that token issuers were likely not under the status of married women. The paper examines who these women issuers were, their occupations, and the legal status that enabled them to become independent active agents within the new commercial sphere of tokens. The paper will demonstrate that the artifact of tokens issued by women is extraordinary within the phenomenon, though the line of work these women did was not unique in the period. The ability of women to represent themselves on a token was likely a direct result of their legal status and the commercial rights it entailed.

¹Hebrew University of Jerusalem, Jerusalem, Israel. ✉email: idit.benor@mail.huji.ac.il

Introduction

The copper token coin depicted in Fig. 1 was issued by Mary Woodfall in the mid-17th century in London. Woodfall was a widow who was a tavern keeper of the Nag's Head, known by the depiction on the reverse side (Berry, 1978, p. 50). This is a typical name of a tavern and an image of a nag's head similar to the one on the token would have likely appeared on the sign ('signboard') which hung outside of the drinking establishment (Lillywhite, 1972). The business was located in Cheapside London, as inscribed on the reverse. Mary Woodfall's token was not extraordinary in the period at all. It was part of a wave of issuing which took place in England between 1649 and 1672.¹ Over 4200 types of tokens were issued throughout London by private tradesmen, retailers, shops, taverns, inns, and ale houses that were used as small change in circulation. The tokens themselves are known by collectors as trade tokens or tradesmen's tokens. Local civic institutions outside of London such as city and town corporations issued unlicensed tokens in many locations as well, but in London all issues were by private actors (Dickinson, 2004; Williamson, 1889). Economically speaking a token was not a coin as its face value was not tied to its intrinsic value (Black et al., 2012, p. 65), but this was a means of exchange which entered circulation in the period and functioned as money within the existing monetary system (Burnett, 2019).

What is extraordinary about Mary Woodfall's token in this period was not the issuance of a private currency, nor the particular material attributes of the token, nor where it was issued and what business it represented. What made it extraordinary was that it was issued by a woman who clearly indicated her gender on the token, in more than one way. Like all the women who issued tokens, Woodfall owned a business, which meant she either owned property or rented it and had her own capital. Only a small percentage of private token types can clearly be identified as being issued by women in London, about 140, and throughout England between 1649 and 1672.² These tokens comprise a mini archive of the economic lives of women, providing information about women's work in the period and how that work is represented by the women themselves.

In the eyes of the 21st century observer privately issued currencies used in daily economies may seem at a first glance unexpected and extraordinary. How could a private means of exchange circulate freely? Moreover, how could its issuer declare freely her identity? Was this not an infringement on the Royal prerogative of issuing coinage? The issues most likely began at the height of the English civil war in 1649 and were prohibited 12 years after the Restoration of monarchy (in 1672). No official low value coinage was issued during this period. Tokens were privately issued due to a lack of regal low value coinage—necessary for what contemporaries called 'small commerce' and money for

the 'poorer sort' (Dickinson, 2004; Whiting, 1972, pp. 13–20, 32–76; Willan, 1976, pp. 84–88; Williamson, 1889).

Woodfall's token is quite ordinary within this wave of minting. Many of the tokens issued had similar characteristics. They were worth a farthing (quarter penny), halfpenny, and relatively rarely a penny. Only tokens worth a halfpenny and up mentioned their value on the face of the token. Woodfall's token was therefore likely worth a farthing, as no value is mentioned. The majority of tokens were manufactured out of copper, but some were manufactured out of other cheap metals. They were usually circular and their design, inscriptions, and iconography largely followed similar patterns due to what is believed to be a relatively consolidated production process (Dickinson, 2004, pp. 11–12; Thompson, 1989). Woodfall's token is designed according to all the conventions seen on most tokens. As all were unlicensed and privately issued, they had no regal iconography, but were inscribed according to the issuers' needs. In addition, Woodfall's geographic location in London was also prevalent amongst issuers. London and its immediate surroundings were a particular center for token issuers and the most likely location of the manufacture of tokens themselves, representing over a third of token types overall. Ale house, tavern, and inn keepers were amongst the largest group of actors involved in issuing tokens (Dickinson, 2004; Thompson, 1989). Meaning that Woodfall's trade was in itself ordinary for a mid-17th century token issuer.

The tokens provide a rare type of source for contemporary life in England at the time and for the economic lives of women in particular. Although tokens were issued across England, the article looks at tokens issued by women in London alone.³ London tokens represent a significant case study. It is not a surprise that London was a center of token issuers. In the mid-17th century it was the largest city by a wide margin, and was growing rapidly. By all accounts, London and its surroundings were the center of trade and commercial life for all of England (Beier and Roger Finlay, 1986, pp. 1–34; Porter, 1995, pp. 20–44; Weinstein, 1996, pp. 31–44). There were also many businesses that could be found mainly in London, such as coffee shops, as discussed below.

To carry out the analysis in this paper a database was compiled of all London token types issued in the period. The tokens included in the database are taken from the most comprehensive and up to date collector's catalog of the tradesmen's tokens, Michael Dickinson, *Seventeenth Century Tokens of the British Isles and Their Values* (2004). As can be seen in Fig. 2, issuers in London were divided into three categories: female, male and unknown. Issuers who inscribed their names on the tokens, included both their first name and surname which were used to determine if an issuer was male or female. Women's first names were determined with the help of secondary sources (Hanks, 1990; Smith-Bannister, 1997). In total, it is estimated that 3.36% of token types were clearly issued by women. The number of women involved is most likely an underestimate, as 29.52% of token types cannot be categorized under male or female issuers.

While research has been carried out regarding the tradesmen's tokens as a whole, mainly by numismatic experts, little attention has been given to the role of women within the phenomenon. While they represent a small percentage of issuers, these women were active agents and represent important aspects of women's involvement in the commercial sphere. The paper will grapple with the following two questions: What characterizes the work and the tokens issued by these women? What economic and legal societal constructs existed that enabled this particular minority of women to issue tokens, with their names clearly displayed? To answer these questions, tokens issued by women will be analyzed as a primary source and contextualized within women's work and



Fig. 1 Trade token issued by Mary Woodfall. London year unknown (1649–1672). This figure is not covered by the Creative Commons Attribution 4.0 International License. Reproduced with permission of the Museum of London; copyright © Museum of London, all rights reserved.

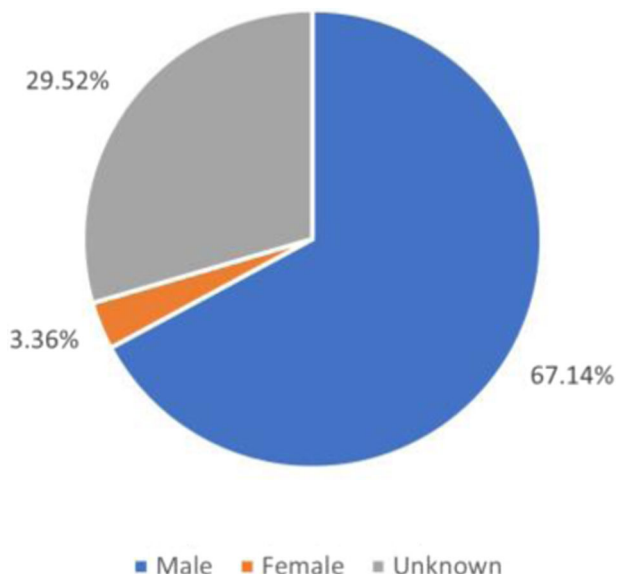


Fig. 2 Gender distribution of mid-17th century token issuers in London.

This chart details the distribution of token issuers according to gender, which was determined based on the issuers' names. The tokens that fall under the category "unknown" include tokens that have no inscription of a name; tokens that are inscribed only with a name of a business; and tokens inscribed with initials and no full name of an issuer, the largest group of unknown issuers. In addition, a very small number of tokens had abbreviations of names or names for which the gender was unclear (see Fig. 3).

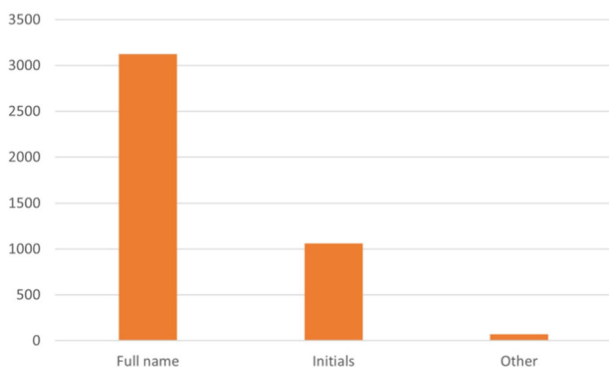


Fig. 3 Self-identification of issuers as inscribed on mid-17th century tokens in London.

This chart details how token issuers inscribed their names. Those included here under "Full name" sometimes added initials in addition to their name. Those included under "initials" in this chart did not include a full name (below is a more detailed explanation). Tokens under the category "other" include tokens with no names, names of businesses, or names that could not be defined as male or female.

their legal status throughout the period. The results of this research are preliminary in that they look at female token issuers as a group. More archival research on individual female issuers could shed light on their professional and personal stories.

Trade tokens: historical survey 1649–1672

The lack of regal low value coinage was not unique to the mid-17th century. Though regal minting was disrupted during the civil war, the entire early modern era was characterized by ongoing shortages of small change necessary for daily commerce. One recurring problem in early modern England, recorded from the 15th until the early 19th century, was a consistent lack of

coinage necessary for daily transactions. These shortages have been described by economists Thomas J. Sargent and François R. Velde (2002) as *The Big Problem of Small Change*. According to these authors, shortages were caused due to lack of adequate theory and technology. As a result, small change was expensive and impractical to produce, easy to counterfeit and problematic to distribute.

The lack of issues, and their poor distribution, meant that a large amount of economic activity was carried out via credit rather than in cash. Craig Muldrew (1998) has described this as an *economy of obligation*, meaning that credit was extended based on personal connections and on what they knew about each other. After long periods of time credit between people was settled in a process called 'reckoning' and little cash was transferred.

But credit was not always a viable option. Cash was needed for rent, salaries, and taxes. Moreover, from the 16th century onward trade was developing in England and levels of commercial activity were growing, bringing new commodities into the English market, consequently increasing consumer activity for many sectors in the population. Cash was increasingly used in businesses with many small transactions, and in cases when business was done amongst strangers. In addition, large amounts of the population were not considered worthy of credit. The poor were often left dependent on cash alone (Muldrew, 2001).

The lack of small change in Early Modern England led to an array of solutions in the 17th century. Besides credit, there is evidence of use of foreign low value coinage in circulation. Prior to the tradesmen's tokens there were also lead tokens issued by merchants and shop owners from the late 16th century onwards. These tokens were issued mainly in London and were much cruder in their style, often not mentioning the issuer's identity. Yet they set a precedent for the tradesmen's tokens (Caldecott and Yates, 1907, pp. 317–326; Craig, 1953, p. 140; Dykes, 2011, pp. 6–7, 10–12; Mitchiner and Skinner, 1984, pp. 115–116).

The tradesmen's tokens did in fact appear in the midst of political and social upheaval but they were in many ways a new solution to a problem that was centuries long. Though the King deemed the tokens illegal, they were allowed to circulate until the late 1660s without any apparent legal action. The government began giving orders against particular tokens issues in 1669, though it seems that the authorities were not interested in prosecuting offenders. Pardons were given to seven towns and to the shop keepers of London, Southwark, Westminster, Cambridge, and Huntingdon. This indicates that trade tokens circulated freely for the majority of this period and that they were used to facilitate trade. The fact that they were not anonymous is testament to them not being viewed as an outright threat to royal prerogative. Tokens were prohibited in 1672 following a declaration of King Charles II (Berry, 1988, pp. 6–7; Craig, 1953, p. 173; Thompson, 1989, pp. 199–200).

Privately issued tokens were likely distributed as small change for purchases. There is evidence that tokens circulated mainly in the locality of their issuers, sometimes only within a few streets of their origin. Sources voicing complaints regarding the circulation of tokens teach us both of difficulties within this unregulated system, but also of the expectations of the token issuers. Complaints included issuers accepting their own tokens for less than their face value and issuers that refuse to redeem their tokens. Redemption of tokens was based on the premise that the issuer would redeem their tokens for regal coinage upon demand. Whether this actually occurred in practice is unclear (Dykes, 2011, p. 20; Evelyn, 1697, p. 16; Marsden, 2016, pp. 13–15).

Issuers gained from the tokens in multiple ways. First off, the cost of issuing tokens was lower than the face value of the token itself, meaning they gained from the moment of giving the token as change. In addition, this enabled them to continue small

transactions in their shops and encourage ongoing business especially in situations where allowing transactions on credit would have been problematic. Finally, these tokens were also a means of advertisement, promoting the issuer's business. In this last sense, the design of the token was of utmost importance (Burnett, 2019, p. 192).

It is impossible to know the number of tokens each issuer ordered and distributed, as there are insufficient sources of such quantification. It is possible to analyze different types of issuers, by location, trade, and gender in order to understand the active agents in this phenomenon—who had the power, motivation, and ability to issue tokens in a given location. Analysis may also focus on the types of transactions in which tokens were necessary and what all this teaches us about daily economic life.

Women's tokens

Tokens clearly state the issuers' name, many times inscribing their trade, and often use iconography which points to their trade (either as an addition to the inscription or as a substitute). Women who issued tokens reveal themselves as such in several ways. All these elements are either in line with conventions of men's tokens, or a slight adjustment to be gender specific. Further examples for this can be seen in Figs. 4 and 5. One way of indicating the gender of the issuer was simply by inscribing a full name. Figure 4 depicts a London token issued by Elizabeth Mayne in 1668, it is worth half a penny which we know via the inscription "Her Half Penny." The inscription stating the value of the token is using a convention used on many tokens issued by men, e.g. "His Half Penny." This is another way in which the gender of the issuers is made visible. Mayne was most likely a member of a London livery company, indicated via the arms of the merchant tailor's livery company and we know that her

business was found in Shoe Lane London. In addition, Mayne added her initials (EM). The shape of this token is octagonal, which was very rare.

So far, we have seen tokens issued by women working in very well-established trades, such as a tavern or alehouse keeper, and a member of the merchant tailor livery company. But female token issuers can also be found amongst one of the newest commercial scenes in the mid-1600s, coffee houses, which only appeared in Oxford in the early 1650s and from there spread to London (Cowan Brian, 2008, pp. 1–16). Figure 5 depicts the token of Mary Stringar, issued in 1669 and worth half a penny. Her coffee shop was on Little Trinity Lane. The iconography inscribed on the token clearly identifies her as an owner of a coffee shop. It shows a hand holding a pot pouring coffee into cups. In addition, two tobacco pipes are visible. Emerging coffee shop culture included the smoking of tobacco, tying together two increasingly important imported commodities (Cowan Brian, 2008, pp. 82–83).

Women are also on many of the tokens issued by men, but in a much more elusive form. They appear in the form of a single initial. Many of the tokens issued by men have a triad of initials inscribed on the token in addition to a first and last name. These triangles of initials were a known format in the period, used to signify ownership of objects and property (Jerffries and Major, 2015; Watkins, 1958). For example, a typical use of an initial triad on a London token can be found in Fig. 6. The token was issued by Richard Burmby whose business was in Salisbury Court. Burmby was likely a member of the tallow chandlers' livery company, as the arms are inscribed on the token. The triad of initials includes an "R" on the bottom left indicating Richard's given name, "M" on the bottom right indicating his wife's given name, and a "B" on top indicating their surname.

Thus, most women appeared on tokens solely as a single letter, such as "E", "A", "M", etc. Indeed, over half the token types in London have a triad of initials. Some 1636 of these triads (64.6% of tokens with triads) appear on tokens that also have a full name of a male issuer. Another 893 (35.3%) tokens display triads produced by issuers who cannot clearly be identified as male or female. The vast majority of this second category are issuers that only put the triad of initials on the tokens, and have no full name inscribed. As triads were usually used to signify a husband and wife, these were most likely not issued by women on their own accord. In three cases alone triads of initials appear on tokens clearly issued by women (0.1%). The triad of initials was used almost solely by men; these tokens are not included in the count of the 140 tokens issued by women. Meaning that single initials are the ordinary representation for women on tokens in the period. To understand who were the women that fully represented themselves and their trade on the tokens, compared to the



Fig. 4 Trade tokens issued by Elizabeth Mayne, London 1668. This figure is not covered by the Creative Commons Attribution 4.0 International License. Reproduced with permission of the Museum of London; copyright © Museum of London, all rights reserved.



Fig. 5 Trade token issued by Mary Stringar, London 1669. This figure is not covered by the Creative Commons Attribution 4.0 International License. Reproduced with permission of the Museum of London; copyright © Museum of London, all rights reserved.



Fig. 6 Trade token issued by Richard Burmby, London year unknown (1649-1672). This figure is not covered by the Creative Commons Attribution 4.0 International License. Reproduced with permission of the Museum of London; copyright © Museum of London, all rights reserved.

women who are represented by a single initial, it is necessary to contextualize these differences within the legal status of women and the history of women’s work in mid-17th century London.

Status and occupations of women in mid-17th century London

The trades of the women token issuers in the mid-17th century seem at a first glance eclectic. It includes for example, one potter, three coffee shop owners, one weaver, two meal shop owners and one shoemaker. The largest group of women token issuers that can clearly be identified are tavern and ale house keepers that consist of around 20 token issuers.

Defining the trades of the women token issuers was based on two parameters: inscriptions and iconography. When a profession is inscribed on the token it is taken as a clear indication of trade. Arms of a London livery company is taken to represent membership in the given company. Membership is important to understand women’s economic lives, but it does not necessarily indicate a particular trade. It was necessary to be a member of a livery company to trade in London, but sometimes people practiced different unrelated trades from the company to which they belonged (Erickson, 2011).⁴ In the cases of coffee shops, ale houses, and taverns trade was determined when the iconography and inscriptions match the format of the majority of such token types. Out of the 140 women issuers, 85 have no clear indicator of trade, though the majority do have a lone symbol inscribed, some of which are associated with particular trades. For example, Margret Randell and Sherly Bladworth both issued their tokens with a sugar loaf (which was how sugar was sold at the time). This was usually attributed to grocers, but there were also taverns with this name. For this reason, lone symbols were not used as a clear indicator of trade. Table 1 details the trade of women issuers and membership in livery companies.

What women did for a living in early modern England has been the subject of historiographic debate. Alice Clark’s seminal book on the topic “Working Life of Women in the Seventeenth Century” (1919) revealed many aspects of women’s work previously unknown. Her main claim is that women mainly worked within their husbands’ businesses, as their opportunities for other forms of employment declined in the 17th century. This claim has been widely disputed. Research since the 1980s revealed a much more nuanced picture in which most women were working, often for wages outside of the family business and in separate professions as compared to their husbands. Types of work in which women partook were frequently gendered and casual, their work being valued different than men’s, leading to lower pay and exclusion from high paying employment. Yet despite these limitations women were actively involved in many economic sectors, including skilled trades, retail, provision trades, etc. (Crawford and Gowing, 2000, p. 73; Earle, 1989; Humphries and Weisdorf, 2015). In order to understand how female token issuers fit into these historiographic findings it is important to look at women’s work in the period through the lens of social class and marital status.

Token issuers’, both women and men, came from a commercial class which was relatively wealthy, though not the wealthiest members of society. Issuing tokens did not demand a significant amount of capital, but it was not something any tradesmen could afford (Burnett, 2019; Muldrew, 1998, p. 54). Many women who issued tokens would have needed to both own property and control their earnings to carry out their trade. These women would have needed to order regular supplies. For example, grocers in London typically carried a variety of high-end goods and often were significant importers as well, thus, operating also as large-scale wholesalers (Stobart, 2013). If Mary Child and Ann Clark, two token issuers who likely belonged to the grocers’ livery

Table 1 Trades, businesses, and Livery Company memberships of female token issuers in mid-17th century London.

Trades and Businesses/Livery Company	Number of female issuers ^a
<i>A. Female issuers trades and business of female issuers</i>	
Ale houses, taverns and inns	24
Chandler	3
Coffee house	3
Milliner	3
Meal shop	2
Cheesemonger	1
Potter	1
Semster (sempster)	1
Shoemaker	1
Slopseller	1
Weaver	1
Total	41
<i>B. Female issuers membership in London Livery Companies</i>	
Salters’ Livery Company	3
Grocers’ Livery Company	2
Merchant Taylors’ Livery Company	2
Butchers’ Livery Company	1
Cooks’ Livery Company	1
Coopers’ Livery Company	1
Cordwainers’ Livery Company	1
Fruiterers’ Livery Company	1
Girdlers’ Livery Company	1
Goldsmiths’ Livery Company	1
Haberdashers’ Livery Company	1
Total	15
C. Total unknown issuers	85
D. Total female issuers	141 ^b

^aAle house, tavern, inn and coffee house token issuers were identified based on typical iconography of these establishments at the time. The rest of the trades were inscribed on the token.

^bThe total number of female issuers identified is 140. Because one issuer, Rachel Goulsmith (spelled Rachell Govlsmith) fits two categories of trade and company membership, the total number in Table 1 amounts to 141. Goulsmith was likely a member of the Salters’ company, as she had her token inscribed with the arms of the company, and she also self-identified as a Chandler via inscription.

company, had a small-scale grocer operation they would have needed to do business with other traders. Moreover, token issuers would have operated from set locations—shops or drinking establishments. Tokens are designed to identify the issuer based on their particular location, hence the mention of a particular street and the iconography that often correlated with the sign outside of the establishment. So token issuers’ either owned a shop or paid rent, meaning that these women would have needed a license to trade. In London this would have entailed membership in a livery company, as will be explained below. This means that many of these women would be considered mistresses, the equivalent of masters at the time. They had capital, may have employed other men and women, or trained them as apprentices (Erickson, 2014). All this points to women who were of higher status than most women working in London.

The majority of women worked for wages and were not members of livery companies. Women were hired as teachers and servants, two of the commonest jobs of working women in London. Servants were often single women and worked in these capacities until they married or took on another waged labor job (Crawford and Gowing, 2000, p. 71; Earle, 1989; Willen, 1988). Often women worked in the expanding informal economy for wages. London’s informal economy had expanded rapidly in the late 16th and early 17th centuries, as the population drastically grew in London and its suburbs. The growth in commercial

activity meant that civic authorities and livery company officials had less ability to enforce labor standards and market regulations, particularly true during the years of the civil war. Women could be found selling a variety of goods as petty retailers, traveling vendors, selling food in markets, unlicensed alewives, pawn-brokers, and also working in shops (Earle, 1989; Korda, 2011, pp. 5–24; Mendelson and Crawford, 1998, pp. 314–344; Reinke-Williams, 2014, pp. 103–126). In addition, women dominated certain aspects of wage-earning textile work and clothing production across England, one of the most important industries in the early modern period (Clark, 2013, pp. 93–98, 144–150). One sphere of highly gendered work was women hired by the authorities in London for unskilled short term commitment jobs in the poor relief system in the 17th century as hospital keepers, matrons, nurses, wet-nurses, housekeepers, and as teachers of poor children. This was still official employment by local authorities, meaning that women served a public function. In cities, poor widows performed most of the common difficult low paying jobs. There were a disproportionate number of women amongst the poor, widows, and orphans making up the bulk of names on charity lists in the 17th and 18th centuries (Mendelson and Crawford, 1998, p. 179; Tilly and Scott, 1987, pp. 51–52; Willen, 1988, pp. 559–567).

Access of women to capital to set up and run a business, for the professional training needed and membership in livery companies, was necessary to carry out their trade and was not only a matter of class. All forms of women's employment in the period were entangled with women's marital status, which is crucial for understanding the differences among the various depictions that these token issuers selected to appear on their tokens.

Amey Erickson (1993) demonstrated how employment of women was affected by their status as single, married, or widowed. This defined whether they could legally control their earnings. Under common law a married woman fell under the category 'feme covert' and as such lost almost all the private rights she had before marriage. This was based on the common law doctrine known as coverture which deemed husband and wife as one entity before the law. Women were not their own legal entity, as they were under marital authority and as such were under the same legal category as wards, lunatics, criminals, and idiots. They could not own property or enter binding contracts, making it impossible to run a business on their own accord. In contrast, single adult women were considered 'feme sole' enjoying most legal rights held by men, including owning property and inheriting many forms of property. Widowed women reverted back to a 'feme sole' upon the death of their husbands, regaining legal rights and liabilities lost when married, in many instances inheriting and administering their husbands' property, business, and estate.

A third case scenario occurred when wives were recognized as a 'feme sole' for the purpose of carrying out their own trade, in which case they were allowed to own property and their husbands were not responsible for their debts. This was dependent on their husbands' consent and contingent to local customary law. There are documented cases of married women in London being recognized as 'feme sole' for the purposes of trade, though it was not common (Erickson, 1993; Gowing, 2014, p. 42).

The number of women who were not married—widows, single women before marriage, and women who never married (known as 'spinster')—was significant in the 17th century. It has been assessed that in the 1690s around half of all adult women across England were single at any given moment. In London this figure was likely higher (Froide, 2002). More particularly, it has been assessed that between 20% and 30% of adult women in England never married (Froide, 2005, pp. 2–3; Weir, 1984; Wrigley and Schofield, 1981, pp. 255–265). Which meant that they could be

'feme soles' for their entire life, owning property and working for wages belonging legally to themselves.

Firstborn sons inherited real property (mainly land and real estate); the remainder of the inheritance was divided amongst the rest of the children (male or female). For some women this could mean significant capital (Erickson, 1993, pp. 61–78). Evidence for women with means can be found in women investors from the 1680s onwards. Thanks to their legal freedoms spinsters and widows were significant investors in the new financial mechanisms that began to appear in the early years of the financial revolution, though married women also found ways to invest in these financial mechanisms, despite their limitations. These new forms of investment had particular importance for widows and spinsters in preparation for retirement and increased their capital. Women investors played an important role in the financial revolution overall (Froide, 2017, pp. 1–29).

Women's marital status also affected the type of membership they could have in a London livery company, which as explained above was a condition to trade in London. The London livery companies were weakening in the 17th century, their ability to govern trade during the civil war was damaged and they did not manage to regain their hold even after 1660. Yet they still were the main avenue for an individual to officially enter many high-status trades and crafts and operate in them independently, once freedom had been obtained. They controlled apprentices, the right to trade within London and were a source of political and social power (Berlin, 2008; Glass, 1969; Jenner, 2002, pp. 163–170). Women could be found as full members of livery companies under their own names; some examples include 20 women who were admitted into the freedom of The Carpenters Livery Company in the last two decades of the 17th century. Two late established companies, the Scriveners' Company, founded in 1617, and the Company of Wheelwrights, founded in 1670, admitted women from the beginning (Laurence, 2013, pp. 127–128; Smith, 2015, p. 17). But their access to membership in the livery companies was not equal to men's as they could not take part in the governance of the companies and were excluded from the political rights of male members in the City of London. Research has shown a nuanced picture of women's involvement and opportunities within the companies, given these restrictions.

There were four ways to become members in the companies: apprenticeship, patrimony, marriage, and redemption (meaning purchase, an option available under very particular circumstances) (Erickson, 2011, p. 152). Formal apprenticeship was the standard means of training for a craft. In many cases only those who completed their apprenticeships, thereby gaining freedom from their company, could work in a particular trade. This could potentially lead to obtaining freedom within the company. Female apprentices were young single women who were bound to either a master or mistress who was a member of a livery company in order to obtain a trade. Female apprentices were predominantly from the middling, genteel, and artisanal classes, with access to the capital required to embark on apprenticeships and to set up in trade. These women used apprenticeships as a way to access a variety of trades including luxury trades, often related to textile, through a variety of companies (Birt, 2021; Gowing, 2016; on 18th century see Erickson, 2011; Collins, 2013). There were also female (and male) pauper apprentices; these were young girls whose apprenticeships were organized by parish overseers (Willen, 1988, pp. 565–566).

Between 1600 and 1800, only 1–2% of those apprenticed to any of the London livery companies were girls, but proportions varied enormously. Some trades had no girls while 44% of pin makers apprentices were girls (Craig, 2015, p. 19; Erickson, 2008, p. 287). However, Gowing (2016) demonstrated that a closer look at these figures shows that from the 1650s, the years tokens were being

issued, there was a rise in the numbers of women apprenticing overall in the more elite trades. This could be due to familial disruption and dislocations due to the civil war that opened up new opportunities for women. Though percentages of female apprentices did not change significantly, absolute numbers show a shift in livery companies' willingness to accept women. For example, 43 women were apprenticed in the 1650s to cloth workers, drapers, goldsmiths, mercers, and tallow chandlers. In the previous decade there were only four (Gowing, 2016, p. 453). Birt (2021), in her examination of the Merchant Taylors' company between 1658 and 1688, has shown that women were apprenticing in the tailoring trades which researchers had previously thought were inaccessible to them in the period. Sixty-seven percent of female apprentices in the company were apprenticed to tailors, seamstresses, milliners, and coat makers. Thus, Elizabeth Mayne, who's token is displayed above, was not extraordinary in her affiliation with the Merchant Taylors' company. Though we don't know how she gained her membership, Birt's research makes it clear that women were involved in this company in multiple ways. Women were apprenticed in the 16th and 17th centuries in many other trades as well, such as carpenter, draper, mercer, capper, weaver, plumber, cordwainer, silversmith, baker, fringe-maker, sieve maker, housepainter, and pipe maker (Mendelson and Crawford, 1998, pp. 328–329).

Apprenticeship did not mean full membership in the companies for women or men. Only one in 10 women who apprenticed in the late 17th century completed their service and became free of their company, which enabled them to trade freely in London under their own name as long as they were single. Women who did complete apprenticeships sometimes did go on to train apprentices of their own (Gowing, 2016, p. 454). But even if a woman did not obtain freedom, she would have obtained skills to work for others.

Most women who were actively involved in livery companies were, therefore, not apprenticed but became members through patrimony or marriage. Tracing what these married women did for work under the membership of the companies, in particular joint work within a family business, can be difficult as the nature of their membership meant that it was under their husbands' names, making them hard to detect (Birt, 2021, p. 157; Erickson, 2008, p. 272). One indication of the type of involvement of women within family businesses comes indirectly from widows, who were the majority of women admitted as full members in the majority of livery companies. Widows of members could in many cases retain their husbands' rights within the companies, continue his business, and gain access to benefits reserved for members, such as loans. Like all other women they could not participate in the governance of the companies or obtain wider civic rights. While some trades, like printing, allowed women to continue membership upon remarriage to a man of another occupation; other trades, like weaving, did not allow continuing membership upon remarriage. In some cases, upon remarriage the new husband became the master and craftsman (Bellavitis, 2018, p. 212; Gowing, 2014, p. 42; Tilly and Scott, 1987, pp. 51–52; Wayne, 2020, pp. 6–7). The number of widows fully operating as masters of trade was small. Yet, there are many examples of women who were masters of trade in the 17th century, sometimes running a business for several decades. It is likely that widows having taken up their husbands' trades worked in the craft with their husband prior to their death. Widows are sometimes recorded taking female and male apprentices in their husbands' old trade, which points to them working with their husband in that trade prior to their death. But these accounted for 2% of apprentices overall in the 17th century (Birt, 2021, pp. 148–160; Gowing, 2016, p. 453, 460; Mendelson and Crawford, 1998, pp. 327–330).

Beyond just the ability to become members there is evidence that widows were part of livery culture. Wives of members and

widows were routinely among the guests at company feasts in the 16th–18th centuries, though they were seated at side tables, and portraits of women as well as men hung in the livery halls (Smith, 2015, pp. 17–26).

Women could also become members of the livery companies while married under their husband's name. Here too, evidence for their activity can be found in records of women who trained apprentices under the names of their husbands, though the cases that appear in the archive are likely a significant under-representation. Women married to members of a livery company could enroll apprentices as the wife of a freeman (Erickson, 2011). There is evidence of married women in London who apprenticed girls in seamstry and millinery under their husband's name in a wide range of livery companies. Millinery was an important trade without a corresponding livery company, so anyone who practiced it was necessarily a member of another company (Gowing, 2016, p. 452).

What characterized these married women's work? Many married couples did work together in family businesses, in partnership, though not in legal equality. But this was not necessarily the case. Data on what married women did for work in London has not been compiled for the mid-17th century, but has been compiled for the late 17th and 18th centuries. Peter Earle (1989) studied occupations of married women between 1695–1725 based on records from the London church court. These women were from a variety of socio-economic statuses. He found that 60% of married women in his church court sample claimed that they financially maintained themselves partially or entirely. A third of the women claimed that they maintained themselves solely by their own labor. Earle found that around 75% of the married women could be found in what could be understood as typically female lines of work, in that they were related to work that women did in the home. These women could be found working for wages in professions related to clothing production and mending, selling food and victualing, nursing, etc. Close to 20% of the women were working in other professions, such as shop keeping and forms of service unrelated to what women did within the home. Earle estimated that only 10% of wives worked in the same trade as their husband, most of these were in the sectors of food and drink production, and sales.

Amy Erickson (2008), expanded on Earle's research by looking into sources that represent married women of a higher socio-economic status in the 18th century. These sources expose that almost all London wives worked. In the lower socio-economic levels, husbands and wives did not often share a line of work. In the middling levels, including wives of craft masters and professional men, up to half the couples worked in the same trade and women participated in jobs that demanded professional skill. It was more common amongst couples to work together in the textile and retail trades.

It is possible to hypothesize, based on what is known about married women's work in early modern London, that many women who appear as a single initial on tokens were jointly working with their husband in his business or shop, which was legally under the husband's name. There are several reasons to think this might be the case. First, based on the finding of Earle and Erickson we know that wives and husbands were working together in large numbers in particular in entrepreneurial businesses related to food and drinks and in textile and retail; these are all spheres highly represented by token issuers in London. Thus, there were definitely wives working with men who were token issuers. This was one of the realities in the marital economies in which husbands and wives shared all aspects of their economic life, often running the business from their homes (Erickson, 2008, p. 273). Yet, only one token in London mentions the full name of both a husband and wife: Will and Elizabeth

North who were members of the Blacksmith livery company. The fact that there is only one such example shows that it was not an acceptable convention to mention wives by a full name. Second, the triad in which the initial of these women's names appear, as explained above, was used as a common form signifying a couples' ownership over property. The visual signification of property highlights the marriage by putting the wife's initial next to her husband's. The triad could be found on property that was relevant to the family as a unit, both husband and wife, such as silverware, furniture, wine bottles and even sometimes engraved on the exteriors of homes (Jefferies and Major, 2015; Watkins, 1958). It has been suggested that marriage in early modern England was viewed as an economic partnership founded on the bases of merging assets (Erickson, 2005). In that sense it is possible to view the triad as a symbol of that economic partnership. As shown above, almost 65% of the triads on tokens were accompanied with a full name of a male issuer, meaning these tokens were not issued by the couple together. But if these tokens were issued by men who worked with their wives, then it could provide a case study that will enable a better estimate of the number of married women working in the mid-17th century in trades under the licensing of livery companies. This would be an indication that about half of such shops, taverns, coffee shops, etc. were run by couples. More research into the history of the triad is necessary in order to conclude its social and legal meanings.

Women who fully identified themselves on the tokens as the issuers and owners of their businesses were likely working independently, unlike the women above. If they were working with their husband, it would be his name on the tokens and they might have appeared as a lone initial. Moreover, this indicates that these women were operating independently financially as proprietors of their own businesses and were likely single, widowed, or married women legally recognized as 'feme sole' for the purpose of trade.

The tokens themselves contain two elements that support this claim. The first are women issuers who have been identified as widows. Mary Woodfall herself was identified through research as a widow (Berry, 1978, p. 50), while two additional London tokens explicitly mention that the issuers were widows on the token itself. The first had her name inscribed simply as "Widow Thvrriton" and the second as "Widdow Matthew" adding only the initial of her first name "K". This is also supported by women issuers outside of London, where 4 women identify as widows on the tokens (Dickinson, 2004).

The second indication of women issuers as legally independent are the initials that appear on many of the women issuers' tokens. It is not possible to quantify how many women issuers chose to put their initials alone on the tokens, as this does not appear in the Dickinson catalog which mentions only triad initials. In addition to the tokens discussed above, with initials of the first and last name of women issuers without a mention of a husband's initial, there are many other examples of digitized tokens in museum collections in which women's initials appear alone on tokens that they themselves issued. This is a major difference between men's and women's tokens. While it does not necessarily prove these women were widowed or single, it is a clear indication that these women were involved in their trade or ran their business independently. There is the possibility that these were married women who were practicing a different trade from their husbands, as Earle and Erickson figures suggest happened often in the period. Yet, these women came from trades in which there were a higher percentage of married couples working together, but there is no element indicating marriage.

These female issuers were extraordinary compared to how other women are represented in the types of tokens they produced and how they used the medium of the token to represent themselves and their businesses. Their tokens are extraordinary in

comparison to men's not because of their style, in that sense they were quiet ordinary, but simply because of their gender. When looking at the actual work these female issuers were doing, they were not very different as compared with many other women who worked in the period and who traded under their husbands' company memberships. In that sense both the female token issuers and the women working jointly with their husband token issuers under coverture were working on the high end of their trades, doing work that demanded skill, running shops and businesses from fixed locations, training apprentices, etc. This signifies that the women who were token issuers were ordinary in terms of the types of skills, resources, training, and social status of other women working under coverture. Many women took part in these commercial spheres dominated by the artisan and growing middle class (Birt, 2021; Collins, 2013; Erickson, 2011, 2018; Gowing, 2016; Hunt, 1996; Lemire, 1997; Phillips, 2006). What, probably, differentiated them was their ownership of their enterprises and independent memberships in the London companies.

For example, among women token issuers there were a variety of trades related to textiles, which is unsurprising given what it is known about women who apprenticed in these trades and who trained apprentices under their husbands' names. These issuers include one shoemaker; one sempster, meaning a sempster, a male or female seamstress; one weaver; three milliners, who were high-end fashionable dressmakers and dealers (Erickson, 2011); and one slop seller, who sold ready-made garments, particularly to the army or navy (Lemire, 1997, pp. 9–42). These were luxury tailoring trades. It makes sense that these women represented themselves with inscriptions and not with the arms of the livery companies they belonged to. Most of the trades above were not represented officially by a company. The three issuers' who were milliners, Ann Kanes, Margeret Brookes, and Sarah Willcockes, are a prime example.

Women who worked in drinking establishments, known as the victualing trades, such as coffee shops and taverns, can be understood to be part of the growing number of women in the service industries described above, whether married, single, or widowed. The large number of women who were tavern and ale house keepers can be explained by the overall significance of these sectors within the tokens at large, as this sector represents a large number of tokens in London amongst male issuers as well. The three women who issued coffee house tokens are an interesting case study. Here too marital or legal status was likely to play a role. Historian Brian Cowan notes that coffee house keepers were likely the heads of households from the middling sort of society and included men, widows, and occasionally unmarried women. The costs of running a coffee house were more expensive than most victualers due to higher rent and cost of supplies. Though the returns of these establishments seem to be lower than the average in the sector (Cowan, 2008, pp. 80, 161–162). These three women were taking part in an emerging costly sector that was financially risky. But married women were also running coffee shops together with their husbands, as Earle identified in his survey (1989). Here too these issuers were different from other women in their legal ownership of their coffee shops and taverns, but not unique in the actual work that was being done. Other token issuers in the food related businesses and services include two women issuers who were keepers of meal shops and one token issuer who is represented on her token as a cheese monger.

Finally, there are a group of 16 women issuers who chose to identify themselves using the coat of arms of the London livery company to which they likely belonged. The arms of a livery company were its official symbol and its appearance was used to signify their halls, official ceremonies, celebrations, etc. (Smith, 2015). Inscribing the arms of a given livery company on a London

token can be understood to be a clear indication of membership. Livery companies represented on the tokens include the following company arms: One Butchers' Company, one Coopers' Company, one Cordwainers' Company, one Croppers' Company, one Goldsmiths' Company, two Haberdashers' Company, two Merchant Taylors' Company, three Salters' Company, two Grocers' Company, and one Cooks' Company. Some of these women probably practiced the trade of the company they belonged to while others used the membership to practice other trades. One example of this, Rachell Govlsmith [sic], was the sole female issuer to inscribe a profession and a livery coat of arms. While Govlsmith had her token designed with the iconography of the Salters' Company, she inscribed that she was a chandler. As explained, all women who were issuing tokens, as proprietors of businesses, belonged to a company. What was extraordinary is the legal status that enabled the female issuers to join. Inscribing a livery coat of arms was a clear indication of status. In a reality where women's involvement in livery companies is hard to trace, these tokens provide a visual source of the way women portrayed their membership visually, when they had the freedom to do so.

Conclusion

Women who issued tokens in mid-17th century London were extraordinary on more than one account. First, because they were an exception amongst the majority men issuers. Second, because the way they represent themselves on their tokens, compared to the way married women are represented. The ability of these particular women to issue tokens for their likely independently run businesses is tied both to their legal and social status. These women worked in trades and professions that were outside the realm of the work of the majority of women in London in this period. Their work was of high status, demanded higher levels of skill, and required capital necessary to run a shop or set up a trade. Importantly, they were necessarily members of London livery companies.

In this paper I have argued that the lines of work in which women token issuers were engaged were quite ordinary for women within their social status. Women who were married to men from the middling sort and trading class worked with their husbands or alone in lines of work similar to the women who issued tokens independently. What was extraordinary was the legal status of *feme sole* that gave them the ability to trade under their own name and be members of livery companies in their own accord. Legal independence could come in several forms, whether they were widows who inherited funds or obtained the right to become a member in London livery companies, whether they were single women recognized legally as '*feme sole*' or married women recognized as '*feme sole*' for the purpose of trade. These statuses were not entirely equal to men's, but they enabled women the right to own their own property, sign contracts, and control their own earnings. These would have been crucial elements necessary to practice the trades and run the businesses that appear on women's privately issued tokens in mid-17th century London.

Women's tokens provided an important primary source for understanding their occupations and legal status. This is rare material evidence for women's economic lives in the mid-17th century. The majority of women's token designs were similar to men's tokens though they clearly identify as women through name and inscriptions indicating value. Women's trade, however, is indicated on the tokens in a very similar fashion to men's using the same iconographies and descriptions. Women's initials and several instances of self-description of marital status position them differently from the men's tokens and indicate the legal status of these women issuers. This means that their particular social and legal standing enabled them to represent themselves using the medium and conventions of a token, in order to

enhance their businesses and trades. This is in contrast to the thousands of women represented on tokens as a single initial, testament to their legal status as married women at the time.

Data availability

The datasets generated during this study are not yet publicly available due but will become available when we finish publishing all of our analyses. It is available from the corresponding author on reasonable request.

Received: 10 December 2020; Accepted: 7 March 2022;

Published online: 01 April 2022

Notes

- 1 A small number of tokens bear the date 1648. It is possible that these tokens were issued in 1649, according to the Gregorian calendar. The English used the Julian calendar until the mid-18th century. This means that if tokens were issued at the end of 1648 according to the Julian calendar, according to the Gregorian calendar, we would date them in 1649.
- 2 It is highly likely that three of the women identified issued two tokens each. In three cases tokens were issued by women with the same name in two different years, these issuers were: Ann How (issued in 1657 and 1667), Martha Churcher, spelled on the token as Chvrcher (issued in 1663 and 1667) and Mary Hurst, spelled on token as Hvrst (issued in 1668 and 1670). This would mean that the number is 137 female issuers that can be identified.
- 3 For this reason, the survey of women's work in this article addresses only occupations that were relevant in London. Agriculture, for example, was an important sphere of female employment outside of urban centers but was not surveyed (see Whittle and Hailwood, 2020)
- 4 Tokens outside of London are also often inscribed with London livery company arms. In these cases they are likely not an indication of membership in these companies but only an indication of trade (see Willan, 1976). It is also possible that provincial traders who inscribed arms on their tokens were members of their local guilds.

References

- Beier AL, Roger Finlay R (eds) (1986) *London 1500–1700: the making of the metropolis*. Longman Publishing Group, London
- Bellavitis A (2018) *Women's work and rights in early urban Europe*. Palgrave Macmillan, London
- Berlin M (2008) *Guilds in decline? London Livery Companies and the rise of a liberal economy, 1600–1800*. In: Epstein SR, Prak M (eds) *Guilds, innovation, and the European economy, 1400–1800*. Cambridge University Press, Cambridge
- Berry G (1978) *Taverns and tokens of Pepys' London*. Seaby Publications, London
- Berry G (1988) *Seventeenth century England: traders and their tokens*. Spink & Son Ltd, London
- Birt S (2021) *Women, guilds and the tailoring trades: the occupational training of Merchant Taylors' company apprentices in early modern London*. *Lond J* 46(2):146–164. <https://doi.org/10.1080/03058034.2020.1810881>
- Black J, Hashimzade N, Myles G (2012) *A dictionary of economics*. Oxford University Press, Oxford
- Burnett L (2019) *For change and charity: identifying the motivations and characteristics of issuers of tokens in the British Isles in the mid-seventeenth century*. In: Crisà A, Mairi G, Clare R (eds) *Tokens: culture, connections, communities*, vol 57. Royal Numismatic Society, pp. 189–202
- Caldecott JB, Yates GC (1907) *Leaden tokens*. *Br Numis J* 4:317–326
- Clark A (1919) *Working life of women in the seventeenth century*. George Routledge and Sons Ltd, London
- Clark A (2013) *The working life of women in the seventeenth century*. Routledge, Abingdon-on-Thames
- Collins J (2013) *Jane Holt, milliner, and other women in business: apprentices, freewomen and mistresses in the Clothworkers' Company, 1606–1800*. *Textile Hist* 44(1):72–94. <https://doi.org/10.1179/0040496913Z.00000000020>
- Cowan Brian (2008) *The social life of coffee: the emergence of the British coffeehouse*. Yale University Press, London, New Haven
- Craig B (2015) *Women and business since 1500: invisible presences in Europe and North America?* Palgrave Macmillan, London
- Craig J (1953) *The mint*. Cambridge University Press, Cambridge
- Crawford P, Gowing L (2000) *Women's worlds in seventeenth-century England: a sourcebook*. Routledge, Abingdon-on-Thames
- Dickinson M (2004) *Seventeenth century tokens of the British Isles and their values*. Spink & Son Ltd, London

- Dykes D (2011) *Coinage and currency in eighteenth century Britain: the provincial coinage*. Spink & Son Ltd, London
- Earle P (1989) The female labour market in London in the late seventeenth and early eighteenth centuries. *Econ Hist Rev* 42(3):328–353. <https://doi.org/10.1111/j.1468-0289.1989.tb00501.x>
- Erickson AL (1993) *Women and property: in early modern England*. Routledge, New York
- Erickson AL (2005) The martial economy in a comparative perspective. In: Ågren M, Erickson AL (eds) *The martial economy in Scandinavia and Britain 1400–1900*. Ashgate, Farnham
- Erickson AL (2008) Married women's occupations in eighteenth-century London. *Contin Change* 23(2):267–307. <https://doi.org/10.1017/S0268416008006772>
- Erickson AL (2011) Eleanor Mosley and other milliners in the City of London companies 1700–1750. *Hist Workshop J* 71:147–172. <https://doi.org/10.1093/hwj/dbq053>
- Erickson AL (2014) Mistresses and marriage; or, a short history of the Mrs. *Hist Workshop J* 78:39–57. <https://doi.org/10.1093/hwj/dbt002>
- Erickson AL (2018) Esther Sleepe, fanmaker, and her family. *Eighteenth-Century Life* 42(2):15–37. <https://doi.org/10.1215/00982601-4384515>
- Evelyn J (1697) *Numismata, a discourse of medals, ancient and modern together with some account of heads and effigies of illustrious, and famous persons in sculps, and taille-douce, of whom we have no medals extant, and of the use to be derived from them: to which is added a digression concerning physiognomy*. Benj. Tooke, London
- Froide AM (2002) Hidden women: rediscovering the singlewomen of early modern England. *Local Popul Stud* 68:26–41
- Froide AM (2005) *Never married: singlewomen in early modern England*. Oxford University Press, Oxford
- Glass DV (1969) Socioeconomic status and occupations in the City of London at the end of the seventeenth century. In: Hollaender AEJ, Kellaway W (eds) *Studies in London history presented to Philip Edmund Jones*. Hodder and Stoughton, London
- Gowing L (2014) *Gender relations in early modern England*. Routledge, Abingdon-Thames
- Gowing L (2016) Girls on forms: apprenticing young women in seventeenth-century London. *J Br Stud* 55(3):447–473. <https://doi.org/10.1017/jbr.2016.54>
- Hanks P (1990) *A dictionary of first names*. Oxford University Press, Oxford
- Humphries J, Weisdorf J (2015) The wages of women in England, 1260–1850. *J Econ Hist* 75(2):405–447. <https://doi.org/10.1017/S0022050715000662>
- Hunt MR (1996) *The middling sort: commerce, gender, and the family in England, 1680–1780*. University of California Press, Berkeley
- Jefferies N, Major N (2015) Mid 17th and 19th century English wine bottles with seals in London's archeological collections. *Post Mediev Archeol* 49(1):131–155. <https://doi.org/10.1179/0079423615Z.000000000075>
- Jenner SR (2002) Guildwork. In: Patrick W, Gadd I (eds) *Guilds, society and economy in London 1450–1800*. Institute of Historical Research, London
- Korda N (2011) *Labors lost: women's work and the early modern English stage*. University of Pennsylvania Press, Philadelphia
- Laurence A (2013) *Women in England 1500–1760*. Hachette UK, London
- Lemire B (1997) *Dress, culture and commerce: the English clothing trade before the factory, 1660–1800*. Springer, New York
- Lillywhite B (1972) *London signs: a reference book of London signs from earliest times to about the mid-nineteenth century*. Allen and Unwin, London
- Marsden A (2016) 17th century Norfolk tokens in Norwich Castle Museum. *Norfolk Museums, Norwich*
- Mendelson S, Crawford P (1998) *Women in early modern England 1550–1720*. Clarendon Press, Oxford
- Mitchiner M, Skinner AN (1984) English tokens, c. 1425 to 1672. *Br Numis J* 54:86–163
- Muldrew C (1998) The economy of obligation: the culture of credit and social relations in early modern England. Macmillan, Basingstoke
- Muldrew C (2001) 'Hard food for Midas': cash and its social value in early modern England. *Past Present* 170:78–120. <https://doi.org/10.1093/past/170.1.78>
- Phillips NJ (2006) *Women in business 1700–1850*. Boydell & Brewer Ltd, Woodbridge
- Porter R (1995) *London, a social history*. Harvard University Press, Cambridge
- Reinke-Williams T (2014) *Women, work and sociability in early modern London*. Springer, New York
- Sargent TJ, Velde FR (2002) *The big problem of small change*. Princeton University Press, Princeton
- Smith H (2015) Gender and material culture in the early modern London guilds. In: Greig H, Hamlett J, Hannan L (eds) *Gender and Material Culture in Britain Since 1600*. Macmillan Education, London
- Smith-Bannister S (1997) *Names and naming patterns in England, 1538–1700*. Oxford University Press, Oxford
- Stobart J (2013) *Sugar and spice: grocers and groceries in provincial England, 1650–1830*. Oxford University Press, Oxford
- Thompson RH (1989) Central or local production of seventeenth-century tokens. *Br Numis J* 59:198–211
- Tilly L, Scott J (1987) *Women, work and family*. Routledge, New York, London
- Watkins CM (1958) The three initial cipher: exceptions to the rule. *Antiques* 73(6):564–565
- Wayne V (ed) (2020) *Women's labour and the history of the book in early modern England*. Bloomsbury, London
- Weinstein R (1996) London at the outbreak of the Civil War. In: Porter S (ed) *The making of the metropolis: London 1500–1700*. Palgrave Macmillan, London
- Weir DR (1984) Rather never than late: celibacy and age at marriage in English cohort fertility. *J Fam Hist* 9(4):340–354. <https://doi.org/10.1177/036319908400900403>
- Whiting JRS (1972) *British trade tokens: a social and economic history*. Drake Publishers, New York
- Whittle J, Hailwood M (2020) The gender division of labour in early modern England. *Econ Hist Rev* 73(1):3–32. <https://doi.org/10.1111/ehr.12821>
- Willan TS (1976) The inland trade: studies in English internal trade in the sixteenth and seventeenth centuries. Manchester University Press, Manchester
- Williamson GC (1889) *Trade tokens issued in the seventeenth century in England, Wales, and Ireland, by corporations, merchants, tradesmen, etc*. Elliot Stock, London
- Willen D (1988) Women in the public sphere in early modern England: the case of the urban working poor. *Sixt Century J* 19(4):559–575. <https://doi.org/10.7591/9781501720741-015>
- Wrigley EA, Schofield R (1981) *The population history of England 1541–1871: a reconstruction*. Edward Arnold, London

Acknowledgements

I would like to thank the Mandel Scholion Interdisciplinary Research Center in Humanities and Jewish Studies at the Hebrew University of Jerusalem and the research group of which I was a member—“Materials for Change”. The center was my intellectual home throughout my Ph.D. and it was a wonderful one. I also thank the Azrieli Foundation and the George L. Mosse program for the generous scholarships that helped fund my research. Finally, I would like to thank the Edmond J. Safra Center for Ethics at Tel Aviv University, where I was lucky to be a postdoctoral fellow while completing the research for this paper.

Competing interests

The author declares no competing interests.

Ethical approval

This study did not involve human participants.

Informed consent

This study did not involve human participants.

Additional information

Correspondence and requests for materials should be addressed to Idit Ben-Or.

Reprints and permission information is available at <http://www.nature.com/reprints>

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2022