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Introduction

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Scope of the volume

This volume arises from the three-day international conference *Tokens: Culture, Connections, Communities*, held at the University of Warwick from 8–10 June 2017. The event represented a significant milestone for the *Token Communities in the Ancient Mediterranean* research project, funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme under grant agreement no. 678042. The conference brought together 24 international speakers from different countries (Australia, France, Germany, Greece, Italy, United Kingdom and the USA) and professional categories (museum curators, archaeologists, historians, anthropologists, numismatists and material culture specialists). Since 'tokens' are deceptively simple objects whose boundaries remain difficult to define, the conference focused on an interdisciplinary approach to these objects in order to develop a better understanding of these artefacts and their ubiquitous presence in cultures across time.

The volume contains 15 of the contributions offered by speakers at this event. While the conference had a thematic format to encourage scholarly exchange, the chronological presentation of papers here will allow readers to trace the development of tokens over time. We wish to thank all the participants and attendees at the original conference: your comments and insight during the event have contributed to a better understanding of this category of material. We also wish to acknowledge the funding of the European Research Council once more, without which the event and this volume could never have occurred, as well as the Royal Numismatic Society, particularly Andrew Burnett, Roger Bland and Kris Lockyear for their support during the publication process, as well as the anonymous reviewers of each contribution.

This work is the first ever multi-regional, multi-period, interdisciplinary volume on tokens. It emerges from a scholarly tradition that has been mainly focused on the publication of catalogues. The first such catalogue known to the editors (of ancient Roman lead tokens) was produced by the Italian antiquarian Francesco Ficoroni in 1740 as part of a broader

publication of ancient lead objects, *I piombi antichi*.¹ Further catalogues of material have been produced since and tokens have continued to appear in excavation reports and as sporadic finds.² This volume seeks to build on this scholarship by adopting a comparative approach to these objects in order to better understand their characteristics and roles in society. Although the case studies presented here can only be selective we hope the contributions will serve to further study in this field.

Defining tokens

As Schmandt-Besserat has argued, tokens in prehistoric, preliterate societies contributed to the creation of writing and abstract number. These early tokens appeared in conjunction with the birth of agriculture (civilisation), and with it the need to store, protect, and redistribute communal resources. The tasks of collecting, recording, retrieving, calculating, and communicating needed a formal administration that was enabled by tokens.

Accounting and administration go hand in hand, and we find tokens once more in classical Athens, where they were employed in the selection procedures of democracy. Athens has a particular place in the history of these objects. Tokens here were principally a democratic device used in the process of distributing offices; they enabled the participation of citizens in running the affairs of the city. The use of tokens can be related to the increasing democratisation of the constitution during the course of the fifth century BC. *Symbolon* (σύμβολον), the ancient Greek word for token, derives from the verb *symbollein* (συμβάλλειν), which means ‘to bring closer’ and signifies an object that has to be brought closer to another in order to acquire its full significance.³ The earliest tokens found in Athens (dated to the fifth century BC) are little puzzle-like pieces cut along an irregular line so that any given half could join only its original mate and no other. Parts of a word were written on the tokens so that, when the two pieces came together, a full word was revealed – by being brought together the two tokens created meaning.⁴

¹ Ficoroni (1740).

² Postolacca (1868); Svoronos (1900); Rostovtzeff (1903); Ingholt, Seyrig, Starcky and Caquot (1955); Crosby (1964); Simonetta and Riva (1981); Mitchiner (1988–2007); Bateson (1991); Hvidberg Hansen and Ploug (1993); Overbeck (2001); Benassi, Giordiani and Poggi (2003).

³ Gauthier (1972), 62–75.

⁴ Agora Museum inv. nos. MC 820–22, found in a pit filled with ‘rubbish’ behind the Stoa of Attalos and dated to 450–25 BC: Thompson (1951), 51–52, pl. 25c; Lang (1959), 80–89; Staveley (1972), 70–72. See also *Inscriptiones Graecae (IG) I*², 916 = *SEG* 38,50 = 36,232, previously housed at the National Archeological Museum in Athens but now lost. According to Hermann (1987), 62–69 the words LEO and POL on these tokens could be personal names, making these particular tokens objects exchanged between friends or *xenoi*, but

The names of demes and tribes immortalised on the puzzle-style tokens reveal a desire to prevent vote buying and indicate a balance between the power of demes (the geographic entities of the state) and the influence exercised by the ten tribes in sortition procedures (**Maurer**). The year 403 BC, which saw the reinstitution of democracy, the reconciliation agreement (amnesty) and the compilation of a formal code of primary laws (*nomoi*) is not only significant for the constitutional history of the polis, but can be regarded as a turning point concerning the use of tokens in governmental procedures.⁵ Not only in terms of conception but also in terms of materiality, the *symbola* changed radically around this time. Reforms in the operation procedures of the Boule, the Assembly and the Law courts, as well as the transformation of thought on financial affairs and currency, resulted in the earliest monetiform tokens. **Sheedy**, in this volume, argues that Athenian juror tokens were inspired by contemporary bronze coinage. Possible connections to inflation of the fourth century BC are yet to be explored.⁶

Symbolon refers not only to the form and function of the object, but also to the design it carried (called in numismatics the type). The design of tokens is a sign and a prearranged signal. In this context it is worth mentioning the Greek word *synthēma* (σύνθημα), which refers to a code that functions as a passport or password: the words *symbolon* and *synthēma* are more or less synonymous. Similarly, one of the Latin words for token, *tessera*, could also refer to a watchword written on a tablet, and the Latin word has appeared in the modern world in association with computer password software.⁷

Symbola are first mentioned in ancient Greek texts in narratives of hospitality and transaction, where they served as forms of identification.⁸ As well as *someone*, tokens might represent *something*, as discussed by **Schmandt-Besserat** in this volume for prehistory.⁹ In ancient Greek texts tokens also enable procedures for concluding agreements or contracts and facilitate practices of authorisation or admission.¹⁰ At the peak of the Athenian Empire the members of the Delian League (an alliance of city-states led by Athens) were compelled by *symbola*, issued by Athens as the leading city, to contribute taxes to the joint treasury.¹¹ In

Thompson (1951), Lang (1959) and Staveley (1972) read names of tribes, demes and public offices and think that these tokens were used in the allotment of offices.

⁵ Lang (1959).

⁶ Gallo (1987).

⁷ https://archive.org/details/tucows_369506/Tessera_Password_Generator (accessed 07/06/2019).

⁸ Euripides, *Ion*, 1386.

⁹ See also MacGinnis, Monroe, Wicke and Matney (2014).

¹⁰ Homer, *Hymn to Hermes*, 21–22.128–36; Herodotus, *Histories*, 5.92.16, 6.86.28–35; Euripides, *Medea*, 613.

¹¹ *Inscriptiones Graecae* I², 34, lines 11–16.

Athens of the fourth century BC tokens stamped with inscriptions function as credentials, official passports guaranteeing safe passage or favoured treatment. Similarly in the Roman world *tesserae hospitales* were made for mutual agreement and contract and were exchanged between a host and their guest.¹²

Tessera (pl. *tesserae*) derives from the ancient Greek word *tessares* (τέσσαρες = four) and is used to refer to a whole category of objects in Latin: square or cubic pawns, dice, or tablets with inscribed texts.¹³ These are all square objects that can be convincingly connected to the number four; whether *tessera* also referred to the circular lead tokens discussed by **Rowan** is debatable. These circular objects were labelled *tesserae* by Ficoroni, but they may never have been known by this name in antiquity.¹⁴ Although the word *tessera* may have at times indicated a Roman token, other words might have been used as well. For example *missilia* (something that is thrown) and *tesserae* are both used within a single section of text describing the emperor Domitian's gifts to his subjects.¹⁵ These might have been different words that referred to the same type of object, or the different words might have referred to different types of tokens. The multiple words for tokens no doubt reflected their multiple uses, also witnessed in their multiple shapes and materials across the Roman Empire. The existence in English of only a single word – token – for this category of material can make its discussion dauntingly large, and often demands the use of another word to provide further information (e.g. communion token, locker token, love token).

Indeed, when examining the category 'tokens' we are confronted with the paradox that it is almost impossible to have a single definition of the word. Tokens have served a variety of functions and their roles in human society have evolved over thousands of years. A pluralism of terminology is thus not surprising. In English 'token' signifies something that is a tangible representation of a fact, quality, feeling, or value. To this effect, a token may be a voucher that can be exchanged for goods or services in a pre-arranged way, sometimes given as a gift or as part of a promotion (*Oxford English Dictionary*). As well as this concrete meaning, the word also possesses a metaphorical one: it can describe things or actions that are small and unimportant but that are meant to show particular intentions or feelings (*Collins Dictionary*). These may or may not be sincere, but are manifested with tokens. The concrete and

¹² Daremberg and Saglio (1877–1919), vol. 3, s.v. '*hospitium*', 298, figs. 3908–09, and vol. 5, s.v. '*tessera hospitalis*', 135.

¹³ Justin, *Epitome Historiarum Trogi Pompeii*, III, 5,10.

¹⁴ Rostovtzeff (1897), 463.

¹⁵ Suetonius, *Domitian*, 4.5.

metaphorical aspects of tokens are evident throughout this volume, from the armour tokens discussed by **Schäfer** to the emotional meanings explored by **Millmore** or **Mondello**. The *Collins Dictionary* also notes that a token might be a coin-like object, made of metal or plastic, that can be used instead of money for special purposes (e.g. to make a call from a public phone).

The complexity of tokens is also reflected in other languages. The French term *jeton* derives from the verb *jeter*, having the dual meaning ‘to throw’ and ‘to add up accounts’. *Jetons* were counters used on a board for accounting before going on to fulfil representational and prestigious functions in the royal court as coin-like medals (**Valin**). The French term has entered the English-speaking world as *jetton* – a token used as a gambling chip or to operate slot machines. Equally, *jeton* entered Italian as *gettone* in the late 16th century to indicate a token used for accounts and then in gambling. The word is still used and was very popular until the late 1990s, when metal *gettoni* were used for public telephones. According to the German Dictionary *Duden*, ‘die Marke’, the German term for token, is an abbreviated form for a great spectrum of terms – *Erkennungsmarke*, *Dienstmarke*, *Garderobenmarke*, *Lebensmittelmarke*, *Briefmarke* – all of which reflect the multiple roles played by tokens. In modern day financial affairs *Marke* means the design a company chooses for its products. This design or logo is singular and copyright protected – it also is a visible representation of something, in this case an organisation.

It is thus clear that, like the tokens themselves, the language we use to describe these objects and their functions is multifarious. The diversity of terminology observed in European languages reflects the transformations and multiple roles played by tokens across cultures. Nevertheless, there are some intrinsic features of tokens that have persisted over time: their *cryptic* nature, their role as *credentials* and in *information storage*, and their *singularity*.

Tokens have a *cryptic character*. Particularly in Classical Athens, where the state was faced with the problem of how best to ensure the legitimate use of official tokens, the images placed on tokens are characterised by an extraordinary heterogeneity, which would have served to prevent fraud. The same concern with security and protection against fraud or misuse can be found in the use of cryptography in modern day alternative cryptocurrencies. Furthermore, tokens have diachronically functioned as *credentials*. In the prehistoric period tokens enabled members of the community to claim their portion of the harvest (**Schmandt-Besserat**), while tokens in the Roman city of Palmyra, for instance, appear to have served as tickets to grant entrance to particular feasts or events (**Makrypodi**). Short-term circulation and one-off exchange (*singularity*, discussed further below) guaranteed that tokens would not

fall into the wrong hands. Favoured treatment was granted to the bearers of tokens, as highlighted in multiple contributions within the volume.

Tokens also frequently serve as devices for storing and recording an important bulk of information regarding human relationships, emotions, transactions, agreements, and obligations. Tokens were meant to motivate relationships between issuers and recipients: this is the case in the Holme Cultram Abbey tokens discussed by **Rennicks**, as well the promises and emotions discussed by **Millmore**. Tokens kept a register of goods amassed or funds raised on the one hand and the beneficiaries involved on the other. In this memory capacity tokens overlap with official governmental money (which is also, essentially, a medium of memory), and it is thus no surprise that there are strong interactions between the two forms of media.¹⁶

Money, coinage, and tokens

The boundaries between ‘coin’, ‘money’ and ‘token’ are fluid: tokens can function as coins, or have currency-like functions, and money itself can be token. The movement between coin, money and token is evident in many of the contributions in this volume. Tokens might be pressed into service as money, and money itself might be transformed into a token, as with the silver shilling transformed into a sailor’s love token (**Millmore**). If there is not sufficient information it can be difficult to classify a particular artefact as a token, a coin, or a token coin.¹⁷

A clear case of tokens operating as coinage can be found in early modern Britain: seventeenth century trade tokens, for example, declare their purpose ‘for necessary change’. These tokens clearly functioned as small denominations in a monetary system, their value recognised by a particular local community. They appeared in a vacuum of officially supplied small change; we find a similar situation and similar tokens in colonial Australia, where penny and half penny tokens bore the names of merchants and even the names of token makers or die engravers.¹⁸ The scale of seventeenth century tokens in Britain is evident in the fact that over 12,700 different types of token have been catalogued for the period 1644–72; there was even a problem of token counterfeiting (**Burnett**).¹⁹

¹⁶ Hart (2000); Hart (2005); Rowan (2017).

¹⁷ Kroll and Mitchell (1980), 94, n. 11 and Sheedy (2015), 215 for an example from antiquity.

¹⁸ A representative sample of these objects can be found in the National Museum of Victoria (<https://collections.museumvictoria.com.au/search?query=token>; accessed 07/06/2019).

¹⁹ Sargent and Velde (2002), 267–71.

The ‘Big Problem of Small Change’ has been a recurring issue since the adoption of coinage. Indeed, the need to provide small change has resulted in some absurdly small monetary media (e.g. the *hemitartemorion* in ancient Greek city states, a silver coin weighing ca. 0.10g with a diameter of ca. 5mm), while the cost of producing small change often outweighs the value of the money produced, meaning governmental authorities have little incentive to issue such pieces (in the US today, for example, it costs 1.5 cents to make a single one cent coin). The Roman government ceased to strike small change for some fifty years (ca. 82–46 BC) and it is evident that locally created imitations, older coinages and ‘pseudo-currencies’ filled the void; in the later Roman Empire small change was often the prerogative of individual cities rather than the Roman government, and wealthy citizens might sponsor or pay for small change as a public good.²⁰ The prestige associated with this last activity (coins funded in this way often carried a reference to the benefactor) is also seen on the tokens presented by **Burnett**: here it is wealthy individuals in a community (although not the wealthiest) who sponsored tokens, which carried their names and often their occupation. The potential role of tokens in creating hierarchy and prestige is further discussed below.

But although the tokens of early modern Britain provide a tantalisingly clear example for scholars, Mitchiner and Skinner have warned against using tokens of the seventeenth century as a model to understand tokens from earlier eras; they argued that tokens in England in the medieval period, on the contrary, should be understood more as a ‘chit-for-service’ than an item with a set monetary relationship with official currency.²¹ This is the type of function the tokens of Holme Cultram Abbey served, which do indeed appear to be earlier in date: 1300–1490 (**Rennicks**). Tokens representing particular goods such as bread likely functioned as credit given out by the abbey for goods and services; these enabled the abbey to defer payment. We might envisage similar situations in other cultures and time periods. In the Roman world, for instance, lead tokens are regularly found in bathhouses, and may have, similarly to the Abbey, been used within a small closed economy as a chit for service to gain access to bathing complexes and/or the services within (the purchase of food and wine, massage, etc); the various workers within the bath complex may then have had their pay tallied up by the number of tokens they possessed.²²

In these scenarios tokens operate as a media of accounting to enable the redistribution of goods and services within an economy. This should come as no surprise; tokens developed in

²⁰ Crawford (1982); Hollander (2007), 25; Stannard and Frey-Kupper (2008); Rowan (2018), 11, 13.

²¹ Mitchiner and Skinner (1983), 30.

²² Pedroni (1997), 209.

response to the rise of agriculture, resulting in the ability to plan and distribute a settlement's wealth (**Schmandt-Besserat**). Modern crypto-currencies like Bitcoin also use tokens to facilitate a distributed ledger, that is, a system to keep track of exchanges.²³ Tokens can operate in similar manner to money (facilitating the distribution of goods and efficient account keeping) without ever taking on all the roles of money: that is, without becoming general-purpose money. The use of particular accounting systems, and particular numbers and values, is one method by which a community is formed and maintained. The specific *number* of tokens given during exchanges between the king and his officials in France, for instance, is a number significant to a particular cultural group (**Valin**). Tokens, having assisted in the creation of the concept of abstract number, continued to form media of account that constructed and then cemented particular social groupings.²⁴

Many of the tokens presented in this volume possess a materiality (shape, material, imagery) that closely resembles (but does not exactly reproduce) contemporary official government coinages. Why should this be? Tokens are known in other forms: eighteenth and nineteenth century 'pee' tokens from Siam (modern Thailand), used in gambling houses, were made of porcelain and could come in a variety of shapes that were chosen because they were considered lucky or auspicious.²⁵ These were very different in material to the official currency of the time. But large numbers of tokens do imitate the shape of contemporary coinage, and often their designs (**Crisà, Küter, Wilding**). Indeed, even the modern blockchain has adopted some of the features of coinage: the term is 'Bitcoin', for example, and the visual representation of this media is of a gold coloured circular coin-like object engraved with a design. For those who cannot understand how the blockchain works, the image of a 'coin' communicates that the cryptocurrency is a currency, and provides a point of reference for understanding.²⁶ Indeed, for an object to function as a currency it is commonly recognised that those using the medium need to accept that it has value, whether this value is imposed above from a government or authority, or created from below amongst local users in the market.²⁷ Perhaps token makers adopted many of the characteristics of coins to ensure that their products might be more readily accepted, and the function of these objects clearly

²³ On the parallels between prehistoric tokens and modern crypto-currencies see: Wilding et al. (2017).

²⁴ Dodd (2014), 289–302 on the role of accounting in society and Schmandt-Besserat (2010) on the role of tokens.

²⁵ As an example, see ANS 1937.179.24477 (<http://numismatics.org/collection/1937.179.24477>; accessed 07/06/2019), shaped as a butterfly. See also Van Dongen (n.d).

²⁶ Golumbia (2015), 121.

²⁷ Hart (1986).

communicated. Even so, the influence of official governmental money (largely coinage in the examples discussed in this volume), on the mentality and ideologies of the groups creating and using tokens is evident. One wonders whether some tokens might be commenting upon or parodying existing monetary and value systems; the recent Tulip mania coin, for instance, satirises the recent explosion of cryptocurrencies with a reference to the tulip mania of the seventeenth century, when the price of bulbs skyrocketed only to collapse.²⁸ The playful scenes on some tokens like those presented by **Küter** may perhaps be similarly tongue in cheek.²⁹

And yet there are also some clear differences to official all-purpose money. Often the design of a token is slightly different from official currency (**Wilding**), or made from a different metal, like the lead tokens discussed by **Rowan** or the clay piece found in a necropolis in Sicily (**Crisà**). As mentioned above, tokens also regularly possess *singularity*, a term used here with reference to uniqueness, and hence status and hierarchy (**Maurer**). The very first tokens in fact are singular: each represented *one* object (e.g. ‘one corn’), they were counted ‘one’, ‘one’, ‘one’ (this was before the development of abstract number), and were used once before being thrown away (**Schmandt-Besserat**).³⁰ Tokens, in contrast to general purpose money, continued to have a singular aspect to their use: they may only be used in exchange for one particular good (e.g. for a particular piece and size of military armour, **Schäfer**) or within one particular sphere (e.g. a particular abbey’s holdings, **Rennicks**). As mentioned above, in ancient Athens tokens may represent particular pieces of armour, but also particular individuals.³¹ The foundling tokens, left by parents alongside their children deposited at the London Foundling hospital, were also singular and offer an interesting parallel. Since abandoned children would be renamed, mothers were asked to leave a token so that the child might be identified if necessary; these objects were placed in a sealed envelope that was only opened if a claim were made.³² The single use of tokens seen in prehistory continues in the present day: the electronic tokens used in pin and chip credit card transactions, for example, are unique to each transaction. This singularity, as **Maurer** notes, leads to hierarchy. For example, the use of tokens to mediate charity in the medieval period meant that *who* gained access to charity was controlled, as were the number and type of goods (e.g. specific

²⁸ <http://tulipmania.co/> and <https://thetulip.auction/> (accessed 07/06/2019).

²⁹ See also the thoughts on ‘playfulness’ emerging in the cryptocurrency world by Maurer in Tooker (2014), 29.

³⁰ Schmandt-Besserat (2010).

³¹ Kroll and Mitchel (1980).

³² <https://foundlingmuseum.org.uk/collection/whats-on-display/the-tokens/> (accessed 07/06/2019).

quantities of bread, meat, charcoal).³³ In this way tokens might act very differently to money broadly conceived, which can be used in multiple contexts, reused, and can be exchanged for a variety of goods and services.

The functions of money continue to elude precise definition despite studies of the media since Aristotle. Moreover the adjective token plays a large part in the discourse surrounding money (for instance, much of our physical modern money is a token, since the specific media we handle, coins and paper notes, has no intrinsic value in and of itself). Consequently the relationship of the artefacts discussed within this volume with money more generally cannot be definitively assessed here.³⁴ While it might be tempting to see many of the tokens presented here as Polanyi's special purpose money – currency issued for a specific function and/or sphere of exchange – it is increasingly accepted that no money, in fact, can be described as general purpose in the true sense of the phrase (money that can be used to purchase anything).³⁵ Indeed, perhaps the study of tokens can help us better elucidate money.

Tokens and human society

Comparing the diverse case studies presented here a salient absence among the discussions are the rituals that involved the handling of tokens. Details of the practices involved largely escape us, but they must have contributed to the formation and maintenance of different types of community. Find spots, the materiality of the artefacts, and method of manufacture enable only tentative reconstructions of the procedures of token issuing, distribution, collection, and deposition. The find of an important hoard in a 'house' in the Athenian Agora and the dolphin countermark placed on almost all the tokens within it (**Gkikaki**) point to such practices, but the context of the countermarking can only be guessed at (a timestamp, sign of the issuer, stamp of validation?).

Zelizer has proposed to see money as a *process* through which different kinds of human interactions are actively created and valued.³⁶ We might study tokens in a similar lens. Money and culture, as Dodd notes, are mutually constitutive, with money acting as a tool of calculation, a material form, and a means of creating and sustaining hierarchy and rank.³⁷

Maurer's exploration of the somewhat paradoxical situation in which a cryptocurrency

³³ Courtenay (1972).

³⁴ Similarly defining or discussing money is complicated by the fact that many discussions of semantics use money as a metaphor. See Maurer (2006), 16.

³⁵ Dodd (2014), 286.

³⁶ Dodd (2014), 294; Zelizer (2011), 303–43; Zelizer (2012).

³⁷ Dodd (2014), 296.

aimed at ‘true’ democracy nonetheless results in hierarchy is of relevance here. The way tokens can reinforce rank is also evident in the discussion of French royal tokens by **Valin**: the annual exchange of tokens between the king and his high officials ceremonially reinforced their relative status and relationship, further cemented by the use of a complex ‘aristocratic language’ that could only be understood by individuals of a particular cultural background and class. The cryptic designs on the Roman lead tokens explored by **Rowan** might similarly be understood as a visual language that enforced the cohesion of a particular group, who alone understood the full significance of the imagery portrayed. Indeed, **Maurer**’s conclusion that tokens, more so than coins, are about status, is also evident in **Burnett**’s analysis of token issuers in Britain in the seventeenth century: while these were not the wealthiest individuals in their communities, they were certainly better off than others, and the imagery on the tokens would only have served to further reputation and prestige. So too **Gkikaki**’s exploration of the use of tokens in Roman Athens suggests that they were used by members of the elite to further enhance their prestige and reputation.

Tokens can enable particular types of community by incentivising particular human activity. In Athens participation in the democracy was mediated by tokens, which were used to control access and reward participation (**Makrypodi** and **Sheedy**). The use of tokens as an incentive for particular human action can also be found elsewhere: the jetons de presence of French academies or the méreaux of French religious orders, for example. In the latter case a chaplain received a token that might be redeemed for money for attending church services.³⁸ This particular use of tokens continues in the modern day: ‘Christ coins’, for example, are ‘used to financially reward people who read the Bible, post/view content and interact with the community’ on a relevant online platform, while ‘Sweatcoin’ rewards users for physical activity.³⁹

Hart observed that money is a media of *memory* that remembers our interactions with others.⁴⁰ Tokens, just like coins, can also trace movements across time and space and carry the memory of social interactions. In this context **Millmore**’s discussion of eighteenth century sailor’s tokens is of particular interest: here a piece of physical money (a coin) was converted into a token that acted as a memento of the 1797 Spithead mutiny. This particular token, which, as **Millmore** notes, ‘communicated and made manifest a community’s system

³⁸ Mitchiner and Skinner (1983), 30.

³⁹ <https://christcoins.io/> (accessed 07/06/2019). The sweatcoin app is currently available for download on the iTunes store.

⁴⁰ Meadows and Williams (2001); Hart (2005).

of beliefs', reminds us more broadly of love tokens (and convict love tokens), coins converted into objects embodying a deep human connection and a series of emotions. Here the act of engraving coins with personal and meaningful messages was an important process; it imbued the object with an ideological and emotional import that was not present in the circulating currency.⁴¹ An earlier parallel can be found in Christian graffiti on the contorniate pieces of late antiquity – here too the act of engraving imbued the objects with a meaningful message that must have contributed to and reflected Christian identity. Similar to the love tokens of the more modern era, these pieces show a mix of hands from the professional to the more amateur (**Mondello**).

Concluding remarks

While scholarship has focused on how monetary media influences human interactions and society, there has also recently been a movement to explore how particular human relationships and communities reshape exchange media to mark social distinctions and different groups. Tokens are an ideal media to further this approach: how and why a particular society, community, or 'circuit' (to use Zelizer's terminology) creates new money or media of exchange, and how these media in turn 'take on particular connections and understandings, practices, information, obligations, rights, symbols, and idioms'.⁴² If a community produces a token in its own image, so to speak, what do these products, the tokens themselves, reveal about those involved and their ideals, beliefs and practices?

The presentation of material here may seem unwieldy at first glance – after all, what connection could there be between Neolithic tokens, mutiny tokens, French royal tokens and Bitcoin? But there is something inexplicably profound that unites these contributions across time and space. Tokens expressed values and beliefs shared by a community and at the same time enabled the achievement of a community's goals. Tokens antedate the invention of writing, are as old as accounting itself, and yet as a media remain remarkably fresh since they continue to respond successfully to the human need for societal life.

The creation and maintenance of networks is an integral part of a token's function. If tokens came about at the very moment when hunters settled into farmers, and from the beginning served as credentials and memory banks, then they almost immediately evolved into dynamic regulators of networks. These networks of participant farmers, citizens, beneficiaries,

⁴¹ Platt (2006), 247: the author draws a similar comparison between engraved seals and coinage.

⁴² Zelizer (2011), 337.

merchants, rebels, artisans, courtiers, and nowadays servers and high-speed processors, form an integral part of how we conceptualise tokens as they keep track of registers, distributions, emotions, transactions, and relationships. This is a system based on trust, mutual agreement, and consensus. The system is decentralised (there are multiple actors) and constantly subject to independent authentications. Based on the very essence of communal life, and especially on the principle of collectivity, with individual participants acting as part of a wider whole, tokens will continue to exist and regulate economic and political life. This is possible due to tokens' unique ability to keep a balance between participation and hierarchy, individual reward and the secrecy of personal data. Two and a half thousand years after the birth of democracy token systems have made an emphatic return in a new, digital form. Further developments in the media are undoubtedly yet to come.

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