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Marginalia and mortality in early modern Venice

Early modern Venice was one of Europe's largest cities, with a population which hovered around 140,000 for much of the seventeenth and eighteenth centuries.¹ Around 5,000 people died in the city each year. Causes of death ranged from accidents and old age to communicable diseases such as smallpox and tuberculosis. The impact of disease was intensified by the density and mobility of the urban population and stimulated the hereditary patriciate which governed the city to monitor mortality closely. The city's Health Office, the *Provveditori alla Sanità*, began to collect information on deaths in 1504, not long after the magistracy's inception in 1486 following a major plague epidemic.² This information was inscribed into registers known as *Libri dei morti* or *Necrologi*. Systematic scrutiny of mortality was initiated by the state, rather than the Church: Venice's earliest parish death registers date from the 1550s.³ The Venetian Republic was a strong and organized state, its governance underpinned by a network of numerous magistracies, each of which employed clerks who generated vast quantities of paperwork.⁴

The practice of death registration continued until and beyond the fall of the Venetian Republic in 1797. About 70% of these 'books of the dead' survive for the years from 1537 to 1805.⁵ The registers were elaborate and carefully organized volumes, which remained remarkably similar in their content, structure and format over time. In most cases, a single volume was produced each year, running from March to February in accordance with the Venetian calendar. Death registers were compiled in the offices of the city's Health Magistracy by dedicated and highly trained members of chancery staff. These officials obtained the information they inscribed from parish clerics, who took a physical parish record of deaths to the Health Office on each day that a parishioner died. All Christian deaths within

¹ Daniele Beltrami, *Storia della popolazione di Venezia dalla fine del secolo XVI alla caduta della Repubblica* (Padua: Antonio Milani, 1954), 59.

² Beltrami, 17.

³ The earliest surviving example pertains to the parish of San Pantalon. Archivio della Curia Patriarcale di Venezia (ACPV), San Pantalon, Registri dei Morti, R. 1. By contrast, Henry VIII and Francis I used Church structures to track demographics.

⁴ Filippo de Vivo, 'Ordering the archive in early modern Venice (1400-1650)', *Archival Science*, 10 (2010), 231.

⁵ For a detailed catalogue of the registers, see Monica Del Rio (ed.), *509: Provveditori alla sanità. Necrologi (1537-1805) Inventario analitico* (Venice, 2005).

the city, Catholic, orthodox and reformed, were recorded in the civic registers. Until 1631, deaths of non-Christians were usually documented in a specific section of the register. From that date, the deaths of Jews and Muslims were recorded in separate registers. The registers were organized chronologically and each deceased person received an individual entry, with a handful of exceptions on both counts. Strikingly, some entries featured a drawing in the margin to the left of the text. Palaeographical evidence suggests that these marginal images were almost always produced at the same time and by the same hand as the textual entry. Marginal images feature in all the surviving registers, albeit in varying numbers.

Medievalists and early modern literary scholars have paid considerable attention to marginalia in recent years, as part of a broader interest in paratexts and their significance.⁶ Many scholars have followed Evelyn Tribble's lead in exploring 'the conversation between a text and its margins', whether the marginalia is printed or handwritten, visual or textual.⁷ All the same, scholarship has largely concentrated on marginalia in printed books, and marginalia as evidence of reading practices. With notable exceptions, moreover, attention has been focused on textual rather than visual marginalia.⁸ As a consequence, analyses have explored what marginalia reveal about the concerns of individual readers, and have neglected their broader purpose and significance in certain types of texts. The death registers that are my focus here have been used by historians in studies of demographic change and the impact of epidemic disease, especially plague, but no attention has

⁶ Key works include Michael Camille, *Image on the Edge: The Margins of Medieval Art* (London: Reaktion Books, 1992); Gérard Genette, *Paratexts: Thresholds of Interpretation*, trans. Jane E. Lewin (Cambridge: Cambridge University Press, 1997); D.C. Greetham (ed.) *The Margins of the Text* (Ann Arbor: University of Michigan Press, 1997); William H. Sherman, *Used Books: Marking Readers in Renaissance England* (University of Pennsylvania Press, 2007); Jason Scott-Warren, 'Reading Graffiti in the Early Modern Book', *Huntington Library Quarterly*, 73 (2010): 363-38.

⁷ Evelyn B. Tribble, *Margins and Marginality: The Printed Page in Early Modern England* (Charlottesville: University Press of Virginia, 1993), 1.

⁸ These exceptions include the assessment of manicules in Sherman, 25-52; William H. Sherman, "'Nota Bembe': How Bembo the Elder Read His Pliny the Younger", in Guido Beltrami, Howard Burns, and Davide Gasparotto (eds), *Pietro Bembo e le Arti* (Venice: Marsilio, 2013), 119-133. Non-prescribed markings in notarial records from colonial Cuzco are examined in Carolyn Dean, 'Beyond Prescription: Notarial Doodles and Other Marks', *Word & Image*, 25 (2009): 293-316.

hitherto been paid to the significance of their textual and visual features.⁹ This study breaks new ground by evaluating how marginalia enhanced the value of these registers for the people, and especially the rulers, of early modern Venice.

This study examines the 206 surviving death registers using a combination of quantitative and qualitative methodologies. The registers contain records of around a million deaths in their entirety, necessitating sampling. Registers were selected at ten-year intervals and each volume in the sample was examined in full to create a database of marginal images.¹⁰ The chronological range of the sample is 1636 to 1796. The three registers of Jewish and Turkish deaths, which cover the periods 1631–53 and 1671–1764, were also studied in full.¹¹ My sample of Venice's civic death registers is analysed in conjunction with other sources, including civic registers from the northern Italian cities of Mantua and Milan, and parish death registers and health office legislation from Venice itself.

I examine the significance of visual marginalia by exploring the iconography of the images, as well as by interrogating the stability of visual codes and the stability of their meaning. I reflect on how the incidence of marginal images changed over time and draw out their distinctiveness by comparison with marginalia in other official documents in Venice, Italy, and beyond. By reconstructing how these registers were produced through the collaboration of chancery staff, parish clergy, medical practitioners, and local communities, we gain insights into the role of record-keeping as a tool of governance in one of Europe's largest cities.¹² Marginalia were an integral part of Venice's civic death registers, facilitating the scrutiny of certain causes of death, as well as allowing the Venetian Republic to promote its public health agenda and to monitor demographic change.

⁹ Prior studies focus on evidence of medical care and mortality from plague and the French disease. See Alexandra Bamji, 'Medical Care in Early Modern Venice', *Journal of Social History*, 49 (2016): 483-509; Stephen R. Ell, 'The Venetian Plague of 1630–1631: A Preliminary Epidemiologic Analysis', *Janus*, 73 (1986–1990): 85-104; Carla Boccato, 'La mortalità nel Ghetto di Venezia durante la peste del 1630', *Archivio Veneto*, 175 (1993): 111-146; Laura McGough, *Gender, Sexuality and Syphilis in Venice: The Disease that Came to Stay* (Basingstoke: Palgrave Macmillan, 2011), 19-25.

¹⁰ Sample years = 1636, 1645, 1656, 1666, 1676, 1685, 1696, 1706, 1715, 1726, 1735, 1746, 1756, 1766, 1776, 1786, 1796.

¹¹ ASV, *Sanità*, BB. 996, 997, 998.

¹² Important parallels can be drawn with Milan. See Ann G. Carmichael, 'Registering Deaths and Causes of Death in Late Medieval Milan', in Joëlle Rollo-Koster, *Death in Medieval Europe: Death Scripted and Death Choreographed* (London and New York: Routledge, 2017), 209-236.

The scribes who produced Venice's civic death registers used visual marginalia regularly and with intent. The 17 registers of Christian deaths in my sample contain 1236 items of visual marginalia, most of which are images. The objects depicted were, in alphabetical order: altar, arquebus, axe, bridge, building, cart, child, church, cross, dagger, dog, door, ducal corno (the hat worn by the doge, the political figurehead of the Venetian Republic), gallows, galley, gun, house, key, knife, ladder, lightning bolt, manicule (a hand with a pointing finger), palace, person, pistol, pot on a chain, rooftop terrace, scaffold, ship, spontoon (a pole arm), staircase, statue, stick, sun, sword, tongs, tree, waves, well, and window. These images are mostly, but not exclusively, connected to the cause of the death. Other marginal markers draw attention to the textual entry through the presence of one or more lines; a grid, loop or triangle; or a disorderly scribble. The three non-Christian registers contain 39 items of visual marginalia, with one or more examples of a cross, dagger, fire, gallows, gun, ladder, pistol, sun, sword and waves, as well as some non-pictorial markers.

The iconography of the marginalia was highly stable throughout the seventeenth and eighteenth centuries, facilitated by the schematic nature of the images, which did not require sophisticated draftsmanship. Variation is subtle. Some arquebuses emit bullets or smoke.¹³ Some daggers are depicted in outline; others have a shaded blade or decorated handle.¹⁴ None of these variants are confined to a specific year, and they reflect minor differences in the artistic skills of individual clerks. The meaning of each image remained unchanged throughout the period.

<Insert TABLE 1 near here>

Marginal markers have been read in conjunction with the corresponding textual entries to categorize the 1236 deaths in the main sample. 94 per cent of these deaths fell into the top fifteen categories, each of which accounted for ten or more deaths (see Table 1).¹⁵ Marginalia were used

¹³ ASV, *Sanità*, B. 878, 11 October 1656; B. 926, 30 May 1735.

¹⁴ ASV, *Sanità*, B. 900, 23 August 1696; B. 882, 19 February 1666 *more veneto* (mv).

¹⁵ The remaining deaths were categorized as (number of entries): burned (9); accident (7); death at birth, not given, epilepsy/convulsion (6); other, swelling, tuberculosis, childbirth/uterine (5); dropsy (4); old age (3); animal bite, blood from mouth, bowel, cold, doge, lightning bolt (2); bewitched, dysentery (1).

most frequently to highlight homicide, sudden death, deaths by water, deaths by falling, and deaths of centenarians. The complex relationship between these categories and the marginalia reflects the sophistication of the records, the range of ways in which people could die, and broader cultural values. In most cases, symbols were used to indicate a group of deaths from a similar cause. Wavy lines mark out deaths by water, which were usually drownings, but included circumstances such as falls involving boats, bridges, and wells.¹⁶ Falls in which death was caused by impact rather than drowning were illustrated with images which expressed the precise circumstances of the death, such as the window or balcony from which the deceased had fallen. There are several poignant drawings of steps with a person suspended head-first in mid-air above them, as they fall to their death. Homicides were depicted with the specific weapon which had been used, whether a bladed weapon such as a sword, dagger or knife, or a firearm, most often an arquebus or a pistol. Criminals executed by the Republic were pictured on the scaffold. Some images portray the mode of death in a very specific way, as in the entry for Giovanni Battista Rinaldi, who is depicted wearing a hat, alongside the dog that bit him and brought about his death in September 1696 (Fig. 1).¹⁷ Some marginalia, however, did not indicate causation. Sudden deaths, which had a variety of causes, were marked by a cross. Manicules drew attention to deaths from a range of causes. Other deaths incurred marginalia due to the exceptional status or age of the deceased, rather than the way they died. The death of the doge was labelled with an image of his distinctive hat, the ducal *cornio*.¹⁸ The long lives of centenarians were singled out by a drawing of the sun, reflecting the Aristotelian idea that longevity was linked to vital heat.¹⁹

<Insert TABLE 2 near here>

Throughout the early modern period, only a small proportion of deaths recorded in the *Necrologi* were accompanied by an image (see Table 2). Incidence varied over time.²⁰ Marginalia were

¹⁶ ASV, *Sanità*, B. 920, 11 November 1726.

¹⁷ ASV, *Sanità*, B. 900, 23 September 1696.

¹⁸ See, for instance, ASV, B. 878, 1 May 1656, 5 June 1656; B. 887, 15 August 1676.

¹⁹ On Renaissance ideas of ageing, see Silvia Marinozzi, 'Ageing in the early modern age', *Medicina nei secoli*, 22 (2010): 531-556.

²⁰ See Del Rio, 'Appendice C', 47, which tabulates specific marginal images by year, noting whether each symbol has 1 occurrence, 2-5 occurrences, or more than 5 occurrences.

less frequent in the sixteenth century. A higher proportion of entries were accompanied by an image between the 1610s and the 1740s, although incidence fluctuated on a yearly basis. Visual marginalia were rare from the 1780s onwards. The decline in visual marginalia in the later eighteenth century was partly the outcome of injunctions of 1731 and 1768 that required medical practitioners to account for the cause of death in more detail, which increased the reliance on textual entries.²¹

<Insert TABLE 3 near here>

Visual marginalia were rarely used as a counting device, and – with the exception of executions and the death of the doge – scribes did not accord an image to all deaths from any particular cause (see Table 3). But the frequency of marginalia was not affected by the artistic propensities of individual scribes. The sampled registers all contain entries and images in multiple hands. The inclusion of a marginal image was a subjective decision which was usually prompted by the intersection between temporally-specific preoccupations with causation, speed of death, and the age and gender of the deceased. Scribes included an image to signpost deaths of interest and concern, especially those which – as we shall see – might require further scrutiny.

<Insert TABLE 4 near here>

A range of factors prompted variations in the presence and absence of images. Marginalia were primarily used for adult deaths (see Table 4).²² For some causes of death, such as when someone had died from a fall or was ‘found dead’, visual markers are less common when the deceased was elderly, although scribal practice was inconsistent. Male mortality was monitored more closely than female mortality: 74% of images relate to the deaths of men.²³ The visual focus on the deaths of men of working age reflected patriarchal values, concerns about urban violence, and broader anxieties about threats to social order. Men made up 96% of the large group of homicides with pictorial markers. The greater mobility of men within and beyond the city may also have contributed to

²¹ ASV, *Sanità*, B. 751, 24 April 1731; B. 760, 4 May 1768.

²² Author’s study of ASV, *Sanità*, BB. 873 (1645), 900 (1696), 934 (1746), 983 (1796). The age of the deceased is specified in 95% of sampled entries with visual marginalia.

²³ Male deaths = 74.11% (N = 916); female deaths = 25.89% (N = 320).

gendered monitoring. Medical and Health Office interest in certain causes of death also intensified at particular points. Curiosity about apoplexy peaked in the early eighteenth century, with an increase in visual marginalia running in parallel with a significant number of autopsies for this cause of death.²⁴ Drownings were a pressing public health concern in the later eighteenth century; a high proportion of these deaths had visual marginalia in 1766 (see Table 3). The annual tallies of deaths by drowning from 1758 to 1767 were included in a 1768 publication on resuscitation sponsored by the Health Office.²⁵ Speed of death also influenced recording practices. When a fall or wound had caused death but had occurred a long time ago, a visual marker was less likely. In these cases, causation was less ambiguous and action might already have been taken to address any criminal behaviour.

Despite the influence of the social context on recording practices, high status individuals were neither more nor less likely to be highlighted through the inclusion of a marginal image. The registers did not categorise deaths according to the three main Venetian social groups – nobles, citizens and *popolani*. Instead, reflecting the complexity of social status in practice, influenced as it was by factors including intermarriage, immigration, illegitimacy, occupation and wealth, they include titles in entries. Titles provide indications of status sufficient to assign individuals to one of three groups: higher status, lower status, or religious.²⁶ The status profile of entries with an image (13.51% higher status; 80.42% lower status; 2.43% religious; 3.64% unknown) closely mirrors the status profile of the population as a whole (13.90% higher status; 84.20% lower status; 1.90% religious). This reflects how the registers mostly underplay social distinctions by recording the deaths of elites, artisans and the lowly in a very similar way.

The visual marginalia of Venice's civic death registers are more extensive, diverse and systematic than in comparable documents. Many of Venice's parish death registers contain no marginal images, despite the close relationship of these records to the civic registers. Such images as

²⁴ Biblioteca Fondazione Querini Stampalia, Cl. V COD 42 (374) (1711-1736); for the broader context see Maria Pia Donato, *Morti improvise* (Rome: Carocci editore, 2010), 155-159.

²⁵ Francesco Vicentini, *Memoria intorno al metodo di soccorrere i sommersi* (Venice, 1768), lv.

²⁶ On social status in the *Necrologi*, see Bamji, 'Medical care', 494-496.

we do find in them are more limited; almost all examples are of a cross. In many cases, a death has an image in the civic register but not in the corresponding parish register, as in the case of the body of a headless man which was brought to the Piazzetta on 22 July 1697 (Fig. 2).²⁷ The late seventeenth-century registers of the parish of Anzolo Raffaele are exceptional in their level of illustration. The register for the years 1675 to 1686, for example, contains numerous images of firearms, swords, and crosses, along with instances of a cooking pot, ladder, spontoon, and a skull and crossbones.²⁸ Here it seems that we have a scribe with a predilection for the visual, rather than anything more systematic; this is illustrated by the marginal image for Bortolo Oseletto in 1676, which is considerably more sophisticated in the parish register (Figs 3 and 4). Even in the Health Office registers of the deaths of Jews and Muslims, the incidence of visual marginalia is lower, the number of deaths in a given month is rarely tallied, and several seventeenth-century entries have no image when one would be expected in the Christian register for the same year.²⁹ The more limited use of visual marginalia underlines the key function of the images in Christian registers as a signposting device; such a device was needed less in the Jewish and Muslim registers, to which a relatively small number of entries were added each year. The paucity of images also suggests that Jews and Muslims were less relevant to the scribes' community. The level of marginal annotation in Venice's civic death registers was also more extensive than in parallel records in other Italian cities. Textual marginalia are commonplace in Milan's civic death registers, but visual content is confined to a single manicule.³⁰ Mantua's registers have some visual marginalia, but with lower incidence and a more limited iconography, mostly comprising manicules in the earliest registers, and sundry swords, crosses and firearms in the late sixteenth- and seventeenth-century registers.³¹ The greater complexity of the Venetian registers had its roots in local bureaucratic cultures and requirements.

²⁷ ASV, *Sanità*, B. 901a, 22 July 1697; ACPV, San Marco, Registri dei morti, R. 5, 22 July 1697.

²⁸ ACPV, Anzolo Raffaele, Registri dei morti, R. 8.

²⁹ ASV, *Sanità*, B. 996, 14 March 1636 (homicide), 19 March 1636 (homicide); B. 997, 1 August 1671 (drowning), 9 June 1673 (drowning), 5 July 1674 (homicide), 6 June 1676 (homicide), 11 July 1676 (homicide); B. 998, 12 April 1751 (found hanged), 2 May 1757 (homicide).

³⁰ Archivio di Stato di Milano (ASM), Atti di governo, Popolazione, Parte antica 143, 28 June 1696.

³¹ Archivio di Stato di Mantova, Archivio Gonzaga, Registri Necrologici, RR. 1, 11, 29, 33.

The civic death registers were a centralized body of information about civic mortality which was intended for use by the Health Office and to serve other institutions of state. Originally, the maintenance of public health was the central objective. Over time, the Republic recognised that these records could also be useful for other purposes, notably the analysis of demographic change and civic governance.³² Visual marginalia helped the Republic to make effective use of its information, especially by aiding the scrutiny of deaths from certain causes. Access to the information in the registers by the city's inhabitants was always mediated by Health Office officials.

The registers were first created in a period in which the city experienced frequent outbreaks of epidemic disease, and they sought to expedite the detection of those suffering from plague. Venice was not the first city to use death records for plague surveillance. Milan had recorded deaths to this end since the turn of the fifteenth century and did so systematically from 1438.³³ The preoccupation of the Venetian Health Office with plague fuelled its interest in sudden deaths, which made up the second largest category of visual marginalia. The practice of marking such deaths with a cross facilitated the identification of any deaths which might pose a risk to civic health. The early modern concept of a sudden death encompassed deaths which occurred following an illness of four days or fewer. This conceptualisation was expressed in Health Office legislation, and numerous medical treatises posited a similar length of time between the appearance of symptoms of plague and death.³⁴ Venice's Health Office believed that if it could identify deaths from plague and their location quickly, then it could implement public health measures which might impede the spread of disease through the city. When a death raised concern, the Health Office commissioned further investigation. From 1563, the magistracy's own physician, the *protomedico*, was expected to examine the body of anyone

³² In Milan, too, civic death records transcended their initial function as plague surveillance. See Carmichael, 'Registering deaths', 215-216.

³³ Ann Carmichael, 'Contagion Theory and Contagion Practice in Fifteenth-Century Milan', *Renaissance Quarterly*, 44 (1991): 215-216; Samuel K. Cohn, Jr., *Cultures of Plague: Medical Thinking at the End of the Renaissance* (Oxford: Oxford University Press, 2010), 4.

³⁴ For example: ASV, *Sanità*, B. 2, 11 June 1563; Francesco Frigimelega, *Consiglio sopra la pestilentia qui in Padoa dell'Anno MDLV* (Padua, 1555), unpaginated.

who died suddenly, and signed the parish register to confirm that he had found nothing of concern.³⁵ The recording and inspection procedures meant that in the summer of 1630 the Health Office quickly realised that a cluster of deaths in the parish of Sant'Agnese was likely due to plague and sought further advice from city physicians immediately.³⁶ As the outbreak intensified, the Senate – the organ of government responsible for domestic and foreign policy – issued decrees based on information received from the Health Office.³⁷ Plague surveillance continued into the eighteenth century and successive *protomedici* documented inspections and autopsies in dedicated registers, noting they had found 'no sign of plague' on the body.³⁸

Marginalia in the death registers were also used to track communicable disease over time. During the final two major epidemics of plague in Venice, in 1575-1577 and 1630-1631, clerks used textual marginalia, often the letter 's', to label deaths which were thought to be from plague and facilitate the enumeration of this subset of deaths. The tally of daily deaths from plague circulated contemporaneously and mentions of these tallies in medical reports and diplomatic letters show how they were used to track the progress of the epidemic.³⁹ Textual marginalia were also used in the eighteenth century to evaluate deaths from smallpox, in this case retrospectively. A clerk named Giuseppe Fornasieri placed a 'V' in the left margin of entries for death by 'varole' (smallpox) in the registers and produced documents which tallied yearly deaths from smallpox from 1761 to 1768 and 1769 to 1776.⁴⁰ Fornasieri was charged with this understanding to evaluate the efficacy of a smallpox inoculation scheme at the hospital of the Mendicanti which commenced in 1769; his study found that the total number of deaths from smallpox for each eight year period declined by 26% from 2540 to 1867.⁴¹ This later use of the registers indicates their continued utility as a resource for monitoring

³⁵ See, for example, ACPV, San Vidal, Registri dei morti, R. 11, which includes authorisations by three successive *protomedici*.

³⁶ ASV, *Sanità*, B. 562, 'Opinione mediche 1630 nel contagio di Venezia'.

³⁷ ASV, *Sanità*, B. 17, 15 November 1630.

³⁸ ASV, *Sanità*, B. 561 (1653-1668); Biblioteca Fondazione Querini Stampalia, Cl. V COD 42 (374) (1711-1736).

³⁹ ASV, *Sanità*, B. 561; Archivio Segreto Vaticano, Segreteria di Stato, Venezia 54, 11 February 1631.

⁴⁰ ASV, *Sanità*, BB. 563, 948-963.

⁴¹ ASV, *Sanità*, B. 563, 12 August 1769.

matters of public health, as well as the ability of the Health Office to adapt their use to emergent public health concerns.

The second main function of the registers, especially from the mid-seventeenth century onwards, was as a tool for demographic analysis. Governments took an interest in demographic change because the contours of the population had practical consequences for the economy of their cities. In Venice, the visual characteristics of the registers helped the Republic to monitor changes in the make-up of the urban population. The inclusion of daily and monthly tallies of deaths meant that yearly totals could be calculated with ease. Annual figures, tabulated by month, appear at the back of many registers. The explicit interest of the Health Office magistrates in demographic change is clear from their 1663 directive to a new clerk, asking for a tabulation of births to complement that of deaths, 'so that it will always be possible to observe the number of those who are born and who die over time'.⁴²

By 1676, a Health Office clerk was coordinating the printing of a 'compendious' broadsheet of the annual figures, to the magistrates' great satisfaction.⁴³ These broadsheets or 'ristretti' followed an identical format from their inception until the last surviving example from 1805, with two columns for births and deaths, divisions into districts and parishes, and the provision of the total number of deaths of boys, girls, men, and women for the year in question.⁴⁴ There are obvious parallels between the *ristretti* and the annual bills of mortality produced in London by the Parish Clerk's Company.⁴⁵ Given the intensity of commercial and cultural connections between the two metropolises at this time, the English practice may have been a direct inspiration. There is no evidence that documents the sale of Venice's broadsheets, but we know that they were accessible to readers beyond the magistrates and

⁴² ASV, *Sanità*, B. 741, 8 June 1663: 'così che possa in ogn'tempo osservarsi il n° di quelli che nascono e morono di tempo in tempo'.

⁴³ ASV, *Sanità*, B. 743, 26 September 1676.

⁴⁴ Biblioteca Fondazione Querini Stampalia, Fogli volanti, D1 (9 *ristretti* dated 1756-1805); Biblioteca Fondazione Querini Stampalia, IST.0017/019.098 (1691), IST.0017/025.004 (1753); Wellcome Library, London, EPH++80 (1772); Stanford University Library, HA1379.V4 G73 1800 FS (1799).

⁴⁵ See J.C. Robertson, 'Reckoning with London: Interpreting the *Bills of Mortality* before John Graunt', *Urban History*, 23 (1996).

chancery staff. Commentaries on the *ristretti* appeared in print, analogous to analyses of the London bills of mortality by figures like John Graunt.⁴⁶ The Franciscan polymath and publisher Vincenzo Coronelli included mortality figures in three successive editions of his guide for visitors to the city published between 1700 and 1713.⁴⁷ In each case, Coronelli tabulated the information from the *ristretti* for the preceding 21 to 30 years, analysed the data, and commented on population growth and the impact of immigration. In the later eighteenth century, *ristretti* were reproduced in Venetian newspapers. A 1788 edition of the *Gazzetta Urbana Veneta* even accompanied the *ristretto* with a commentary which referred to Graunt's findings for life expectancy at birth in London.⁴⁸ Print made the content of Venice's death registers, albeit summarised and de-individualised, available to a wider public.

A third major role of the civic death registers was in governance. The registers functioned as a definitive list of the deceased which came to be treated as a central reference point for other government bodies, particularly those involved in matters of tax and inheritance. For example, in December 1653, the Provveditori di Comun prescribed that 'the Health Office notary, who keeps the Book of Deaths, must take a note of all the deaths from the preceding week to the Magistrato delle Acque [Water Magistracy], and these notes should be registered in a book. The Cancellieri Inferiori must go and see this book each week'.⁴⁹ The Cancellieri Inferiori were officials who were responsible for wills, and the decree sought to ensure the timely opening and publication of wills in accordance with the inheritance process. The benefits of this process for the Republic are revealed in a decree of 1674 which required heirs who had obtained the goods of deceased people to ensure that the relevant wills were published within a month, to address the 'intolerable confusion' which was delaying the exaction by the Water Magistracy of the five per cent of each estate which was due as tax.⁵⁰ The

⁴⁶ John Graunt, *Natural and political observations, mentioned in a following index, and made upon the bills of mortality* (London: Thomas Roycroft, 1662).

⁴⁷ Vincenzo Coronelli, *Guida de' forestieri sacro-profana per osservare il più ragguardevole nella Città di Venezia* (Venice, 1700), 44-45; *ibid.* (Venice, 1706), 34-35; *ibid.* (Venice, 1713), 33-34.

⁴⁸ *Gazzetta Urbana Veneta*, 24, 22 March 1788.

⁴⁹ ASV, *Savi ed Esecutori alle Acque (Acque)*, B. 226, Testamenti, 17 December 1653.

⁵⁰ ASV, *Acque*, B. 226, Heredità, 9 February 1674mv.

Republic needed these revenues due to the economic impact of protracted wars with the Ottomans in this period, which prompted substantial increases in direct and indirect taxation.⁵¹ From 1685, a complete record of deaths was advantageous for the Health Office specifically, because it exacted a tax on burials which it used to finance the construction and maintenance of civic cemeteries.⁵²

Marginalia facilitated efficient governance by signposting deaths from causes which required further investigation. In the case of homicides, the largest group of deaths with visual marginalia, marginalia helped officials locate the initial report of any such death. Many homicides did not take place in the deceased's parish of residence, and sometimes the identity of the deceased was not immediately known. Since several magistracies had responsibilities for prosecuting murder, marginalia offered a visual marker which could be checked as the judicial process unfolded. Some registers explicitly state that the Health Office had supplied the Council of Forty, which was responsible for the prosecution of non-noble murders, with a monthly note of deaths.⁵³ Although these notes have not survived, they may have enabled the latter body to produce its alphabetised register of homicides, containing details of the deceased and any subsequent prosecution.⁵⁴ The embedded death registration system thus ensured that all homicides came to the attention of the judicial authorities. Deaths also merited particular scrutiny when the cause of death was ambiguous. Sudden deaths, drownings and falls all had the potential to be accidental, self-inflicted, or homicidal. Here too, visual marginalia allowed the original record of the death to be located easily.

Death registers were multi-purpose documents. Initiated as a weapon in the Republic's armoury of public health measures against plague, they became valuable in an expanding range of contexts due to the comprehensiveness of the records, the capacity of the Republic's bureaucracy to work collaboratively, and the fact that their visual characteristics made them so easy to use.

⁵¹ Frederic C. Lane, *Venice: A Maritime Republic* (Baltimore: The Johns Hopkins University Press, 1973), 416.

⁵² ASV, *Sanità*, B. 155, 16 February 1684mv.

⁵³ See, for example, ASV, *Sanità*, B. 926.

⁵⁴ ASV, *Quarantia Criminal*, B. 174 (1727-1797).

The culture of record-keeping in Venice influenced the form of the death registers. The archive of the Republic of Venice was one of the largest pre-modern sets of chancery records and was renowned throughout Europe.⁵⁵ Filippo de Vivo points out that scholarship on Venice's archive has focused on two main themes: the role of the archive as part of the state and the history of the chancery staff.⁵⁶ De Vivo takes our understanding forward by evaluating the processes by which the archive of the *Cancellaria Secreta*, which contained the records of Venice's main political councils, was created and organized; his contention is that 'greater awareness of the records' production may lead to a better understanding of their contents'.⁵⁷ By exploring the way in which Venice's death registers were compiled, and the extent to which this process changed over the course of the early modern period, we certainly gain deeper insights into the Republic's concerns about mortality. We also glean a sense of the day-to-day activities of a mid-level government organisation. The education of the Health Office scribes informed the organisational features of the death registers; their education inspired the visual dimension of their work.

The scribes needed material to record. They were able to obtain information thanks to the power of the Venetian Republic and its ability to secure compliance with its demands for information. In the case of the death registers, the Health Office was supplied with information by the parish clergy, who were well-placed to obtain it due to their central position in local networks and their role in death and funerary rituals. Venice's civic death registers were the written record of a series of oral exchanges. Like London's bills of mortality, albeit with a different set of participants, the death registers were 'collaborative texts'.⁵⁸ As Will Slauter has argued in his study of bills of mortality, the recording of death was negotiated by these participants.⁵⁹ The information which ended up in the *Necrologi* emerged from a set of conversations between families, neighbours and medical

⁵⁵ On chancery staff in pre-modern Italy, see Filippo de Vivo, Alessandro Silvestri and Andrea Guidi (eds), *Archivi e archivisti in Italia tra medioevo ed età moderna* (Rome: Viella, 2015).

⁵⁶ De Vivo, 'Ordering', 233.

⁵⁷ *Ibid.*

⁵⁸ Will Slauter, 'Write Up Your Dead: The Bills of Mortality and the London Plague of 1665', *Media History*, 17 (2011), 1.

⁵⁹ *Ibid.*, 13.

practitioners, which took place before and after the moment of death. These conversations involved parish clergy as direct participants, due to their provision of sacramental support in the final stages of life, and as listeners, due to their recording obligations. Slauter found that social pressures led to the misreporting of deaths in London during the plague of 1665.⁶⁰ In Venice, by contrast, the strength of the state helped the Republic to obtain accurate information and to record it efficiently.

The Health Office put in place measures designed to ensure that the information it received was detailed and reliable. Requirements were promulgated in decrees, and evidence suggests that the decrees were followed. From the inception of the civic death registers in 1504, the Sanità sought to guard against the fallibility of memory by obliging parish priests to keep a written record of deaths. By the mid-sixteenth century, these records had evolved into parish registers: long, thin books in paper covers, designed to be portable. Clerics took the physical register to the Health Office on the day that a parishioner died; there, once the information it contained had been inscribed into the civic register, it was signed. Each set of daily entries is annotated in the parish register with initials, the word 'licenziato', or an abbreviation of this term. In all cases the hand which made the annotation is distinct from that which wrote the entry. Daily visits facilitated the creation of a civic record in chronological order, and also minimized the risk that material would be forgotten or lost. Legislation specified the information to be provided, including details of the deceased's identity, illness, medical treatment and funerary arrangements.⁶¹ The presence of such details in both parish and civic registers proves that legislation was obeyed. Clerical collaboration was incentivized by the proscription of burial until the death-record had been authorized by the Health Office. A single decree from July 1540 complained that parish priests were burying bodies without authorisation; the absence of similar legislation in later years indicates acquiescence.⁶² The parish clergy were an integral part of the Venetian community and usually cooperated with the Republic. The *piovano*, or parish priest, was elected by property-holders in the parish, and was an established figure in the communications network of the

⁶⁰ *Ibid.*, 11-12.

⁶¹ For details of the evolution of these requirements, see Bamji, 'Medical Care', 485-486.

⁶² ASV, *Sanità*, B. 728, 16 July 1540.

Republic, accustomed to broadcasting new legislation of all kinds to his parishioners. In the eighteenth century, the formal parameters of this network were extended to physicians, who had increasingly close links with particular parishes.⁶³ In 1731, the Health Office sought to augment the level of detail they obtained by requiring physicians to provide priests with sworn statements about the cause of death and length of illness if they had treated a sick person who subsequently died.⁶⁴ This decree enhanced the provision of information about causes of death which was informed by medical knowledge, since a high and increasing proportion of the deceased – especially adults – had previously received some kind of medical care.⁶⁵

The collation and transmission of information from parish to Health Office was a collective endeavour for the parish clergy. The *piovani* had overall responsibility for ensuring that Health Office orders were followed. The parish sacristan often recorded deaths, but the presence of multiple hands in parish records shows that other clergy updated the register if he was not available. The parish register was usually taken to the Health Office by a lower-status cleric called a *nonzolo*.⁶⁶ The offices of the *Sanità* were in the public granaries, facing out onto the lagoon in a prime position next to the mint and close to the Ducal Palace and Piazza San Marco. When a *nonzolo* arrived at the Health Office, specific members of the chancery staff were expected to read his register and to update the civic register. Entries for each day are not in any particular order. The handwriting and intermittent presence of multiple hands indicate that the register was updated repeatedly throughout the day. The size and responsibilities of the chancery staff shifted over time, but the entering was always undertaken by the *nodaro* (notary), *scrivano* (scrivener) or one of their designated assistants. Both the *nodaro* and *scrivano* worked at a counter where they communicated with visitors to the office. In the early years of death registration the *nodaro* led the compilation of the death registers.⁶⁷ During the seventeenth and eighteenth centuries, the *scrivano* assumed primary responsibility, but entries were

⁶³ See Bamji, 'Medical care', 492.

⁶⁴ ASV, *Sanità*, B. 751, 24 April 1731.

⁶⁵ Bamji, 'Medical care', 487-488.

⁶⁶ See, for example, ASV, *Sanità*, B. 895, 19 December 1687.

⁶⁷ Nelli-Elena Vanzan Marchini, *Le leggi di Sanità*, vol. 3 (Treviso: Canova, 2000), 40.

made by his assistant or the *nodaro* when he was unavailable. The *scrivano* had one assistant from the mid-seventeenth to the mid-eighteenth century, and two in the later eighteenth century.⁶⁸

The collaborative work of these clerks is evidenced in parish registers, which sometimes include the signatures of scribes, as in the authorisation of deaths for the parish of San Pantalon in 1661, where the register features the names of Antonio Contin *nodaro* and Andrea Gratarol *scrivano*.⁶⁹ Most civic registers, moreover, were compiled by multiple hands.⁷⁰ The collaboration between notaries, scriveners and assistants ensured the completeness of the registers in the short term, and the continuity of recording practices in the longer term. The involvement of multiple officials meant that recording practices could be transmitted easily to new clerks through oral instruction, as well as through the material evidence of existing registers. The stability of recording practices was cemented by the sheer length of time for which most notaries and scriveners held office; at an extreme, the post of *scrivano* was retained by two generations of the Monti family for over 110 years.

The organisation of the records themselves was underpinned by broader chancery practice. As De Vivo remarks, the volume of paperwork produced by the Republic's magistracies 'required the development of strict criteria for the organization of the material'.⁷¹ Chancery records were ordered chronologically *and* thematically, and contained finding aids such as running titles with the date at the top of each page of a register, indexes within volumes and general indexes of multiple volumes known as *rubriche*.⁷² The *Necrologi* conformed to chancery practice in their chronological order, and by including a date at the top of each page of the register. Marginal images performed the role of indexing the text, and also constituted a form of thematic organisation. From 1789, the registers also contained a more conventional index of deaths at the back of the register.⁷³ The Health Office undertook an early

⁶⁸ ASV, *Sanità*, B. 742, 19 July 1666, 16 January 1667mv; B. 767, 18 December 1776; B. 778, 20 December 1786.

⁶⁹ ACPV, San Pantalon, Registri dei morti, R. 6, ff. 62-64.

⁷⁰ Earlier registers, including those for 1570, 1586, 1606, 1617, 1618 and 1631 also feature multiple hands.

⁷¹ De Vivo, 'Ordering', 1.

⁷² *Ibid.*

⁷³ ASV, *Sanità*, B. 976. Legislation indicates that indexes may have been produced for the registers for 1787 and 1788 but they do not survive. See Del Rio, 23, 27.

attempt at indexing a register in 1611, including an index by first name at the back of the volume.⁷⁴ It probably instigated this index due to its cognizance of the concerted efforts being made to improve the organisation and indexing of the records of the Council of Ten and Ducal Chancery in precisely these years.⁷⁵ The Health Office may not have pursued conventional indexing in the seventeenth century as it found the process too laborious and expensive. The length of time it took to return to the practice indicates that it felt that its system of marginal indexing worked well. Amongst other factors, the marginal images were an efficient way of indexing because they could be produced at the same time as the document itself.

The registers had visual characteristics beyond the visual marginalia. Walter Ong famously wrote that: 'Print situates words in space more relentlessly than writing ever did. Writing moves words from the sound world to a world of visual space, but print locks words into position in this space'.⁷⁶ But the handwritten text of the death registers was locked into visual space more inexorably than if the mortality records had been printed. A printed book can be reset and reprinted. The Health Office maintained a single run of death registers, and pursued continuity in the visual arrangement of words and images, for almost three hundred years. The architecture of the text in these registers was consistent.⁷⁷ Each month began on a new page. Each page was headed with the date of the first entry. Each entry was written with a hanging indent, so that its beginning—and the name of the deceased—was discernible with ease. Throughout the seventeenth and eighteenth centuries, each entry was separated with a line. Each page had a left and right margin; the parish was noted in the latter. Each day, deaths were enumerated in the left margin; each month daily deaths were tabulated. These features underline the importance of the margins for textual as well as visual content. The count of

⁷⁴ ASV, *Sanità*, B. 842; Del Rio, 27. An incomplete alphabetical index of the deaths of women during the later months of the plague of 1630–1631 was also produced. See ASV, *Sanità*, B. 857.

⁷⁵ De Vivo, 'Ordering', 12–15.

⁷⁶ Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (London: Methuen, 1982), 121.

⁷⁷ On the medieval origins of systematic page layouts, see Michael Camille, 'Glossing the Flesh: Scopophilia and the Margins of the Medieval Book', in D. C. Greetham (ed.) *The Margins of the Text* (Ann Arbor: University of Michigan Press, 1997), 252.

daily deaths facilitated a speedy calculation of monthly figures. The margins also served a practical purpose by providing space for essential additions to the register.⁷⁸ In 1685, 1696 and 1706 the margins were used for an occasional supplementary entry which meant that the chronological order of the register was retained when the report of death had been delayed. From the 1720s onwards, if an entry had been corrected, the approval of the change by one of the magistrates was noted in the margin. These corrections—usually emendations of names—were infrequent, but they are striking because chancery clerks were usually reluctant to annotate government documents.⁷⁹ The Health Office's main notarial registers show that families of the deceased usually requested these changes; petitions indicate that they were motivated by the need for names to be accurate for inheritance to progress.⁸⁰ The emendations show how the registers mattered to individuals as well as to the Republic. The use of the margins for these annotations disrupted the flow of the register and in turn allowed for amended entries to be located with ease.

Marginal images, by contrast, were part of an ongoing, serial process. The simultaneity of production engendered a close interplay between text and image, which worked in a variety of ways. First, sometimes the image offered an elaboration of the information offered by the textual entry, as in cases of homicide where variants of killed ('ammazzato', 'ucciso') and wounded ('ferito') are developed by the inclusion of a sword or dagger in the margin, to the exclusion of other potential causes of violent death. In a second set of cases, the interplay had an indexing function, particularly for drownings and sudden deaths. Drownings were marked with waves regardless of the circumstances. Sudden deaths were labelled with crosses regardless of the cause of death, which was often unknown. Third, marginalia captured the visual world, which could not always be expressed in words. It is striking, for instance, that scribes attempted to reproduce the exact building where an incident had taken place, rather than simply sketching a generic edifice, whether it was Teatro

⁷⁸ Textual marginalia were used widely in Mantua and Milan. In Mantua, every death was numbered each day. In Milan, abbreviations were used to label deaths, especially as S.P.S. (*sine pestis suspicionem*). See, for example, ASM, Atti di governo, Popolazione, Parte antica, 143.

⁷⁹ De Vivo, 'Ordering', 5.

⁸⁰ See, for example, ASV, *Sanità*, B. 747, 19 June 1713.

Grimani, where the carpenter Giandomenico Menardi fell to his death in October 1656 (Fig. 5), or the three separate falls on adjacent days in September 1768, each of which is accompanied by a distinctive building.⁸¹

Visual marginalia were valuable bureaucratic tools. But why did clerks start using them in the first place? The minimal presence of visual marginalia in modern writing practices should not mean that scholars forget how visual symbols were everywhere in early modern Europe, forming a central part of economic life, social interaction, and communication systems. Notaries had distinctive signs. Merchants' marks were widely used across the medieval and early modern world on goods, documents, and personal seals. The register of cargoes loaded onto a ship destined for Cyprus and Syria in 1590 features examples of these marks in the left margin, next to each consignment of goods. The register itself bears many textual similarities to the civic death registers, with wide margins, hanging indents, and lines separating entries.⁸² The printer's device, such as the famous dolphin and anchor symbol of Aldus Manutius, was a form of merchant's mark. Insignia were used in other contexts to articulate identity. Noble families displayed their coats of arms on their palaces; guild emblems were exhibited in the Palazzo dei Camerlenghi, the city's main seat of financial administration next to the Rialto bridge; apothecaries used signs to advertise their shops.⁸³ Visual symbols were also widely used in correspondence, notably through the use of seals to secure and 'sign' documents. Letters were marked in transit with postal endorsements. The image of a gallows was an established icon placed on the outside of a letter to highlight its importance and urgency. The symbol conveyed a message to more than one audience. It prompted couriers to deliver the missive with speed, and told readers to prioritize it.⁸⁴ Of course the choice of symbol also hinted at bad news. As the patrician diarist Marin Sanudo wrote on 15 May 1509, describing how news of the Republic's defeat at the battle of Agnadello

⁸¹ ASV, *Sanità*, B. 878, 28 October 1656; B. 955, 22-23 September 1768.

⁸² See Giovanni Caniato, 'Mercanti e guardiani, commerce e contumacie', in Gerolamo Fazzini (ed.), *Venezia: isola del lazaretto nuovo* (Venice, 2004), 42-43.

⁸³ Renato Vecchiato, *Gli speciali a Venezia* (Venice: Mazzanti Libri, 2013), 39-41.

⁸⁴ James Daybell, *The Material Letter in Early Modern England* (Basingstoke: Palgrave Macmillan, 2012), 6.

reached the city: 'a secretary came running in with letters in his hand from the battlefield, with many gallows drawn on them'.⁸⁵

Across early modern Europe, the most common locus of visual marginalia in official documents was in records related to criminal prosecutions. These images had medieval origins and were influenced by the *pittura infamante* tradition.⁸⁶ Images usually depicted the punishment imposed following a conviction. The margins of the burial register for the cemetery of Bologna's Ospedale della Morte contain images of men executed in 1559 and 1560.⁸⁷ In Rome in 1656, a group hanging was depicted in the records of the criminal tribunal of the governor, albeit below rather than next to the textual entry.⁸⁸ Images of criminal punishments from sixteenth-century Memmingen in southern Germany have a more varied iconography, and differ from Italian examples in sometimes depicting the person who enacted the punishment.⁸⁹ A building with no visible doors represents imprisonment for life; wavy lines represent water in an image showing Christina Herkin being drowned for theft; and considerable care is given to the clothing of Rosina Schemerin (and the sword of her executioner) in the image illustrating the removal of her ears.⁹⁰ Here too the images are located in the margin to the left of the textual entry. The iconography of Venice's death registers relates to this tradition due to its connections with justice: homicides were the largest category of entries although they marked the beginning rather than the end of a judicial process.

But the clerks of the Health Office had not necessarily worked in a legal setting before taking up their positions. Their use of marginalia was inspired by their education. As Bill Sherman has pointed out, early modern students were 'not only *allowed* to write notes in and on their books, they were

⁸⁵ Patricia H. Labalme and Laura Sanguineti White (eds), *Città Excelentissima: Selections from the Renaissance Diaries of Marin Sanudo* (Baltimore: The Johns Hopkins University Press, 2008), 174.

⁸⁶ Gherardo Ortalli, *La pittura infamante nei secoli XIII–XVI* (Rome: Jouvence, 1979).

⁸⁷ Reproduced in Nicholas Terpstra, 'Body Politics: The Criminal Body between Public and Private', in *Journal of Medieval and Early Modern Studies* 45:1 (2015), 13–19, 42–44.

⁸⁸ Reproduced in Rose Marie San Juan, *Rome: A City out of Print* (Minneapolis: University of Minnesota Press, 2001), 252.

⁸⁹ Punishments are also depicted in Frankfurt's *Strafenbuch* (1562–1696). Thanks to Jeannette Kamp for this information.

⁹⁰ Reproduced in Ulinka Rublack, *The Crimes of Women in Early Modern Germany* (Oxford: Clarendon Press, 1999), 82, 111, 166.

taught to do so in school'.⁹¹ Script and image were not conceived as distinct entities, moreover. Pedagogical tracts framed writing as analogous with painting.⁹² From the early sixteenth century onwards, numerous writing manuals were published in Venice, which fostered an intellectual culture in which text, margins, script and image were integrated unthinkingly.⁹³ These manuals used printed textual marginalia extensively to index the text; 'both to classify and to point out', in Sherman's words.⁹⁴ Giulio Cesare Capaccio's *Il Secretario* features textual marginalia throughout, as well as several printed manicules.⁹⁵ Capaccio's text focuses mainly on style, but also addresses spelling and grammar, and contains a final section on 'cifre' (figures). His wide-ranging discussion encompasses abbreviations for text and numbers; the symbols used in music, chemistry, maths, and astrology; the methods of kabbalah; and ciphers.⁹⁶ The boundaries between script and image are not distinct and the manual thereby underlines the graphic and pictorial nature of manuscript texts. Plates were a common feature of these manuals, as in Giacomo Franco's *Il Franco: modo di scrivere cancelleresco moderno*, which included examples of the scripts of famous writers.⁹⁷ The circulation of writing manuals led young men with aspirations to a notarial career to learn to write in a broadly similar way, and to conceptualize manuscripts as visual as well as textual objects.

Inspired by Gérard Genette, the physical presentation of the text has been studied extensively by scholars of early modern print.⁹⁸ The materiality and organisation of early modern manuscripts also mattered. It was no coincidence that Venice was one of Europe's foremost producers of paperwork as well as one of its leading printing centres. Just as the physicality of books emerged from

⁹¹ Sherman, *Used Books*, 3.

⁹² Jonathan Goldberg, *Writing Matter: From the Hands of the English Renaissance* (Stanford: Stanford University Press, 1990), 200-201.

⁹³ For the publication history of writing manuals in sixteenth-century Venice, see Christopher Witcombe, *Copyright in the Renaissance: Prints and the Privilegio in Sixteenth-Century Venice and Rome* (Leiden: Brill, 2004), ch. 12.

⁹⁴ Sherman, *Used Books*, 27.

⁹⁵ Giulio Cesare Capaccio, *Il Secretario* (Venice: Nicolò Moretti, 1597), ff.21v, 37v, 134v.

⁹⁶ Capaccio, ff. 143-191.

⁹⁷ Giacomo Franco, *Il Franco: modo di scrivere cancelleresco moderno* (Venice: Giacomo Franco, 1612). On printed examples of script, see Armando Petrucci, 'Insegnare a scrivere, imparare a scrivere', *Annali della Scuola Normale di Pisa. Classe di Lettere e Filosofia*, third series, 23 (1993), 620.

⁹⁸ Genette, *Paratexts*.

collaborative processes centred on print shops, the form of government records was sculpted by formalized arrangements centred on the clerk's counter.⁹⁹ Print culture shaped chancery conventions due to the role of printed books in notarial education. The organisational characteristics of government documents like Venice's civic death registers were highly visual, because clerks knew—from education and experience—that this structure worked well. Moreover, as Heidi Brayman Hackel states: “scribble”, “print”, “publish”: all these words had more fluid meanings in the early modern period, and all reflect a network of overlapping oral, aural, visual, and manual experiences’.¹⁰⁰ Visual marginalia picked up on embedded forms of visuality in the text, and their language was long-established and intuitive. The mechanisms through which the registers were produced changed slightly at certain times, but were characterized by continuity more than change. Over the course of 250 years, the parish provided information to the Health Office, which coordinated its staff to ensure that records were complete and stable. The continuity of record-keeping practices helped the registers to be more than mere repositories of information.

Many Italian and European polities monitored mortality. The Venetian Republic was not unique in many of its practices, nor was it the first to deploy several of its strategies. A system for scrutinising deaths for signs of plague had been put in place in Milan a full century before it got underway in Venice. Sudden deaths had been a topic of medical discussion since classical antiquity, and leading medical authors like Paolo Zacchia and Giovanni Lancisi continued these debates in the eighteenth century. Across Europe, inspections of the bodies of those who died in accidents or suddenly were commonplace. Records of the deceased were maintained by governments and by the Church. But the records of the Venetian Republic were unique in their level of completion, level of detail, and

⁹⁹ On paratexts and these processes in early modern print culture, see Helen Smith and Louise Wilson (eds), *Renaissance Paratexts* (Cambridge: Cambridge University Press, 2011), 11.

¹⁰⁰ Heidi Brayman Hackel, *Reading Material in Early Modern England: Print, Gender and Literacy* (Cambridge: Cambridge University Press, 2009), 25.

organisational sophistication. The Republic needed a robust set of records due to the size of the city and its cosmopolitan population.

The Venetian Republic was able to maintain these records due to the distinctive structures of power in the city. The seventeenth and eighteenth centuries have often been characterized as a period of decline for the Venetian Republic.¹⁰¹ The political position and military strength of Venice in the European and Mediterranean worlds may have diminished in relative terms. Yet the Republic retained its grasp on the city. The reporting requirements of the Health Office were a time-consuming activity for the parish clergy, but they accepted their position in the nexus of information exchange at the local level, gathering material from physicians, midwives and their parishioners. In turn, the Health Office played its part within the wider government. Clerks with clearly defined roles worked together to ensure the completeness of the registers and shared key material with other magistracies. The Republic recognized that an effective bureaucracy placed it in a better position to respond quickly to anything which posed a threat to the continued success and survival of the polity. The continuity of record-keeping practices and the long periods of office of staff were effective counterpoints to the regular rotation of patricians through different magistracies.

Venetian bureaucracy revolved around the completion, circulation, conservation and consultation of manuscript records. The continued importance of handwritten documents is noteworthy in a city which was one of Europe's most important printing centres. The Venetian Republic used print to exercise power, notably in issuing printed broadsheet decrees, and it increasingly made use of print for bureaucratic purposes, such as by commissioning printed forms to expedite the collation of information. Nonetheless, the quantity of handwritten material which its officials produced continued to be prodigious. Manuscript records remained dominant because they were such an effective medium of documentation and communication. Their efficacy stemmed from the powerful combination of visual and textual. Words and images were placed on the page with

¹⁰¹ For a complication of this narrative, see G. Symcox, 'Cultural History and the Decline of Venetian Decline', *Studi Veneziani*, 45 (2003): 119-126.

consideration for their collective effects and their organisational force. Marginalia were integral to the Republic's record-keeping practices because visual codes were an inherent part of writing, as much as reading, practices in early modern Europe. The educated chancery staff of the Health Office used visual marginalia to augment the functionality of the civic death registers. Analysing these registers demonstrates the fundamental role of the visual in early modern bureaucracy.

Tables

TABLE 1: Visual marginalia and category of death

Category	N marginal images
Homicide	290
Sudden death	236
Water	206
100 years+	104
Fall	61
Apoplexy	43
Fever	43
Found dead	36
Respiratory	35
Executed	30
Infant convulsions ['spasemo']	24
Contagious/skin [smallpox, measles, spots, leprosy, anthrax, pox]	20
Pain	13
Chest pain/rupture	10
Hanged self	10

TABLE 2: Incidence

Year	N marginal images	% entries with images
1636	21	0.65
1645	192	5.23
1656	145	3.51
1666	120	2.92
1676	83	1.58
1685	99	2.57
1696	129	3.01
1706	100	2.09
1715	57	1.26
1726	111	2.32
1735	54	1.02
1746	27	0.53
1756	26	0.39
1766	42	0.83
1776	10	0.18
1786	7	0.12
1796	13	0.17

TABLE 3: Presence and absence

Category	N images total	N 1666 images	N 1715 images	N 1766 images	N 1666 absence	N 1715 absence	N 1766 absence
Homicide	290	28	5	0	12	6	17
Sudden death	236	19	19	9	15	16	13
Water	206	25	9	20	15	15	1
100+	104	11	3	0	8	0	0
Fall	61	1	1	1	22	21	15
Apoplexy	43	1	7	1	38	85	190
Fever	43	7	1	0	Many	Many	Many
Found dead	36	1	4	6	3	2	7
Respiratory	35	3	4	0	Many	Many	Many
Executed	30	10	0	0	0	0	0
Infant convulsions ['spasemo']	24	4	1	0	Many	Many	Many
Contagious/skin	20	1	0	0	Some	Some	Some
Pain	13	0	0	0	Few	Few	Few
Chest pain/rupture	10	0	1	0	0	0	0
Hanged self	10	1	0	2	1	0	0

TABLE 4: Age and death

Age	% all deaths	% visual marginalia sample
Infant (up to 12 months)	29	2
Child (13-60 months)	12	3

Young adult (61 months to 24 years)	12	20
Adult (25 years and older)	47	75