

MISCELLANY

"ONE FACE, ONE VOICE, ONE HABIT, AND TWO PERSONS!" THE SURVIVAL OF TWINS IN EARLY MODERN SOCIETY¹

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In *Twelfth Night* 'identical' brother and sister twins, Sebastian and Viola are separated following a shipwreck and when finally reunited a third party remarks

How have you made a division of yourself?
An apple cleft in two is not more twin
Than these two creatures.²

Twins also feature in another of Shakespeare's plays. The plot of *The Comedy of Errors* revolves around two pairs of identical male twins, one free, one slave, born on the same day.

There had she not been long but she became
A joyful mother of two goodly sons;
And which was strange, the one so like the other
As could not be distinguish'd but by names.
That very hour, and in the self-same inn,
A mean woman was delivered
Of such a burden male twins, both alike.
Those, for their parents were exceeding poor,
I bought, and brought up to attend my sons.³

After another shipwreck both pairs of twins become separated and what ensues is a comedy of mistaken identity. Twins are therefore easy to discover in literature as indeed they are in mythology: Castor and Pollux, Romulus and Remus easily spring to mind.⁴ Yet what of real life? Shakespeare's interest in twins, although based in part on dramatic tradition, no doubt stemmed from him being the father of twins, Hamnet and Judith who were born in 1585. Judith survived into old age but Hamnet died aged 11, largely forgotten. The baptism of twins occurs frequently in parish registers but I have been able to discover only one set of twins born before 1900 who survived to become famous: Henry and Thomas Vaughan who were seventeenth-century poets. The reason for this may have been that many famous people did indeed have a twin, but that fact was simply not important enough to have been recorded. However, the most likely explanation, as with Hamnet, is connected with the survival rate of twins.

Table 1 Infant mortality rates (per 1,000 live births) for baptised twins, York 1561-1700

Sex	Baptisms	Number of births		Infant mortality rate		Total
		<1 month	<1 year	Neonatal	Post-neonatal	
M	205	93	27	454	132	585
F	257	78	39	304	152	455
unknown	14	14	0	1,000	0	1,000
Total	476	185	66	389	139	527

In most western countries twins occur once every 80-100 births; so about 1 person in 45 should be a twin.⁵ This ratio is not an absolute constant; it varies geographically and is influenced by birth order and mother's age. There are two types of twin: monozygotic (identical) and dizygotic (dissimilar). Of the two, monozygotic twins are less common occurring in only 4 out of every 1,000 confinements which means that about 20 per cent of twins should be identical. In parish registers there is abundant evidence of twin births. For instance:

Mary and Elizabeth, ye twins of George Scofeild, September ye 4th (1680)⁶

Most twins were not specifically labelled; nevertheless, they are still easy to identify:

Thomas & John, the sons of Charles Yates, bap the 17th day of June (1636)⁷

Thus, it is a relatively straightforward, if time-consuming, task to locate twin baptisms, search through the appropriate burial register, and then calculate infant mortality rates (IMRs) for twins. This procedure has been carried out on 13 of York's parish registers for the period between 1561 and 1700.⁸ Altogether 238 pairs of twins were identified out of a total sample of 28,404 baptisms which gives a twin rate of about 1 in 60.⁹ Twin IMRs are shown in Table 1 and it is immediately apparent how high these were with over half not surviving to see their first birthday. IMRs in York were in the region of 260 throughout the seventeenth century and thus, twins experienced over twice the mortality of singleton births. Many twins died shortly after birth. Consequently, rates of neonatal mortality (deaths within one month) were extremely high and it is probable that low birth weight was a major contributing factor to such high levels of mortality. Table 1 also indicates that male twins were much more likely to die than female ones although in general male infants experienced higher rates of mortality. It might be expected that males were given preferential treatment especially when male/female twins were born. To test this thesis Table 2 shows IMRs disaggregated by birth type. While all types of twin suffered high rates of mortality, males suffered most in both categories and any preferential treatment given to males appears, at least, to have been ineffectual.

Table 2 Infant mortality rates (per 1,000 live births) for baptised twins by type of birth, York 1561-1700

Birth type	Baptisms	Number of burials		Infant mortality rate		Total
		<1 month	<1 year	Neonatal	Post-neonatal	
MM	116	52	19	448	164	612
MF(M)	89	41	8	461	90	551
MF(F)	89	30	7	337	79	416
FF	168	48	32	286	190	476
unknown	14	14	0	1,000	0	1,000
Total	476	185	66	389	139	527

Given such high levels of mortality there was a great likelihood that many twins did not survive to be baptised. For example:

Anne daughter of William Morley ye 20 day of Dec, and another twen came to be buried ye same day (1657).¹⁰

In many cases all traces of unbaptised twin burials are missing from the registers since unbaptised infant burials were only rarely identified. This causes the linking process to break down and infant mortality is under-estimated. Throughout the whole sample of York baptisms, there is sufficient evidence to suggest that perhaps 8 per cent of births die unbaptised during this period and with many twins dying shortly after birth the level of twin under-registration may have been even higher.¹¹ Further, the rather low twin rate and the large excess of female twin baptisms also suggest that many twins, especially male ones, went unrecorded. Attempts to compensate for under-registration are fraught with difficulties, especially given the small numbers involved. If 8 per cent of twins died before they could be baptized the total IMR from Table 1 would need to be increased to 561 (per 1,000 live births) and the male IMR would then be in excess of 600. Whatever the true rate may have been, clearly all twins were very vulnerable. It is probable that the threat to twins lessened considerably the older they were; nevertheless, child mortality levels in York were still high and applying these levels to the twin IMRs, less than 1 in 3 twins would have survived to reach 15 with less than 1 in 4 male twins surviving to that age.¹² IMRs in York were about double those in rural areas, but it is likely that a similar mortality differential for twins would have existed there too.¹³ Thus, while the number of twins born was largely invariant, very few sets of twins would have survived to reach adulthood during the early modern period. It has not been possible to differentiate between the mortality experiences of monozygotic and dizygotic twins. However, it is interesting to note that all male twins suffered higher IMRs than male mixed twins, while all female twins suffered lower rates than female mixed twins. If this was due to differences in the mortality experiences of monozygotic and dizygotic twins then identical male twins will have suffered the highest rates of all. Moreover, since male identical twins would have been the ones to be noticed it is not surprising to discover the apparent absence of adult twins from early modern

society.

To conclude, IMRs for twins were so high that very few pairs would have survived into adulthood and it was only following the secular decline in infant mortality at the start of this century that twins became commonplace. Little has been written on this subject and a closer examination of twin mortality levels may repay study. If twin mortality rates mirror those of singletons then being an acutely sensitive sample, secular and spatial variations in twin mortality rates may be able to illuminate topics such as urban/rural differentials in infant mortality, the causes of the secular decline in infant mortality and, by focusing on the changing relationship between neonatal and post-neonatal mortality, how different disease patterns affected infants. Coincidence is a convenient device for the dramatist but surely the greatest coincidence in **The Comedy of Errors** is not that the pairs of twins are eventually reunited but that they survived to become separated in the first place. Finally I would be grateful for any further information on either famous twins or levels of mortality among twins.¹⁴

NOTES

1. **Twelfth Night**, Act 5 line 208. I wish to express my thanks to the British Academy for the award of a Post-doctoral Research Fellowship and the Local Population Studies Research Fund for financial support. I also wish to thank Graham Mooney, Jill Rudd, Naomi Williams and Bob Woods for helpful suggestions.
2. **Twelfth Night**, Act 5 lines 214-216.
3. **The Comedy of Errors**, Act 1 lines 50-58.
4. Other examples include Goldoni's **Venetian Twins**, Alexander Dumas' **Man in the iron mask** and Esau and Jacob from the Bible.
5. Biological factors affecting twins are discussed in A.S. Parkes, **Patterns of sexuality and reproduction**, (Oxford, 1976), 74-86. Also, see R. Pressat, **The dictionary of demography**, (ed C. Wilson), (Oxford, 1985), 152.
6. F. Collins ed, **The parish register of St Michael le Belfrey, York part 2 1653-1778**, (Yorkshire Parish Register Society Vol.11, 1901), 77.
7. F. Collins ed. **The parish register of St Michael le Belfrey, York part 1 1565-1653**, (Yorkshire Parish Register Society Vol.1, 1899), 186. There is the possibility that these types of entries may refer to the retrospective baptisms of older children but during the early-modern period such baptisms were rare and when they occurred an appropriate note was usually made.
8. York had 23 parishes and a population of c.12,000 during the seventeenth century. The accuracy of York's parish registers and levels of mortality within the city are discussed in C. Galley, 'A never-ending succession of epidemics? Mortality in early-modern York', **Social History of Medicine**, 7 (1994).
9. Three sets of triplets were also identified but these have been excluded from the analysis.
10. Collins, **Register of St Michael le Belfrey, part 2**, 18. Perinatal mortality amongst twin confinements was also high. In the register of **St John Ousebridge** (Borthwick Institute of Historical Research Y/J 1:47) there is the following entry: 'Richard Housman had two children born the one, Elizabeth, borne July 14th baptized 17th, the other still borne the 17th (1661)'. Elizabeth was subsequently buried on 26 July.
11. See Galley, 'Epidemics'.
12. Galley, 'Epidemics'.
13. Mortality of twins is still higher than for singletons. In Belgium between 1920 and 1972 the IMR of twins was around three times greater than that of singletons, see Pressat, **Dictionary of Demography**, 152.
14. Department of Geography, Roxby Building, University of Liverpool, P. O. Box 147, Liverpool L69 3BX.