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Time and Work in Rural England, 1500-1700

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Abstract:

‘Free of haste, careless of exactitude, unconcerned by productivity.’ This is how Jacques Le Goff characterised the temporality of pre-industrial rural life. In E.P. Thompson’s famous argument, it was only with the arrival of the factory and the industrial age that the erratic rhythms of English working people were abruptly swept away by a new imperative for long and regular working hours controlled by the clock. It is a thesis that has been much debated in relation to the temporalities of pre- and non-industrial cities, and with regard to the impact of industrialisation when it arrived. There has, however, been very little scrutiny of its account of temporality in rural England before industrialisation.

This article therefore offers the first extensive empirical study of both time consciousness and work-related time-use in sixteenth- and seventeenth-century rural England. It does so by drawing on the testimony that ordinary women and men gave before the courts, testimony that often divulged both how those people told the time of day, and how they used it. What emerges is that English rural society in this period had a relatively high degree of clock time awareness, and that everyday patterns of work followed more consistent and regular rhythms than Thompson’s thesis allows. As a consequence, the article argues that we need to question the assumption that the long hours and work discipline of ‘modernity’ had no roots in ‘traditional’ English rural life.

Time and Work in Rural England, 1500-1700

I

Early on a September Monday morning in 1670, at ‘about three howers to day breakeing’, Jane Maddock of Rattery, Devon, rose from her bed. She mounted her brother’s black mare and set off ‘to ride to a friends howse beyond Exeter’ to fetch some clothes. She was not alone in being up and about before the crack of dawn. As she passed through nearby Ashburton ‘shee saw light in several howses’, and even ‘heard a Joyner planinge as she supposed’. Not everyone she encountered was an early bird though. Upon reaching Bickington, ten miles into her journey, she noticed that her steed had cast a shoe, and ‘shee desired the Smith att Bickington to sett the same’. But, it being only ‘neere about day breaking’ — roughly 6am at that time of year — the smith ‘would not rise’. Maddock had more luck at Kingsteignton, into which she rode ‘about an hower uppon [i.e. after] Sunne rising’. Here she found an ‘old Smith’ who was up, and ‘did sett the shoo for a penney’. Jane Maddock then ‘ridd from thence to Exeter’, and on to her friend’s house.¹

Maddock recounted this story to the Devon JP Richard Cabell the following Thursday. He was examining her as a suspect in a case of barn burning that had taken place in Rattery on the Sunday night. In the process of reconstructing this sequence of events, Maddock — like many of the hundreds of thousands of people that gave testimony to the quarter sessions and church courts in the sixteenth and seventeenth centuries — did more than simply try to establish her innocence. Inadvertently, the story she told also laid down a trail of breadcrumbs for the historian interested in the relationships of ordinary people to both time and work in early modern England. Jane Maddock’s testimony tells us something about the way time could be measured: both in hours and in relation to the sun rise. It also reveals

* I would like to thank David Beckingham, Steven Earnshaw, Laura Fenton, Jeremy Hayhoe, Steve Hindle, Laura Sangha, Brodie Waddell and Jane Whittle for their comments on earlier versions of this essay, and the anonymous referees for their encouraging and helpful comments.

¹ Devon Heritage Centre (hereafter DHC), QS/4/Box 84-85/Michaelmas 1670/Examinations.

something about how time was used: we can see the hours at which people started work, or, in the case of the Bickington blacksmith, the times by which they had not started work. Reading such accounts discloses the rhythm of the early modern working day, and the ways in which its passage was charted.

These are matters of some significance for wider debates about the impact of industrial modernity upon English working people, and especially upon their relationship with time. Such debates are most famously associated with an article written by E.P. Thompson in the pages of *Past and Present* half a century ago.² Thompson saw the coming of industry as a watershed in the history of time and work. The pre-industrial world, he suggested, was marked by irregular work rhythms. Workers focused on completing certain tasks, rather than working for a set number of hours, and consequently there was little need for an understanding or application of clock time. It was not the clock but the natural world — the passage of the seasons, the vagaries of the weather, the waxing and waning of daylight hours — that shaped patterns of work, resulting in an uneven application of sweat and toil across each day, week, and year. That changed with the arrival of industrial capitalism. The factory, in particular, was in the vanguard of a new work-time regime, one in which long, set, regular working hours, measured by the clock, became the mechanism for imposing the new work discipline that was required to drive productivity in the industrial age. The process of internalising this alien notion of time discipline was, for Thompson, a source of trauma for English working people, with the arrival of the modern long and regular working day triggering a ‘psychic crisis’.³ The contrast between old and new time regimes was especially stark for the rural folk who flocked to fill the early factory floors.

Mark Harrison has argued that Thompson’s original piece was more hypothesis than firm thesis, and that it has since become ‘vulgarised’ in the course of subsequent summaries

² E.P. Thompson, ‘Time, Work-Discipline, and Industrial Capitalism’, *Past and Present*, 38 (1967).

³ *Ibid*, 91.

into an uncomplicated narrative of the impact of industrialisation on time.⁴ The fact remains, however, that this *reading* of his essay has become recognized as ‘*the* standard account of the history of clock time’, with its influence evident far beyond the footnotes of eighteenth-century historians.⁵ Yet for all of its dominance over the historiographical terrain, this account is not the only, or even the earliest, account of the historical relationship between time and work. Writing in French in the early 1960s, Jacques Le Goff had identified the developments that Thompson would come to situate in the eighteenth-century factory in a very similar guise in the fourteenth-century city. In an increasingly commercialised urban context, the needs of the merchant for measured, co-ordinated and efficient time saw ‘agrarian work rhythms’ — ‘free of haste, careless of exactitude, unconcerned by productivity’ — give way to a working day made up of regular clock-oriented hours. ‘Work clocks’ began to ring out across the cities of northern France and the Low Countries to mark the beginning and end of the working day at set hours.⁶ Similar evidence has been found across the three centuries that separated Le Goff’s textile merchants from Thompson’s factory workers, confirming that urban societies in early modern north-west Europe were imbued with a developed consciousness of clock time and observed regular and ordered working hours.⁷

⁴ Mark Harrison, ‘The Ordering of the Urban Environment: Time, Work and Occurrence of Crowds, 1796–1835’, *Past and Present*, 110 (1986), esp. 134–5. David Landes is often cited as the main proponent of an uncomplicated story: David S. Landes, *Revolution in Time: Clocks and the Making of the Modern World* (Cambridge, Mass., 1983). See also the debate between Harrison and Landes in *Past and Present*, 116 (1987).

⁵ Paul Glennie and Nigel Thrift, *Shaping the Day: A History of Timekeeping in England and Wales, 1300–1800* (Oxford, 2009), 43. This work can be considered its successor in many respects, especially in relation to time-telling, and will be engaged with closely below.

⁶ Jacques Le Goff, *Time, Work and Culture in the Middle Ages*, trans. Arthur Goldhammer (Chicago, 1980), esp. chapters on ‘Merchant’s Time and Church’s Time in the Middle Ages’ and ‘Labor Time in the “Crisis” of the Fourteenth Century: From Medieval to Modern Time’. The original essays were published in French in 1960 and 1963 respectively. For earlier accounts of changing time regimes in the English context see Keith Thomas, ‘Work and Leisure in Pre-Industrial Society’, *Past and Present*, 29 (1964) and Sidney Pollard, ‘Factory Discipline in the Industrial Revolution’, *Economic History Review*, 2nd ser., 16:2 (1963).

⁷ Donald Woodward, *Men at Work: Labourers and Building Craftsmen in the Towns of Northern England, 1450–1750* (Cambridge, 1995), esp. 122–31; Bruno Blondé and Gerrit Verhoeven, ‘Against the Clock: Time Awareness in Early Modern Antwerp’, *Continuity and Change*, 28:2 (2013); Matthew S. Champion, *The Fullness of Time: Temporalities of the Fifteenth-Century Low Countries* (Chicago, 2017), esp. chapter 1.

This body of work helps to make sense of the findings of Hans-Joachim Voth's major study of time-use during the industrial revolution. This drew on depositional material from London's Old Bailey to examine how patterns of working time-use in that city changed in the years between 1750 and 1830.⁸ Voth was broadly in agreement with Thompson that this period saw an increase in the amount of time people spent at work, a trend manifested in the greater number of days worked throughout the year.⁹ The length of the working day, however, 'remained largely unchanged during the three quarters of a century' after industrialisation first began to bite.¹⁰ This latter finding was not a conclusion that Voth himself particularly emphasised, but his assessment that a relatively fixed, regular working day of eleven hours — from roughly 7am to 7pm with an hour's break — was already in place in 1750, on the eve of industrialisation, is an important one. It chimes with other empirically rich studies of time-use in questioning the role of the factory in introducing a novel regularity to the working day. In late-eighteenth- and early-nineteenth-century Bristol, factory employment was 'negligible', yet the attitude to work time there was far from 'erratic and relaxed', with a regular, ordered, 'recognizable working day and working week' prevailing across the city in the years between 1796 and 1835.¹¹ Another set of late-eighteenth century non-industrial workers, the clerks of the Bank of England, worked a day that was 'characterised by regular, and sometimes long, hours', and was 'time-oriented rather than task-oriented', with the 'tyranny of the clock' having 'entrenched regular time ... in the minds' of those working at the forefront of financial capitalism, independent of the demands of factory discipline.¹² At the other end of the eighteenth century, the workforce on the building site for St Paul's Cathedral were already observing a regular eleven hour day: of

⁸ Hans-Joachim Voth, 'Time and Work in Eighteenth-Century London', *Journal of Economic History*, 58 (1998) and *Time and Work in England during the Industrial Revolution* (Dartford, 2012).

⁹ Voth, *Time and Work*, esp. 164–8.

¹⁰ Voth, *Time and Work*, 164.

¹¹ Harrison, 'Ordering', 167, 140.

¹² Anne L. Murphy, 'Clock-Watching: Work and Working Time at the Late Eighteenth-Century Bank of England', *Past and Present*, 236:1 (2017), esp. 131–2.

6am to 6pm with a break at 1pm — with each of these times marked by the ringing of the St Paul’s bell — six days a week, fifty-two weeks of the year.¹³

The implication of all this research is that Thompson was wrong to see clock-time consciousness and regular work rhythms as inventions of the factory. Why, then, has his narrative proved so persistent? In large part it is because the interventions in these debates have confined themselves to a focus on urban environments, replacing industrialisation with urbanisation as the key driver of changes in time regimes. Thompson’s characterisation of the irregularity of the *rural* world from which so many early factory workers came has remained untouched. Indeed, as Le Goff saw it, ‘urban time was more complex and refined than the simple time of the countryside’.¹⁴ The key distinction implied in this body of work is one between urban and rural timescapes, rather than the traditional and modern ones emphasised by Thompson.¹⁵ Yet there has been little empirical investigation of rural time regimes to substantiate such a dichotomy. This essay therefore offers the first extensive empirical study of both time consciousness and work-related time-use in sixteenth- and seventeenth-century *rural* England.¹⁶ It sets out to question the validity of Thompson’s sketch – explicitly or tacitly accepted by many historians working on these subjects in urban contexts – of the timescapes that prevailed in the English countryside before the age of industrialisation.

In doing so it draws upon material gathered as part of a broader project on gender and work in rural England in the period from 1500 to 1700.¹⁷ This project consulted around

¹³ Judy Stephenson, ‘Looking for Work? Or Looking for Workers? Days and Hours of Work in London Construction in the Eighteenth Century’, *Discussion Papers in Economic and Social History*, 162 (2018), esp. 13–14.

¹⁴ Le Goff, *Time, Work and Culture*, 36.

¹⁵ Harrison, ‘Ordering’, 140–41.

¹⁶ Glennie and Thrift’s *Shaping the Day* does make some attempt to study time awareness in rural areas, as discussed below.

¹⁷ ‘Women’s work in rural England, 1500–1700: a new methodological approach’, funded by a Leverhulme Trust project grant: RPG-2014-313. For more information see: earlymodernwomenswork.wordpress.com. This article is one of four planned outputs from the project, the others being: Jane Whittle, ‘A Critique of Approaches to “Domestic Work”: Women, Work and the Preindustrial Economy’, *Past and Present* (forthcoming); Jane Whittle and Mark Hailwood, ‘The Gender Division of Labour in Early Modern England’, *Economic History*

fifteen thousand depositions from quarter sessions, church courts, and coroners' reports from five counties in the south west of England, chosen because they incorporated a wide cross section of the country's main agrarian regimes and industries.¹⁸ Instances of specified individuals — male or female — participating in specified work activities, such as our 'old Smith' at Bickington who 'set a shoe upon a horse', were recorded. This yielded a total of 4300 observations.¹⁹ The definition of work used was deliberately broad with the intention of recording both paid and unpaid work, and of capturing 'domestic' work tasks.²⁰ Where provided, contextual details about the individual and the work activity were also recorded, such as the age of the actor, or the time at which the activity was said to have taken place. It is this latter information, about the times that work tasks occurred, that provides the basis of the quantitative and qualitative analysis that follows.

Keith Wrightson has recently demonstrated the value of such material for examining popular senses of time through deponents' dating practices; here the evidence is used to highlight the ways in which people told, and used, the time of day.²¹ The focus is very much on exploring quotidian temporalities, rather than focusing on wider understandings and philosophies of time, or longer-term patterns of time-use across the year.²² This body of material also provides a perspective on such everyday temporality 'from below'. As Table 1 shows, the male witnesses and examiners who appeared before the quarter session and

Review (forthcoming); a fourth essay on gender and everyday commerce in early modern England is in preparation.

¹⁸ Primarily Devon and Somerset, supplemented by Cornwall, Hampshire and Wiltshire. For the relative proportions from each see Whittle and Hailwood, 'Gender Division of Labour'. Between them these counties incorporate arable, pastoral, textile, mining, wetland, and coastal areas.

¹⁹ The main conclusions drawn from this data are discussed in *Ibid.*

²⁰ For more on our definition of work see Whittle, 'Critique of Approaches to "Domestic Work"', and earlymodernwomenswork.wordpress.com/methodology

²¹ Keith Wrightson, 'Popular Senses of Past Time: Dating Events in the North Country, 1615-1631', in Michael J. Braddick and Phil Withington (eds), *Popular Culture and Political Agency in Early Modern England and Ireland* (Woodbridge, 2017). See also Andy Wood, 'Popular Senses of Time and Place in Tudor and Stuart England', *Insights*, 6 (2013), Article 3.

²² For more on general philosophies of time see Champion, *Fullness*; Glennie and Thrift, *Shaping the Day*.

church courts represent a cross-section of the early modern male population, with those of artisan and husbandman rank well represented.²³

Table 1: Social/occupational status of men in Women’s Work in Rural England, 1500-1700 database.

Social / occupational group (Male)	N	%
Gentry	23	1.5
Clerical, Medical & Professional	53	3.5
Yeoman	86	5.6
Husbandman	425	27.9
Crafts/trades/retail	543	35.7
Labourer	144	9.5
Servant/apprentice	174	11.4
Miscellaneous	75	4.9
Total	1523	100.0

Whilst the poorest are no doubt under-represented, these depositions offer a perspective that is far from that of a narrow ‘elite’. The project database is not gender balanced — only 29.3 per cent of actors and 26.5 per cent of witnesses were female — but there is nonetheless a sizeable enough proportion of material relating to women’s time-telling and time-use to allow at least some exploration of how temporalities might have been gendered.²⁴ Finally, the sample has the intense rural focus that has been missing from existing scholarship: only 3.9 per cent of the work activities in the database took place in large urban centres with guilds.²⁵ This maximal definition of rural admittedly incorporates many medium, small, and market settlements that had something of an urban flavour, but crucially it takes us outside the walls of the large cities within which existing scholarship has been confined.

²³ This is based on men for whom a descriptor was provided in the court records: 1523 out of 2445 men in the database had a descriptor (62.3 per cent). As women were not, or very rarely, given occupational/social descriptors it is not possible to recreate this table for the social status of women in our project database.

²⁴ For more on gendered temporalities see Merry E. Wiesner-Hanks (ed.), *Gendered Temporalities in the Early Modern World* (Amsterdam, 2018).

²⁵ Whittle and Hailwood, ‘Gender Division of Labour’.

The following section will examine evidence of how witnesses and examinants told the time when providing legal testimony, focusing both on the types of time measurements they gave and the methods they used to ascertain the time. The subsequent section uses examples of work activities linked to specific times to reconstruct patterns of work-related time-use. A concluding section relates these findings on time-telling and time-use to the major debates outlined above about the timescapes of ‘pre-industrial’ rural England and the likely impact of industrial modernity upon them. As will become clear, the dominant narratives about the history of time and work — regardless of whether they associate regular, clock-oriented work regimes with the factory or the city — have made assumptions about rural temporalities and time regimes that are not empirically justified. The essay ends by offering a more robust appraisal of the relationship the majority of the population had with time and work in early modern England.

II

Were the inhabitants of sixteenth- and seventeenth-century rural England time-innocent? Did they have any real need for, or indeed understanding of, the regimented hours of clock time? One way to examine this is through the idioms deployed by deponents in court cases when they were trying to situate events within the course of a day. Witnesses and examinants drew on several timeframes when doing so.²⁶ No doubt the easiest time marker to reach for was the phase of the day, such as ‘in the morning’ or ‘forenoon’, ‘in the afternoon’, ‘in the evening’, sometimes accompanied with a hint of additional specificity, such as ‘in the morning early’. A more precise reference point was to use a light event, such as ‘sunrise’, ‘sunset’ or ‘the breaking of day’. In September of 1638, for example, the servant William Baylie of Rode, Somerset, saw two gleaners leaving the ground of one Mrs Webb ‘in a morning about sun

²⁶ The notion of multiple temporalities has been a prominent one in the literature on time. See: Le Goff, *Time, Work and Culture*, 37–8; Naomi Tadmor, *Family and Friends in Eighteenth-Century England* (Cambridge, 2001), 65–6; Wrightson, ‘Popular Sense of Past Time’, 100; Champion, *Fullness of Time*, 8–10.

rising'.²⁷ Others saw the point at which artificial lights took over from natural light as a key watershed against which to mark time. Walter Strong, a thirty-year-old cordwainer from Exeter, overheard an exchange of defamatory words in 1619 'in the evening after candles were lighted', and in 1681, the forty-year-old widow Francesca Edward of West Pennard, Somerset, witnessed her neighbour make his will 'in the evening... being just at candle lyteing'.²⁸ Social events occasionally served as time markers too. Robert Chadge, blacksmith of Culmstock in Devon, testified that he had broken the sabbath in May of 1683 when his own minister had instructed him to shoe a horse 'after prayers in the afternoon'.²⁹ Hugo Berryman, a clothier of Old Cleeve in Somerset had gone with his wife to 'see his corn' upon a Sunday 'after they had supped', only to witness a defamatory exchange on their stroll homewards.³⁰

None of these markers — phases of the day, light events, or social events such as divine service or dinner — required any particularly cultivated skills of time-telling, but even the very earliest surviving depositions in our sample offer evidence of the deployment of clock time. The Somerset glover Maurice Thomas gave testimony in the 1530s that he witnessed an incident at 'abowte vii at the klok in the mornynge'.³¹ Similar examples abound, generally demonstrating the same degree of precision: events were invariably recounted as having taken place at 'about' or 'between' specified clock hours: 'about 2 of the clock', or 'between 11 and 12 of the clock'. The use of smaller units to describe a time of day was relatively unusual, and took the form of designating an amount of time that had passed since the last hour mark, rather than as a distinct time in itself. Ann Cheshire, a widow of

²⁷ Somerset Heritage Centre (hereafter SHC), Q/SR/77/21.

²⁸ DHC, Chanter 867, Stone v Davy; SHC, D/D/Cd/97/211–13.

²⁹ DHC, Chanter 880, 156r–164r.

³⁰ SHC, D/D/Cd/55, Bindon v Abraham.

³¹ SHC, D/D/Cd/2/33v.

Dauntsey, Wiltshire, claimed in 1673 that she had seen a man taking hay from her reek 'about half an hour after 6 of the clock in the evening'.³²

How prevalent, though, was the use of clock time as a temporal frame? Of the 872 work activities in the database that were accorded some form of time of day by deponents, as many as 41.3 per cent included a clock time (i.e. gave a specific hour of the clock, or range of hours of the clock).³³ The use of clock time in these depositions was actually more common than giving a general phase of the day, or than giving a time related to a light event or a social event. As we might expect, this figure falls short of the rates calculated for early modern urban settings. Comparable records from eighteenth-century Antwerp reveal that 88 per cent of deponents used clock time, and even those from seventeenth-century Newcastle and Gateshead show a rate as high as 86 per cent.³⁴ Nonetheless, the proportion of references in our sample is sufficiently high to suggest that the understanding and application of clock time was far from alien to the rural dwellers of early modern South West England. These abilities do not appear to have been strongly gendered. When male deponents were temporally specific about work activities they used a clock time in 39.7 per cent of instances. When female deponents were temporally specific the figure was in fact slightly higher, at 45.7 per cent. Nor does it appear that clock time use was strongly correlated with literacy. Using the ability to sign a deposition in full, rather than with a mark, as an indicator of functional literacy, the 'literacy rate' of deponents who provided any time of day — phase of day, light event, social event or clock time — was 28.8 per cent. This roughly accords with the general rate of adult literacy in the period.³⁵ When we look only at those deponents who gave a specific clock time, the literacy rate was in fact exactly the same, at 28.8 per cent. Those

³² Wiltshire and Swindon History Centre (hereafter WSHC), A1/110/1673E/139.

³³ This excludes times given in coroners' reports, where the provenance of the time given is unclear.

³⁴ Blondé and Verhoeven, 'Against the Clock', 221; Wrightson, 'Popular Senses of Past Time', 105. For the more rural Diocese of Durham, Wrightson records a lower number of 52 per cent, and suggests most of these are accounted for by small town dwellers.

³⁵ On this method of calculating literacy see David Cressy, *Literacy and the Social Order: Reading and Writing in Tudor and Stuart England* (Cambridge, 1980).

deponents who gave a clock time were no more literate than those who gave any form of time of day, and they in turn were no more literate than the population as a whole. Table 2 shows that the use of clock time was also fairly consistent across the period covered by the source material.³⁶

Table 2: Activities accorded a clock time, over time

1550-1599	42.0 %
1600-1649	44.4 %
1650-1700	37.2 %

To make sense of this remarkable consistency of clock time use across time, gender, and literacy status, we need to turn our attention to time-telling practices. Deponents themselves were frustratingly opaque on this subject, and the vast majority made no mention of their methods of telling time. Other records are suggestive though. The full extent of sundial ownership is difficult to gauge as they rarely appear in inventories, but they were undoubtedly an integral part of the apparatus of time-consciousness in this period. They were used for setting the time at noon on mechanical clocks, and sixteenth-century import records even suggest that cheap ‘pocket sundials’ were ‘quite widely distributed’.³⁷ None of our deponents mentioned one explicitly though.³⁸ Nor does the sample of testimony contain direct reference to the use of a private watch or clock, though we do find references in our database to clockmakers towards the end of the seventeenth century: a 1694 case refers to two clockmaking brothers in Wells, and a rival in Shepton Mallet.³⁹ The age of widespread private clock and watch ownership was only in its infancy by the end of the period under

³⁶ The period 1500–1549 is omitted from this table as our database relies almost wholly on evidence from coroners’ reports for these years, and these have been excluded from the analysis of time-telling practices as stated above. Blondé and Verhoeven, ‘Against the Clock’, finds similar evidence that the use of clock time in Antwerp was not gendered, 235, and that changes in clock time awareness across the early modern period were not dramatic, 224–5.

³⁷ Glennie and Thrift, 125–6, 220–1.

³⁸ For one seventeenth-century example see Ibid, 246.

³⁹ SHC, D/D/Cd/106/16–53v.

study here.⁴⁰ As Glennie and Thrift's research has shown, the sixteenth and seventeenth centuries were instead an era of the public church clock. These were rarely equipped with faces or hands in this period; rather they were generally mechanical clocks attached to the church bells, causing them to ring on an hourly basis.⁴¹ The manual ringing of church bells had, of course, been used to mark specific times for centuries – such as Le Goff's 'work hours' – but the technique of using a sequence of hourly strikings driven by a mechanical clock had become increasingly common by our period.⁴² It was by this method that in 1694 Margaret Syme of Wells was able to situate an event 'a little after twelve of the clock at night for she heard the chimes of the Cathedrall', and it is likely that this was the main technique by which our deponents charted clock time.⁴³ It certainly helps to account for the tendency to routinely locate the time 'between' two specific hours: that is, between two soundings of the church bells.

Church clocks were not universal in early modern England and were less common in rural than in urban parishes. But they were widespread, and it has been estimated that in the late-sixteenth century they could be found in more than half of the rural parishes of both Devon and Somerset.⁴⁴ They had one at North Molton in 1630, where Thomas Fisher with his father Hugh, who was clerk of the parish, did 'trie if hee coulde putt the clocke in order which did not then goe'.⁴⁵ If they sometimes broke down, there were limitations to their sonic coverage too: recent experimental work by Stephen Miles on has suggested that in nucleated

⁴⁰ Lorna Weatherill's inventory data suggests that 13 per cent of households in rural areas owned clocks in 1695, but that the rate grew rapidly thereafter. See especially Table 4.4 in Lorna Weatherill, *Consumer Behaviour and Material Culture in Britain, 1660–1760* (London, 1988), 88. See also Mark Overton, Jane Whittle, Darron Dean and Andrew Hann, *Production and Consumption in English Households, 1600–1700* (Abingdon, 2004), especially Table 5.4, 111. Clocks and watches had, however, 'seeped into the early modern imagination' much earlier than widespread ownership: see Christina Juliet Faraday, 'Tudor Time Machines: Clocks and Watches in English Portraits c.1530–c.1630', *Renaissance Studies* (forthcoming).

⁴¹ Glennie and Thrift, *Shaping the Day*, 28–42.

⁴² Ibid, 138–9. For more on the history of church bells and their role in 'the temporal architecture' of rural life in the French context see Alain Corbin, *Village Bells: Sound and Meaning in the Nineteenth-Century French Countryside*, trans. Martin Thom (New York, 1998), esp. 110–18.

⁴³ SHC, D/D/Cd/106/26v.

⁴⁴ Glennie and Thrift, *Shaping the Day*, 153–8.

⁴⁵ DRO, QS/4/Box 32/Epiphany 1630/Examinations/36.

rural settlements it is likely everyone could have heard the church bells, but in more dispersed settlements this was not the case, where those working in fields or those on the road were less likely to have been within earshot.⁴⁶ The figure of 41.3 per cent usage of clock time by deponents may tell us as much about access to a church clock soundscape as it does about the capacity of rural people to understand and apply clock time. Moreover, we should think of the latter as entailing a process of *hearing* time, rather than deciphering the position of clock hands. As such, it required only the most rudimentary numeracy skills, something which explains its lack of close correlation with hierarchies of literacy and gender, which were of course closely intertwined.⁴⁷

The observation that for ordinary people time in this period was heard and not seen encourages us to understand time telling as an embodied practice — something with a strong physical and sensory dimension, rather than an abstract cerebral skill.⁴⁸ Yet we should be wary of concluding that ‘the passage of clock time probably had an almost entirely aural character for most of the population’, for the depositions considered here highlight an important relationship between light and clock time that has, as yet, been overlooked.⁴⁹ We have seen that deponents often reached for light events as key markers of time, but we should not assume that this was necessarily distinct from thinking in terms of clock times. Deponents often gave a time that was not in itself conterminous with a light event, but rather was measured in relation to it. Jane Maddock, as we have seen, rode into Kingsteignton ‘about an hower uppon Sunne riseing’. In June of 1650 John Goffe, a husbandman of Charlinch, Somerset, recorded that a man came to borrow a horse from him ‘on a Thursday night in the

⁴⁶ Stephen Miles, ‘Sound and Landscape’, in Christopher Gerrard and Alejandra Gutiérrez (eds), *The Oxford Handbook of Later Medieval Archaeology in Britain* (Oxford, 2018).

⁴⁷ The basic numeracy skills necessary to count the hours of the day would have been near universal in this period: Keith Thomas, ‘Numeracy in Early Modern England’, *Transactions of the Royal Historical Society*, 37 (1987).

⁴⁸ See Glennie and Thrift, *Shaping the Day*, esp.81–9.

⁴⁹ *Ibid.*, 82.

tyme of wheate harvist' at 'about an hour in night'.⁵⁰ In each case the deponents appear to have been keeping count of the hours since a key light event, suggesting that they were measuring the passing of time, in hours, by the sun or by changing light levels.

Interestingly, some of the most precise timings provided in depositions were measured in this way: units of less than an hour were rarely cited by witnesses and examiners, but often when they were it was in relation to a light event. The thirty-one-year-old Richard Young of Chillerton, on the Isle of Wight, arrived at his mother's house on a Sunday in 1583 'abowt half an hower before Sonnsett', where he witnessed a bethrothal.⁵¹ Thomas Rashe, an innholder at Street in Somersset, deposed in 1618 that a group of flock drivers had arrived at his establishment 'about halfe an hower before sunsett on Thursdaie last'. Rashe was also *au fait* with clock times, relating that some of these guests 'went to bedd about ix of the clocke at night'. Others, however, had 'satt up all night', and it was only 'about Sunrisinge they went awaie', allowing the host to finally 'laie downe upon his bedd'. Until, that is, 'about a quarter of an hower after he hearde a noise in the streete'.⁵² Rashe, then, was clearly capable of telling time by the clock, but like the other deponents cited here he deployed his most precise units of time telling — half and quarter hours; no one used anything more specific than this — in relation to the day's major light watersheds. This makes sense if we imagine deponents counting hours by the sun: it would have been easier to do this with more precision during the periods of rapidly changing light levels around a light watershed than during the less variable periods of full daylight.

These depositions suggest that there was a strong 'natural' element to time-telling practices in rural England, with the sun and light levels serving as time-cues alongside the audible church clock. We should not, however, assume that the use of light was in some way a prelapsarian precursor to the regularity and order imposed by the clock. It is clear enough

⁵⁰ SHC, Q/SR/82/150.

⁵¹ Hampshire Record Office (hereafter HRO), 21M63/C3/9/50–52.

⁵² SHC, Q/SR/29/28.

that deponents telling time by the light were doing so as a means of measuring the orderly passing of time in hourly units associated with the clock, in much the same way as a sundial. It seems likely that many deponents who offered a time for events, including clock times, did so on the basis of a reading taken from the sun or the light. In this sense, then, we should not see clocks as imposing an alien way of ordering time upon early moderns, but rather as providing a new technology that added greater precision and ease to existing practices. The notion of a dual system of time telling that combined the use of actual clocks with a system of measuring hours by the sun or light can be glimpsed in a literary work of the nineteenth century: in George Eliot's *Mill on the Floss*, 'aunt Pullet, retaining the early habits of the Dodson family, took tea at half-past four by the sun and at five by the kitchen clock'. In the early modern rural context we might need to omit the kitchen clock from the vision, but the idea that the church clock and the sun were both a means of measuring clock time does seem to be applicable.

In some cases a pocket sundial may have aided our deponents telling of time by the sun, but it does not seem to have been essential: in fact, the method of measuring time in relation to light events does not even appear to have been entirely dependent on the sun or daylight itself, for deponents also deployed it during the night. It is notable how many witnesses and examiners were able to provide specific clock times during the night — Nehemiah Wallington's diary reveals that he could always specify the times at which he was woken during the night — and these may simply be testament to the nocturnal chiming of church bells.⁵³ Others who situated events during the night present more of a puzzle. How, for instance, did Jane Maddock know it was, or had been, 'about three howers to day breakeing' when she arose from bed? If a church clock had been audible, we might expect her to have provided a specific clock time. A plausible reading would be that the sensory

⁵³ Tara Hamling and Catherine Richardson, *A Day at Home in Early Modern England: Material Culture and Domestic Life, 1500-1700* (New Haven, 2017) provides several examples from Wallington, 221–2.

nature of time-telling — the audible cues, the shifting position of the sun, the changes in light levels — left early modern people with a more embodied *sense* of time, of what the passing of an hour *felt* like, than we have in our clock dependent age. The bells and the sun provided the cues, but they also left an imprint that meant clock time could be felt and told, albeit imprecisely, even without them: Jane Maddock intuitively knew it was about three hours to day breaking. A sense of regular hours and clock times may, then, have already been deeply internalised long before industrialisation.

This analysis of the time-telling techniques of ordinary men and women in early modern England is, necessarily, somewhat speculative, given the lack of explicit comment on the methods used by deponents themselves. Nonetheless, a close reading of the idioms that they used to describe everyday times is suggestive. What is clear is that the ability to narrate events in relation to clock time was widespread in rural areas — albeit not as common as in large urban centres — and that it cut across hierarchies of gender and literacy. This was made possible by the prevalence of church clocks, and arguably assisted by the mapping of clock time onto light levels, and even by the internalisation of a sense of clock time. The rapid growth of clocks and more widespread application of clock time after 1700 would have been unlikely to have been felt as an alien imposition by the inhabitants of such a time regime.

These conclusions invite further reflection on the figure of 41.3 per cent of deponents using clock time, a figure which seems low in light of the time telling techniques outlined above. It should not, however, be seen as an exact measure of the ability to tell clock time. The vagaries of time references in court depositions mean that we cannot treat them as a clock time equivalent of a literacy rate. Four out of every five witnesses in the database offered no information at all about the time of day events or activities took place, but the reasons for this were no doubt manifold. Many deponents gave some indication of a day or date, but qualified that temporal specificity with a vagueness rendered into formal legal

language as ‘otherwise this deponent doth not remember the time’. Memory, as much as inability to tell the time by the clock, was almost certainly at play here. Others did not even comment on the issue of timing beyond giving a vague date. It does not seem to have been a legal requirement to specify time. Interrogatories — essentially cross-examinations of witnesses in church court cases — occasionally asked deponents to provide timings where they had not volunteered that information. Yet even where there were clear inconsistencies between accounts given by different witnesses they were not pushed on the times they had given. In a defamation case outside ‘the Signe of the Bell’ in Wells, one November evening in 1605, two witnesses asked about the time when a specific episode had occurred remembered it differently: one thought it had been ‘about viii or ix of the clock in the nighte tyme’ and the other ‘about six of the clock’.⁵⁴ Such discrepancies were not argued over, and evidence of this kind was not challenged on the basis of inconsistent timings. It seems likely that timings were not legally load-bearing in early modern courts precisely because of the degree of imprecision inherent in early modern time telling: exactitude was not expected. Although the inclusion of timings was of little legal significance, a deponent who could give a precise account of when events had taken place no doubt added credibility to their story. Mr Colthurst of North Petherton, Somerset, was clearly aware of this. When a neighbour called him ‘a false forsworn . . . sheepstealing rogue’ in his own grounds ‘about seven of the clock’ on a July morning in 1694, he told two nearby workers who were felling a tree for him to bear witness: ‘he then took a pen, ink and paper and did write downe the very words and day and time’. Colthurst then read this over to the witnesses and ‘bad[e] them be sure to mind the words and the day’ before reciting the details, including the time, to these potential deponents.⁵⁵

⁵⁴ SHC, D/D/Cd/36/412–19.

⁵⁵ SHC, D/D/Cd/106/58a–59.

Glennie and Thrift have questioned whether this link between precise timings and credibility ‘may have made clock times more prominent in court than in everyday life’.⁵⁶ A clear distinction between the timescapes of the courtroom and those of everyday life should, however, be resisted here. Clock times were undoubtedly prominent in the organisation of everyday activities in rural areas. Aspects of national legislation and regulation, for instance, applied to both urban *and* rural areas and implied that both would be organised in accordance with clock time. The swathe of alehouse legislation of the early seventeenth century required rural village constables to clamp down on individuals drinking for more than one hour at a time, and to enforce alehouse closing times of 9pm.⁵⁷ The government’s ‘Book of Orders’ — a series of regulatory measures designed to alleviate dearth and implemented regularly in the late sixteenth and early seventeenth centuries — included the stipulation that only the poor were permitted to buy grain at any market ‘until one hour or more after the full Market be begun’.⁵⁸ Such a measure not only assumed familiarity with hours, but also indicates that a market was expected to have a defined — and if the measure was to be effective, presumably widely known — starting time. The Statute of Artificers of 1563, which applied to urban and rural contexts alike, specified that ‘all Artificers and Labourers being hired for Wages by the Day or Week’ were required to be at work ‘at or before five of the Clock in the Morning’ and ‘not departe untyll betwixt seven and eight of the Clocke at Night’. The Statute also mandated the lengths of breaks allowed – not above two and a half hours in the day in total – and even the length of a nap workers were entitled to take in the height of summer – half an hour at the most.⁵⁹ Further evidence of agrarian work being regulated by the clock comes from early seventeenth-century Lincoln, where gleaning on the city’s fields was only

⁵⁶ Glennie and Thrift, *Shaping the Day*, 215.

⁵⁷ Mark Hailwood, *Alehouses and Good Fellowship in Early Modern England* (Woodbridge, 2014), 25.

⁵⁸ *Orders devised by the especiall commandement of the Queenes Majestie, for the reliefe and stay of the present dearth of graine within the realme* (London, 1587), 11.

⁵⁹ 5 Eliz. c.4, IX.

permitted on certain days and only then between 8am and 5pm.⁶⁰ Temporal regulation clearly reached into rural life.

No doubt many manors and local markets had other similar regulations, as well as more loosely defined — but still clock-oriented — rhythms. Henry Best's 'Farming Book' of 1642 reveals the need for rural dwellers to be attuned to these: 'When our folkes go to Malton, they are usually stirring 4 houres before day, which is aboute 3 of the clocke... and att Malton by 9 of the clocke... for in winter time that markett is the quickest aboute 9 of the clocke, or betwixt 9 and 10'. This is just one example of the many among Best's writings of the importance of clock time to rural working life. He records the specific hour at which sheep should be washed ('betwixt 8 and 9 of the clocke' in the morning), the hour by which wains should be yoked ('by 7 of the clocke and not afore, because of the dewes'), and even noted the 'usual time of bees swarming' as 'especially betwixt 9 and eleven'.⁶¹ Sir Richard Newdigate was proactive in his attempts to instil time discipline in his rural workforce at Arbury Hall in late seventeenth-century Warwickshire, fining workers for leaving work early 'at 3 o clock', or for failing to bring oats home until midday.⁶² That everyday rural life was co-ordinated and ordered by the clock was tangibly felt by the blacksmith's apprentice John Perry in Cannington, Somerset, in 1678. His master had 'ordered him to come to Chilton at nine a clock at night', but he 'came not at all... until about twelve a clock', and subsequently the master and his wife 'did strike' the apprentice for his tardiness.⁶³ An 'erratic and relaxed' time regime this was not.

⁶⁰ Andy Wood, *The Memory of the People: Custom and Popular Sense of the Past in Early Modern England* (Cambridge, 2013), 4.

⁶¹ Donald Woodward (ed.), *The Farming and Memorandum Books of Henry Best of Elmswell* (London, 1984), and discussed in Glennie and Thrift, *Shaping the Day*, 217–19.

⁶² Steve Hindle, 'Work, Reward and Labour Discipline in Late Seventeenth-Century England', in Steve Hindle, Alexandra Shepard and John Walter (eds), *Remaking English Society: Social Relations and Social Change in Early Modern England* (Woodbridge, 2013), 269–70.

⁶³ SHC, Q/SR/138-140/46.

The fact that early modern rural dwellers could give clock times in court would make sense if we accept that their lives, like those of their urban counterparts, were in many ways ordered by the clock. We might, however, read evidence compiled by regulators and employers as wishful thinking, outlining an orderly time regime that was more desired than it was a practical reality in the day-to-day lives of ordinary men and women. The next section of this essay therefore explores how deponents used and organised their time.

III

Debates about working patterns in pre-industrial England have tended to focus on the number of days workers put in over the course of a year, rather than the length and character of those working days themselves.⁶⁴ The evidence of time-use provided by depositions lends itself more fruitfully to an exploration of the latter, and that will be the focus here. First, however, we can use evidence from the project database to contribute to at least one of the debates about days worked: that relating to the notion that pre-industrial society observed ‘St Monday’, routinely taking Monday as a day off work.⁶⁵ For 1205 of the work activities recorded in the database deponents specified the day of the week on which it took place, and Figure 1 shows the distribution across the week.

⁶⁴ For a useful summary of this vast literature see Stephenson, ‘Looking for Work?’

⁶⁵ For a classic account see Douglas A. Reid, ‘The Decline of Saint Monday 1766-1876’, *Past and Present*, 71:1 (1976).

Figure 1. Number of work activities recorded for each day of the week, 1500-1700

The graph shows a clear peak of activities on a Saturday — commonly a market day in the small towns of rural England, and hence a busy day for commerce and the movement of goods and livestock — but there is no evidence here that Monday was an off-day, or even a light work day.⁶⁶ The results for Sunday are also notable. Whilst there were fewer work activities recorded than on other days, this evidence suggests that the Sabbath was not strictly observed as a day of rest either.⁶⁷

Depositions can shed light on the rhythm of the working week, but their real value lies in the fact that they allow us to reconstruct a pattern of the working day in early modern England, something that has not been done before. The evidence of work activities and their timings provided by deponents are not fully equivalent to modern time-use studies, with their

⁶⁶ Steve Hindle has also found ‘little evidence of the leisure preferences associated with “St Monday” among the agricultural workers on the Arbury Hall estate’ in late seventeenth-century Warwickshire. Hindle, ‘Work, Reward and Labour Discipline’, 270.

⁶⁷ For a similar conclusion drawing on late medieval evidence see Diana Wood, ‘Discipline and Diversity in the Medieval English Sunday’, *Studies in Church History*, 43 (2007) and John H. Arnold, ‘The Materiality of Unbelief in Late Medieval England’, in Sophie Page (ed.), *The Unorthodox Imagination in Late Medieval Britain* (Manchester, 2010), 84.

careful controls on the sample and their purpose designed methodologies for collection.⁶⁸ But as Hans-Joachim Voth has pointed out, they are similar to the ‘random hour recall’ method used by some such studies, in which participants are asked to record what they were doing at randomly chosen hours of the day, much like witnesses or suspects in court cases.⁶⁹ The results provided here should not then be read as mathematically precise models of early modern time-use, but rather as an attempt to uncover patterns in the data that are at least indicative of how people in this period structured their working days.

There are 454 work activities in the database — about 10 per cent of the total — with a specific clock time attached. Their distribution across the day is show in Figure 2.

Figure 2: Number of work activities recorded for each hour of the day, 1500-1700⁷⁰

The graph shows a gradual upward trend of work activities in the early hours of the morning, followed by a peak of morning activity between the hours of 8am and 11am. There is a lull

⁶⁸ Due to the parameters of the larger project – on ‘Women’s Work in Rural England, 1500-1700’ – the focus here is on work activities rather than all forms of time-use.

⁶⁹ For a discussion of this method see Voth, *Time and Work*, esp. chapter 2.

⁷⁰ Each hour on the x axis represents activities that took place within that hour, i.e. 10 includes all activities that took place between 10 and 11 am.

between 11am and 2pm, which accords with the hours during which the main meal of the day — dinner — was taken.⁷¹ An afternoon peak follows between 2pm and 5pm, but activity remains steady, if at a lower level, right through until midnight. In most respects this looks like a plausible enough pattern for a working day — peak hours of 8am to 5pm, with a break for dinner. Nonetheless, it is clear that levels of activity in the evening and at night are much higher than might have been expected.

It is reasonable here to suspect that the nature of the sources distorts the evidence for the pattern of work activities: criminal activity was more likely to occur at night, and hence more witnesses in court cases were reporting night time activities of their own. It is certainly true that the court records of early modern Devon and Somerset were rife with cases of sheep theft, which tended to be a nocturnal misdemeanour. We should not, however, overstate the extent to which these depositions originate in criminal cases. Of the work activities for which we have specific times just over half (58.2 per cent) originated in the quarter sessions, whose jurisdiction did pertain to criminal offences, but criminal offences themselves were not recorded as work activities in the database. The remaining examples come from coroners' reports of accidental deaths (21.7 per cent) and church court cases (20.0 per cent) which dealt with tithe, defamation, testamentary, and matrimonial disputes, and neither set of records contains the same bias towards night time criminality. Moreover, each activity in the sample was assigned a status of either 'integral', 'related' or 'incidental', according to how closely related it was to any criminality in the case.⁷² It is, accordingly, possible to remove all cases marked as 'integral' from our graph, to further reduce the impact of patterns of criminality. The result can be seen in Figure 3.

⁷¹ See Hamling and Richardson, *Day at Home*, chapter 3, for its importance.

⁷² For more on this see earlymodernwomenswork.wordpress.com/methodology

Figure 3: Number of work activities recorded for each hour of the day, 1500-1700, excluding ‘integral’ cases

Although this exercise has the effect of reducing the prominence of night time work activity relative to the ‘peak’ hours of work, it still suggests that a distinctive feature of the early modern working day was its long tail that stretched deep into the evening. Could this have been a result of longer hours in the summer and shorter hours in the winter, which over the course of the whole year even out to create this pattern? We might expect this in the context of the conventional characterisation of pre-industrial work patterns as highly seasonal. However, when the pattern is broken down into two broad seasonal groupings, as in Figures 4 and 5, it appears that seasonality was not a significant variable in the length of the working day.

Figure 4: Work activities per hour in Summer (April to September)

Figure 5: Work activities per hour in Winter (October to March)

Whilst there is some evidence here of increased work activities in the early morning in summer, there does not seem to be a considerable extension to peak working hours beyond 5pm. In the winter, moreover, we do not observe an early cessation to the working day in the

afternoon, as might have been expected: Donald Woodward, for example, has argued that ‘it must be assumed, since candles were rarely bought, that a very short day, from dawn to dusk, was worked in the dead days of winter’.⁷³ While this might have been true for Woodward’s building trades, it does not seem to be the case in rural England, where a working day in the region of 8am to 6pm appears to have been observed throughout the year with only a small degree of variation. The extent of seasonal differences in the pre-industrial working day has, it seems, been overstated.⁷⁴

The pattern of the working day can also be subjected to a gendered analysis. Figures 6 and 7 show the work activities per hour for male and female actors respectively.

Figure 6: Work activities per hour, Male actors

⁷³ Woodward, *Men at Work*, 127.

⁷⁴ This is not to suggest there was no seasonal variation, but both Stephenson and Voth also found the differences to be small rather than profound: Stephenson, ‘Looking for Work?’, 13; Voth, *Time and Work*, 133-42. Thomas Tusser’s *A hundreth good pointes of husbandry* (London, 1570) suggested an adjustment of waking and bedtimes by only one hour between summer and winter: f.35v.

Figure 7: Work activities per hour, Female actors

This suggests that women's work was less closely tied to the 'peak' hours of 8am to 11am in the morning, with work more evenly spread from an earlier start at 6am and with a less pronounced break for dinner, the preparation of which would have fallen primarily to women.⁷⁵ A peak of activity in the afternoon, and a long tail of activity into the evening, appears to be a pattern common to male and female workers alike.

Accounting for the size of the dataset used for the above analysis it would be wise to see these conclusions as suggestive rather than statistically definitive, but a closer qualitative reading of the depositions can also be used to provide supporting evidence for several of the pronounced contours of this pattern of the working day. One particularly neat example comes from a church court case centred on a school in Devizes, Wiltshire, in the 1670s, that gives a detailed breakdown of the school day with a start time of 8am, a break for dinner and 'play' between 11am and 1pm, and a finish at 5pm.⁷⁶ Socialisation into this pattern of work apparently began in early education, and the idea that the working day would be under way

⁷⁵ Hamling and Richardson, *Day at Home*, chapter 3.

⁷⁶ WSHC, D1/42/61/153v–162v. For more on the role of schools in inculcating time-discipline in this period see Keith Thomas, 'Rule and Misrule in the Schools of Early Modern England', *The Stenton Lecture* (Reading, 1976), 6; Rosemary O'Day, *Education and Society, 1500-1800: The Social Foundations of Education in Early Modern Society* (Harlow, 1982), 73-5.

by 8am is also clear from the 1672 deposition of Elizabeth Brown of Salisbury. Brown was ‘at work in her chamber’ at ‘about 8 a clock in the morning’ one December day when she heard defamatory words shouted in the High Street beneath her window, and deposed that such words would have been widely heard as all of the nearby workers would have been in their shops by that time.⁷⁷ In February of 1668, John Wells, a plumber of Bridgwater, Somerset, was in his shop in the morning by ‘about seaven or eight a clock’ when Richard Bowden of Enmore came in to try and sell him some stolen lead.⁷⁸ As we saw in the case of Jane Maddock, she could not get the blacksmith of Bickington to rise at about 6am in September, but did find one up and at work an hour later in Kingsteignton. It was a common pattern then to begin work somewhere between 7am and 8am. Things were a little different at the height of harvest season. In early September of 1650 Richard Weekes and his two sons ‘went forth to reap in the morning about 5 of the clock at which time it rained’, forcing them to take refuge in a nearby alehouse until the deluge passed.⁷⁹

Dinner was taken in the middle of the day, with noon often providing the cue to down tools, no doubt because it was a time easily identifiable by the sun. In May of 1653 Roger Moore and seven other men were, ‘at about 12 a clock...at dinner near the fences belonging to Sir James Thim’s inclosure’ in Froome Forest in Wiltshire, which they were spending the day repairing after an incidence of hedge breaking.⁸⁰ The working day of Thomas Baylie, a labourer of Poole, Wiltshire, was clearly divided into two main shifts with a break at noon during the hay harvest in July of 1632. He was with ‘the younge Mr Earle’ making hay in the morning ‘until 12 of the clock’, before they were joined by Mrs Earle and Nan Humphry and ‘made haye all the afternoon together’.⁸¹ As the quantitative data suggests, the end of the working day seems to have been a bit more variable, but references to finishing work tend to

⁷⁷ WSHC, D1/42/61/56v–58r.

⁷⁸ SHC, Q/SR/111/39.

⁷⁹ SHC, Q/SR/82/88.

⁸⁰ WSHC, A1/110/1653T/177.

⁸¹ WSHC, A1/110/1632M/185.

cluster between 4pm and 6pm. In May of 1650 Markes Jestng of Cheriton Fitzpaine, Devon, had been working in the fields and ‘went home to his house att fower of the clocke in the afternoone’.⁸² In April of 1618 Owyn Bartlet of Froome Selwood in Somerset, a labourer, had been at work ‘quarrying of stones’ on a Friday and was ‘comeinge homewards from woorke’ at ‘about five of the clocke in the afternoone’.⁸³ Even at the height of harvest the working day was not necessarily dramatically extended: in 1619 the 17-year-old John Gardner of Kingsdon, Somerset, had ‘wrought harvest work’ at the house of Mr William Toose, and ‘came home from work about 6 or 7 of the clock’.⁸⁴ The evidence here suggests that something like a regular working day — with routine start times, finish times, and even dinner time, mapped closely onto clock time — was widely observed by early modern rural workers long before the advent of the factory. The world of rural labour was not characterised by Thompsonian irregularity and erraticism.

Not all work activities were confined within this timeframe, however, as the graphs show. The evening and the night appear as important phases of the working day, a pattern that is confirmed if we explore work activities with a ‘phase of day’ attached to them by deponents, as Table 3 shows.

⁸² DHC, QS/4/Box 55/Baptist 1650/Examinations/2.

⁸³ SHC, Q/SR/29/62.

⁸⁴ SHC, D/D/Cd/55, Seymour v Hilborn.

Table 3: Distribution of work activities across ‘phases of the day’, 1500-1700⁸⁵

Phase of Day	% all	excluding ‘integral’	Summer	Winter	Male	Female
Morning (6-12)	34.4	35.3	35.3	34.4	35.0	32.7
Afternoon (12-6)	21.9	26.7	25.4	19.6	21.8	22.2
Evening (6-8)	16.4	16.5	13.9	17.8	15.9	17.5
Night (8-3)	23.6	17.3	20.9	26.2	23.2	24.5
Morning early (3-6)	3.8	4.2	4.5	2.0	4.0	3.1
	100	100	100	100	100	100

Hamling and Richardson have recently demonstrated that for middling sort householders in sixteenth- and seventeenth-century England ‘the evening’ was an important phase of the day, and one generally reserved for leisure activities.⁸⁶ This pattern of time-use distinguished them from many of their humbler neighbours, for whom it appears to have been an important phase of the working day, albeit less intense than the ‘peak’ hours in the morning and afternoon. Susan Symons, for instance, a spinster of Wells, was ‘at work knitting’ in her mother’s house ‘in the evening’ on a Friday in November 1618 when a neighbour brought round a stocking for her to repair.⁸⁷ If Symons was working long hours to supplement household income, others were forced to work late or early when other duties, such as carework or paid work, had filled the day. In October of the same year in the same county Agnis Pople, wife of a Huntspill labourer, ‘after she had brought her children to bed went out into the fields with a purpose to gather thistles and trazells [teazles] to brew withall having no fit time to go by day for that one of her children was sick in an ague’.⁸⁸ In December of 1617 the Wells labourer

⁸⁵ This table has been produced by using the clock times people commonly attached to certain phases of the day to define the start and end times of those phases, i.e. ‘7 of the clock in the evening’ and ‘9 of the clock at night’. Not all depositions were consistent with the start and end times of each phase used here – sometimes deponents strayed outside them – but they do represent a general consensus of when certain phases began and ended. Using this method allows us to situate 928 of our activities within a phase of the day.

⁸⁶ Hamling and Richardson, *Day at Home*, chapter 5.

⁸⁷ SHC, Q/SR/33/131v–132r.

⁸⁸ SHC, Q/SR/33/135.

Nathaniel Slade was up threshing and winnowing barley ‘between 4 and 5 of the clock in the morning’, saying he had done ‘it so early in the morning because he would go to his other work afterwards’.⁸⁹ Other instances of nocturnal work may reflect a pattern of ‘segmented sleep’ in the period; the hypothesis that early moderns slept twice each night with a short period of activity in between.⁹⁰ Perhaps the yeoman John King of Bishopstone, Wiltshire, had just risen from his ‘first sleep’ in October of 1661, when he was ‘up that night about 12 of the clock to feed his horses’.⁹¹

The regular occurrence of these ‘off peak’ work activities raises some interesting questions about the relationship between work and light in this period. As the foregoing examples and the data presented in Figure 8 demonstrate, working early and late was not confined to summer months with longer hours of daylight, nor even to daylight hours in the summer.⁹² How exactly did people see clearly enough to safely and accurately carry out work at these times? As we have seen, Woodward suggests that the purchase of candles was rare in the period.⁹³ Yet depositions routinely contain examples of individuals lighting candles at or after sundown, and regular references to the light event ‘candle lighting time’ also attest to their widespread use. In 1577 the servant Joanna Preston, of Berry Pomeroy in Devon, was given ‘6d to fetch a pound of candles’ — not an insignificant outlay, but one it seems many people were willing to make.⁹⁴ They were used to illuminate journeys, such as in November of 1637 in Stocklinch Ottersey, Somerset, when a miller who had been grinding half a peck

⁸⁹ SHC, Q/SR/29-31/87.

⁹⁰ See A. Roger Ekirch, *At Day's Close: A History of Nighttime* (London, 2006), 305-6. For some scepticism about this hypothesis see the brief summary of debates in Sasha Handley, *Sleep in Early Modern England* (New Haven, 2016), 8-9. The method outlined in this article could be used to further examine this hypothesis.

⁹¹ WSHC, A1/110/1662/H/208.

⁹² See also Ekirch, *At Day's Close*, chapter 6.

⁹³ See also John Crowley's *The Invention of Comfort: Sensibilities and Design in Early Modern Britain and Early America* (Baltimore, 2001), 111-15, for a similar view that ‘most people did not take candlelight for granted as a way to extend the day in everyday life’. Jane Whittle and Elizabeth Griffiths’ *Consumption and Gender in the Early Seventeenth-Century Household: The World of Alice Le Strange* (Oxford, 2012) shows that at the very least middling sort households such as Robert Loder’s were regularly spending money on tallow candles. As Woodward himself has suggested, the poor may have been using rush lights as an alternative: Donald Woodward, ‘Straw, Bracken and the Wicklow Whale: The Exploitation of Natural Resources in England Since 1500’, *Past and Present*, 159 (1998), 67-8.

⁹⁴ DHC, Chanter 859, 349r-v.

of wheat for a customer at ‘about six of the clocke in the eveninge’, provided extra customer service by offering to ‘light him home with his candle’ when the job was done.⁹⁵ They served an important function on market days, illuminating journeys that by necessity had to start in the early hours to ensure a timely arrival, and extending trading hours — purchases at markets often took place ‘after candle lighting time’. Even relatively skilled work could be carried out by candle or fire light. The Devonian husbandman Jeremie Drew managed to kill and shear a sheep in May of 1630 only by the light of candle held up by his maid servant, and in January of 1558 Jane Foxwill of Venn Ottery was in her hall ‘carding by the fire... half an hour before the sun rose’.⁹⁶ The moon and even the stars could on occasion provide enough light to work by. Two men were threshing corn in Pill, Somerset, at ‘about tenn at night’ in January of 1650, ‘it being light by reason of the moone shininge’, and another man was observed in East Coker in Somerset in September of 1668 carrying a burden of pease into a storehouse ‘by starlight’ just before dawn.⁹⁷

There is a danger here of anachronism: of assuming that early modern workers required the same level of light to undertake work activities that we might demand today. They made do with the lighting options that were available, combined with a bit of ingenuity: a tithe case from 1590 incidentally reveals that John White, a yeoman of Chilcomb in Hampshire, had dug a furrow so that friends ‘might thereby in the night time know the way to White’s house’.⁹⁸ Travel could certainly be managed in poor light, but other skills may also have been less dependent on bright light levels than is often assumed: we have seen already that people were able to card, or knit, or shear sheep by fire or candle light. When John Rowe of Yeovil, Somerset, brought home a stolen sheep in 1638, he ‘hanged or fixed a blankett or

⁹⁵ SHC, QSR/77/161. In seventeenth-century Oxford and Cambridge householders were instructed to hang candles outside between 6pm and 9pm on dark evenings to light passageways: Emily Cockayne, *Hubbub: Filth, Noise and Stench in England, 1600-1770* (New Haven, 2007), 223.

⁹⁶ DHC, QS/4/Box 32/Baptist 1630/Examinations/68; DHC, Chanter 855, 317r-322r.

⁹⁷ SHC, Q/SR/82/24; SHC, Q/SR/111/107.

⁹⁸ HRO, 21M65/C3/10/3.

coverlett to stopp the light of the window of the roome wherein he dressed the same sheep'.⁹⁹ Clearly he was trying to conceal his actions from any suspicious passers-by, but in doing so he demonstrated that he was more than capable of skinning and dressing a sheep in low light levels. In an era when the houses of the common people were rarely flooded with light at the best of times, it seems likely that many work tasks relied on skills that were as much about touch, feel and repetition as they were about being able to see with absolute clarity. Moreover, for those men and women running small rural households there was simply too much work to do to just down tools in bad light and work short hours in the 'dead days' of winter.

As Karen Sayer has recently argued, the history of lighting is prone to the same kind of modernisation narratives that are attached to the history of time, in which the technological developments of the industrial age are seen as radically transforming a pre-industrial world whose primitivism is often exaggerated to make for a more dramatic story.¹⁰⁰ If early modern rural dwellers were far from time-innocent before industrialisation, we might also recognise that they were less severely hampered by darkness than accounts that emphasise the 'natural' rhythms of work — with their short, dark days of winter — allow. They did not shutdown at sundown. The environment that modern clock and lighting technology came into was more resourceful than it is often given credit for.¹⁰¹

⁹⁹ SHC, Q/SR/77/90.

¹⁰⁰ Karen Sayer, 'Atkinson Grimshaw, Reflections on the Thames (1880): Explorations in the Cultural History of Light and Illumination', *Annali di Ca' Foscari. Serie Occidentale*, 51 (2017).

¹⁰¹ This was recognised by George Edwin Fussell and K.R. Fussell, whose *The English Countryman: His Life and Work, 1500-1900* (London, 1955) noted that 'the day-long work went on till dark and later', with horses needing to be fed and prepped before dawn, and winter milking done in the dark: 151.

IV

The foregoing analysis only scratches the surface of the potential of this methodology to reveal the relationship between time and work in early modern England. Time-use data collected from depositions might be used to analyse what types of work activity were more or less prevalent during different phases of the day, and at different times of the year, and such an analysis would almost certainly reveal more clearly the gendered patterns of work-related time-use. With more data this mode of analysis could be extended to examine occupational variations in the working day; local and regional variations in the working day; more nuanced distinctions between cities, towns, market towns, villages and hamlets; types of time-use beyond work; the relationship of time-use to age; changing patterns in time-use across the period. Such work would be fascinating and valuable, and the sheer quantity of surviving depositions for the period make it entirely feasible. My remit here though has been to start with a more general reappraisal of time-telling and time-use in early modern rural England: to replace one broad sketch of this society's timescapes — one that has been highly influential but ultimately misleading — with another outline that is more empirically grounded, but still needs to be filled in by further research.

English rural society in the sixteenth and seventeenth centuries had a relatively high degree of clock time awareness. Women and men across the social scale were able to tell the time by a combination of hearing, seeing, and sensing, and they took their measurements in the units of the clock: usually hours, and very occasionally half and quarter hours. In the court room they were capable of mapping events and activities onto clock times, in large part because clock times were central to the ordering of rural, and not just urban, life. This applied to patterns of work. Early modern workers observed something not unlike the modern working day, with relatively standardised start times and finish times, and many did so at

least six days of the week.¹⁰² This framework was broadly adhered to throughout the year. The seasons, and especially the hours of available daylight, were not the ‘natural’ determinant of working hours to the extent that is widely assumed. This working day had its ‘peak’ hours, but for many it often extended long into the evening, which was not obviously a time of leisure for those below middling rank, and sometimes late into the night too. This working pattern was, of course, subject to myriad variations, and it differed in important ways from what was to follow in the era of industrialisation. Yet there is a much stronger sense of regular work rhythms, tied closely to clock time, than the Thompson thesis allows. That industrialisation brought with it a ‘modern’ time regime that was sufficiently alien to trigger a ‘psychic crisis’ in early modern society seems unlikely.

That is not to say that early modern rural workers inhabited the mindset of fully-fledged Thompsonian time-discipline, and some aspects of the latter may have come as more of a shock than others. If regular and long hours were very much a feature of the early modern rural timescape, many workers none the less had a degree of autonomy over what they did and when that was not available to those on the factory floor. We might finish then by briefly considering why this pattern of regular, ordered, clock-oriented hours of work prevailed in the period, when it was not necessarily a product of industrialisation, urbanisation or strict top-down time-discipline. Thompson suggested some parallels between the time regimes of pre-industrial rural England and those of other pre-industrial peoples, such as the nomadic Nuer.¹⁰³ In light of the subsequent half century of research into early modern English social history such comparisons appear increasingly inapposite. Sixteenth- and seventeenth-century England is now recognised for its ‘sheer dynamism’ as ‘a multi-

¹⁰² Wage data for this period is usually calculated on the assumption of a five day working week: see for e.g. Jane Humphries and Jacob Weisdorf, ‘The Wages of Women in England, 1260-1850’, *The Journal of Economic History*, 75:2 (2015), 428; Gregory Clark, ‘The Long March of History: Farm Wages, Population and Economic Growth, England 1209–1869’, *Economic History Review*, 60:1 (2007). Admittedly the study here includes both waged and unwaged work, but the finding is nonetheless suggestive.

¹⁰³ Thompson, ‘Time, Work-Discipline’, 96.

faceted’ and ‘complex society’: people across the social scale had high levels of interaction with governance, the law, forms of education, and the consumption of goods.¹⁰⁴ These characteristics are now very familiar to historians of early modern society, and they underpin the argument presented here. For one, this was a highly commercialised society, and even rural smallholders were heavily engaged in forms of everyday commerce.¹⁰⁵ Co-ordinated use of clock times helped markets to function, as we have seen. There was a high, and growing, proportion of the workforce engaged in wage labour in this period, a tendency reflected in the fact that at least one third of the work activities in our database were carried out ‘for another’ individual from outside of the immediate household, a proxy for paid work.¹⁰⁶ This too required co-ordination and standardisation of working hours.

It also contributed to the fact that this society had more disciplinary apparatus at its disposal than the Thompsonian model suggests. For whilst the degree of time-discipline in this society did not rival that of the factory, the imperatives of the latter certainly had roots in our period. The state, corporations, guilds, and employers all sought to order and regulate time-use. Alehouse curfews, market regulations, schooling practices, labour legislation, and the punishment of tardy servants, are all testament to that. And we should not overlook the importance of ordered time in another, arguably *the*, key institution of the early modern world in both urban and rural contexts: the household. Naomi Tadmor’s work on the household family in the eighteenth century, and Tara Hamling and Catherine Richardson’s recent study of domestic life in the years between 1560 and 1640, both suggest that for early modern England’s middling sort families the working day of the household followed a clear and

¹⁰⁴ Keith Wrightson, ‘Introduction: Framing Early Modern England’, in Keith Wrightson (ed.), *A Social History of England, 1500–1750* (Cambridge, 2017), 11.

¹⁰⁵ This will be discussed further in an essay on everyday commerce that is in preparation from the ‘Women’s Work in Rural England, 1500–1700’ project.

¹⁰⁶ On the growth of wage labour see Keith Wrightson, *Earthly Necessities: Economic Lives in Early Modern Britain, 1470–1750* (New Haven, 2000) and Alexandra Shepard, *Accounting For Oneself: Worth, Status, and the Social Order in Early Modern England* (Oxford, 2015).

regular rhythm that was anything but irregular, erratic and relaxed.¹⁰⁷ This was, as we know, a society obsessed with order, and conduct books were clear enough that this should extend to the organisation of household members' everyday work patterns in urban and rural areas alike. Time-discipline began at home.

It is also important to reflect more broadly on the nature of work in early modern rural England. Our larger project has demonstrated that running a farm or working as — or alongside — a tradesman involved a wide range of work activities for men and women, and for their servants and employees.¹⁰⁸ Husbandmen and their wives were routinely involved in commercial activity that entailed regular and time-consuming trips to market; most tradesman households also engaged in some form in agriculture, creating a host of tasks that needed attending to outside of the workshop. This was not a sleepy agrarian world that involved a busy harvest period followed by a quiet and leisurely winter. Work — both paid and unpaid — filled the days of women and men with a wide repertoire of tasks that were very often not contained by the 'peak' hours of working. They were no strangers to long hours: it was simply not possible to run an early modern rural household without regularly putting them in. In short, the demands of rural life in a complex, commercialised economy, in a society obsessed with order and with a well-developed disciplinary infrastructure, meant long hours of regular, clock-oriented, often closely policed work, were a fact of life before the coming of the factory.

¹⁰⁷ Tadmor, *Family and Friends*, esp. 63–72. Hamling and Richardson, *A Day at Home*.

¹⁰⁸ Whittle and Hailwood, 'Gender Division of Labour'.