

**The Importance of Being Punctual:
Time, Trust, and Virtue in Britain, c.1700-1900**

by

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Abstract

This dissertation examines the history of punctuality in Britain during the eighteenth and nineteenth centuries. Exploring punctuality as an instance of time discipline, I challenge the historical narratives which have explained the proliferation of clock-time discipline in the late eighteenth and nineteenth century as a result of the appearance of the factory system, religion, or the advent of steam-powered railways. Following the use of the word in newspapers, magazines, and books, I trace how punctuality came to refer to being “on time” within the context of the payment of debts. Contextualizing the meaning of the word I demonstrate how the discourse of punctuality since this transformation between the end of the seventeenth century and through the nineteenth century was intimately connected with questions about the trustworthiness and honesty of others.

The dissertation explores how punctuality, and its absence, was problematized in discussions of commerce, domestic management, the railway journey, and in efforts to create networks of electrically coordinated clocks. In these contexts, punctuality came to symbolize everything from honesty, piety, reliability, good management, and railway safety. In examining these meanings, I argue that punctuality was a middle-class value. It was promoted by middle-class writers for middle-class readers. Being punctual demonstrated that a person, a business, a home, a railway, or even an observatory was well-managed, disciplined, and could be relied upon. Unpunctuality and irregularity raised doubts about whether a person could pay their debts, whether a clock told the right time, and whether a train would deliver you safely to your destination.

Lay Summary

This dissertation examines the history of the word punctuality in eighteenth and nineteenth-century Britain. It demonstrates how punctuality came to mean “on time” in discussions credit and debt and analyzes how the word has been used since that transformation. Four chapters explore how the discourse of punctuality in the eighteenth and nineteenth century centered on questions of trust, honesty, and credit, whether in discussions of commerce or the management of the home, in efforts to coordinate clocks, or in debates about the safety of railways. These commentators turned to punctuality as a solution to problems of trusting other people and the systems they managed. Being on time marked whether a person was creditworthy, respectable, and honest.

Preface

This dissertation is an original, unpublished, and independent work by the author, Ken Corbett. The research program was designed and conducted by the author under the co-supervision of Robert Brain and Alexei Kojevnikov.

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For Stefanie

Chapter 1: Introduction

1.1 Introduction

“Repeatedly failing to be punctual is bad manners,” reads the entry on punctuality in *Debrett’s A to Z of Modern Manners* (2018). Debrett’s continues to publish the *Peerage*, first printed by the bookseller John Debrett (d. 1822) in 1803, which reached the 150th edition in 2019. The company now also offers coaching services and guidebooks on British etiquette and social norms. “By being late,” Debrett’s *Modern Manners* warned in 2018, “you will always arrive at your meeting at a disadvantage—flustered and apologetic,” whereas punctuality “always scores bonus points. You will come across as someone who cares about other people, and is efficient, organized and reliable.”¹ While placing significant emphasis on punctuality the book also acknowledges that one cannot always be on time, or preferably, early. “The unpredictable emergencies of modern life” and “the vagaries of transport systems” can sometimes derange one’s day despite the best planning.² A few years before Debrett’s printed this advice, Dominic Utton, who commuted from Oxford to London on the First Great Western Railway, was frustrated by his first hand experience of such “vagaries.” In 2011 he began writing emails to the company’s managing director and communications director. Realizing that thirty percent of his trains arrived late and exasperated with the waste of his time, Utton crafted emails designed to consume the amount of time he himself had lost. Much to his delight, both directors replied and so began a series of ninety-eight emails over nine months accounting for over twenty-four hours

¹ Elizabeth Wyse et. al., *Debrett’s A to Z of Modern Manners* (Richmond: Debrett’s Limited, 2018), 195–6.

² Wyse, *Debrett’s*; “Work Life: Punctuality,” Debrett’s, accessed March 7, 2016, <https://www.debretts.com/>

of train delays. Posting regular updates on his blog, Utton's letter campaign gained notoriety and led to an interview on BBC Radio 4 and later the publication of his letters in the form of a book.³ Utton's response to the unpunctual First Great Western service reflected the practices of Victorian rail travellers who frequently penned letters of complaint about railway delays to *The Times*, hoping that publicizing tardiness would drive the company to be more punctual. The problems of wasted time, unexpected delays, and the helplessness in the face of the power of big business were seemingly transplanted out of mid nineteenth-century letters to the editor into Utton's emails and blog. Interestingly and in contrast to the advice offered by Debrett's, Utton was aghast to find that in railway statistics "reliability and punctuality are two entirely different things."⁴ Reliability is measure of the percentage of schedules trains that actually run regardless of whether they arrive on time or not. And so First Great Western could profess 99.3 percent reliability while its punctuality was atrocious.

Historians have debated when, where, and why modern time values like those expressed by Debrett's and Utton emerged in Britain and elsewhere in Western Europe. Historians' accounts have variously tended to place emphasis on the emergence of industrial capitalism represented by the factory, the proliferation of more accurate clocks and watches, the appearance of rail travel, and the influence of protestant theology.⁵ Viewed within these interpretations,

³ Dominic Utton, *Martin Harbottle's Appreciation of Time* (London: Oneworld Publications, 2014).

⁴ Dominic Utton, "A new reply! With some BIG numbers in it!" Letters to First Great Western, last modified November 21, 2011, <http://letterstofgw.blogspot.com/2011/11/new-reply-with-some-big-numbers-in-it.html>

⁵ Classic accounts in the field include: E. P. Thompson, "Time, Work-Discipline, and Industrial Capitalism," *Past and Present* 38, no. 1 (1967), 56–97; Gerhard Dohrn-van Rossum, *History of the Hour: Clocks and Modern Temporal Orders*, trans Thomas Dunlap (Chicago: University of Chicago Press, 1996); Carlo M. Cipolla, *Clocks and Culture 1300–1700* (London: Collins, 1967); David S. Landes, *Revolution in Time: Clocks and the Making of the Modern World* (Cambridge: Harvard University Press, 1983). Some more recent accounts of the evolution of modern clock time have taken a more global and frame and explored the relationship between globalization and colonialism and the construction of time values. See for example: Giordano Nanni, *The Colonisation of Time: Ritual Routine and Resistance in the British Empire* (Manchester: Manchester University Press, 2012); Vanessa Ogle, *The*

emphasis on punctuality might be understood as a symptom of an increasingly clock-oriented society in which people began to travel more often and quickly over greater distances, or as a result of factory discipline, or the values of Protestantism which stressed work and “the calling” as part of Christian duty. While such theories help to place discussions of punctuality in context, they fail to account for the word’s appearance, transformations, and its representation of efficiency, organization, and reliability—to borrow from Debrett’s. Following the uses of punctuality—which was no small part of the myriad time values historians refer to when they discuss modern time, clock time, or time discipline—reveals much more about the importance of time measures in society and the social and cultural uses that clocks served as measurers of human behaviour. Placing punctuality’s meaning in context, I examine the uses Britons made of punctuality from the late seventeenth century through the end of the nineteenth century. Paying attention to utterances of the word and how a set of values were repeatedly constructed around it reveals that punctuality’s emergence was driven not by clocks, religion, steam, or factories, but by concerns about trust and the predictability of human behaviour. Punctuality emerged as a reflection of honesty, creditworthiness, and reliability which rendered it significant both socially and economically. For those who preached its importance and decried its neglect from the early eighteenth century onward, punctuality was a matter of social order, self-discipline, and a means of accounting for and mitigating the risks inherent in dealing with and relying upon others.

Global Transformation of Time 1870–1950 (Cambridge: Harvard University Press, 2015); On Barak, *On Time: Technology and Temporality in Modern Egypt* (Berkeley: University of California Press, 2013); Avner Wishnitzer, *Reading Clocks, Alla Turca: Time and Society in the Late Ottoman Empire* (Chicago: University of Chicago Press, 2015).

1.2 Historiography

Unsurprisingly this historiography of time has been dominated by the role of the mechanical clock.⁶ Historians have variously sought to understand when and where clocks proliferated, what uses people made of them, and their influence on cultural attitudes towards time. One of the central debates in this historiography is when and why clock time became the predominant manner in which people thought about and rationed time. More than fifty years since its publication E. P. Thompson's foundational paper "Time, work discipline and Industrial Capitalism" continues to narrate much of the debates in the history of time and timekeeping. In the essay Thompson argued that a combination of puritanism and industrial capitalism (embodied by the advent of factory production) had changed the dominant perception of time from what he called task-orientation, measured by the work being done, to timed-labour, measured by the clock. Through a qualitative analysis of the discourse about thrift, industry, and clock-time, Thompson showed how the clock came to dominate the regulation of work and the moralization of the use of time. Thompson held that a new—if not in kind, then in degree—temporal accountancy was the result of a "marriage of convenience" between capitalism and Christianity, especially after the middle of the eighteenth century where he noted "a new insistence, a firmer accent" on the value of time and its proper use.⁷

Thompson's underlying assumptions followed the interpretation of Max Weber and R. H. Tawney in linking capitalism and Christianity to a new ethic of work and waste that was

⁶ See n. 5 above.

⁷ Thompson, 88, 95.

eschatological, economic, and moral.⁸ Similarly Thompson drew upon the work of Jacques Le Goff who noted that medieval capitalism drove a shift from the time of the Catholic Church to the merchant's time, or from God's time to market time.⁹ While Le Goff saw that market time displaced the time of the church, Thompson saw that puritanism and capitalism combined into powerful and invasive rhetoric about the use of time and time's connection to salvation. This rhetoric was then used to impress time-discipline on workers. Thompson also connected the proliferation of clocks and watches to the moment of an increase in the synchronization of labour.¹⁰ But clocks were one means by which "a new time discipline was imposed."¹¹ Thompson points to a "new Puritan discipline and bourgeois exactitude" and again places time discipline in the context of a puritan ethic arguing that "moralists" accepted the rhetoric of Richard Baxter and "enjoined it upon the working people."

Puritanism, in its marriage of convenience with industrial capitalism, was the agent which converted men to new valuations of time; which taught children even in their infancy to improve each shining hour; and which saturated men's minds with the equation, time is money.¹²

An extreme interpretation of Thompson's argument views the clock oriented society as the result of a cabal between puritanical Christians and capitalists.

While still the most prominent interpretation about the emergence of "modern" time values, Thompson's claims have recently been challenged by a number of historians and

⁸ Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons (New York: Routledge, 2001), although Thompson did not cite Tawney, Tawney's influence is present in Thompson's work R. H. Tawney, *Religion and the Rise of Capitalism* (New York: Routledge, 1998).

⁹ Le Goff, "Merchant's Time and Church's Time in the Middle Ages," in *Time, Work, & Culture in the Middle Ages*, trans. Arthur Goldhammer (Chicago: University of Chicago Press, 1980), 29–42. Originally published as: "Temps de l'église et temps du marchand," *Annales* 15, no. 3 (1960): 417–33.

¹⁰ Thompson, 69.

¹¹ Thompson, 90.

¹² Thompson, 56, 87, 95.

sociologists. Paul Glennie and Nigel Thrift for example have undertaken the most sustained critique of Thompson's thesis. While they overstate the rigidity and totality that Thompson ascribed to the change from task to clock time, Glennie and Thrift have shown that Thompson's vision of social time was too homogenous and that competing time values coexisted with one another. In addition, they demonstrate that pre-industrial clock-time awareness was much more widespread than previously understood. In their meticulously researched *Shaping the Day* (2009), Glennie and Thrift show how clock-time literacy in England permeated society much earlier than historians have previously assumed. They reveal that access to public clocks meant that people encountered mechanical time standards much earlier than private devices alone would suggest. Clocks, both public and private, were a regular part of life in early modern England. Through analysis of time in private journals they suggest that clock times were taken for granted by some early modern diarists.¹³ They argue that by 1770 many clocks had minute hands and "a significant surplus of precision" which exceeded the needs of users. Clock-time's use as a regulating force in society crossed the urban/rural divide and "few sections of society were unaware of clock times." Furthermore time literacy was not connected to clock ownership or formal education in school or work, but rather "the growing saturation of everyday environments with temporal cues." Glennie and Thrift importantly revive the status of the everyday importance of clocks times, noting that it was in face-to-face interactions that clock time precision really mattered.¹⁴

¹³ Paul Glennie and Nigel Thrift, *Shaping the Day: A History of Timekeeping in England and Wales 1300–1800* (Toronto: Oxford University Press, 2009), 194–212. See also their analysis of precision in diaries in table 7.2 on 263.

¹⁴ Glennie and Thrift, 232, 235–6. See pp. 261–76 on the use and availability of minutes and seconds. In addition, they argue that precision of timekeepers was valued for its own sake in many instances.

While Glennie and Thrift have argued that clock time awareness occurred much earlier than Thompson had asserted, and was therefore not driven by factory discipline, Vanessa Ogle has offered a corrective to the supposed global homogenizing influence of industrial capitalism around the turn of the twentieth century. In her study of global time reform Ogle questions the extent to which people readily adopted new times when imposed on them. Ogle shows that a variety of time-senses co-existed at the beginning of the twentieth century.¹⁵ Ogle demonstrates that long after clock time began to replace natural rhythms (in Thompson's formulation), that the sun had not been entirely replaced. Campaigners had difficulty convincing people about the benefits of daylight savings and uniform time standards not based on local time. As Ogle notes, "the simultaneous presence of multiple time regimes dominated" even while the persistence of multiple times was problematized as an impediment to efficient time management.¹⁶ So while campaigners for clock and calendar uniformity and standardization in the late nineteenth and early twentieth century tried to convince people to view time as abstract, as Ogle shows many resisted and continued to live their lives by local times. These observations reflect Hannah Gay's assertion that the very technologies which were supposed to coordinate clocks were unreliable into the twentieth century.¹⁷

While these works have prompted important questions about the transition to a clock-time oriented society, they have overstated the extent to which Thompson posited the timing and completeness of this change. For instance Glennie, Thrift, and Ogle each appear to neglect when Thompson hedged his claims while writing that the imposition of factory time-discipline

¹⁵ Ogle, *The Global Transformation of Time*, 48.

¹⁶ Ogle, 48–9, 39.

¹⁷ Hannah Gay, "Clock Synchrony, Time Distribution and Electrical Timekeeping in Britain 1880-1925," *Past & Present* 181, no. 1 (2003), 107–140.

“sometimes took several generations... and we may doubt how far it was ever fully accomplished: irregular labour rhythms were perpetuated (and even institutionalized) into the [twentieth] century.” In addition, Thompson addressed the extent to which time-thrift was a part of Puritan morality already in the late seventeenth century in the works of John Preston, Richard Baxter, and Oliver Heywood.¹⁸ Moreover such criticisms and refinements to the timing of clock-time literacy do not appear to bear on Thompson’s argument about the role of capitalism and religion in constructing so called modern time values. Although Glennie and Thrift question the role of industrial capitalism in driving the intensification of moralization of clock time and an increase in the spread of devices, they offer no overarching narrative and describe the process of the development of clock time as a “slow burn” and “a growing self-referential confirmatory-ness.” That is, increases in clock-time practices created the need for more clocks, which then fed into more clock-time practices, and so on.¹⁹

Part of their refusal to develop their own causal account or overarching narrative no doubt lies with their critique of both the tendency to see clocks as drivers of time awareness and that clocks were the result of social demands of timekeeping.²⁰ The reasons for buying and building clocks and watches, Glennie and Thrift note, were not limited to the demand to know the time. Similarly, Vanessa Ogle urges that it was “the symbolic quality of timekeepers as status symbols and markers of modernity and progress that rendered them popular and bequeathed time with authority—rather than a desire for spreading or following accurate time and punctuality in the workplace and beyond.”²¹ Clocks and watches, like other automata, bore a significant amount

¹⁸ Thompson, 86–87, 90.

¹⁹ Glennie and Thrift, 408–9.

²⁰ Glennie and Thrift, 225.

²¹ Ogle, 72–3.

of status for their owners and builders²² and it is important to consider the cultural and social importance of clocks as symbols of modernity and civility. However, it is no less important to consider the symbolic power of timekeeping laden in values such as promptness and punctuality for which clocks served as important metrics. Such values which carried moral weight depended on clocks to inform who was and was not on time.²³ As Michael Sauter's study of clockwatching in early modern Berlin shows, the public performance of time gathering from public clocks was highly ritualized and value laden. A highly masculine affair, checking one's pocket watch against a public clock was to "publicly enact his time discipline."²⁴ Indeed, as Glennie and Thrift argue "clock times quickly became an index of people's commitment to emergent forms of politeness and civility, to which changing attitudes to punctuality were central." They suggest that expectations of "promptness" were a kind of "quantification of impatience."²⁵ But from where such values emerged to make clocks more accurate, or coordinated, use them more widely, or judge humans against them, Glennie, Thrift, and Ogle do not say.

Despite the shortcomings of Thompson's argument, his identification of the role of capitalism in shaping time-discipline remains instructive for understanding the development of modern time values and punctuality in particular. While retaining Thompson's emphasis on the role of capitalism I shift focus away from factory production. Though undoubtedly spaces where time and punctuality were highly contested (as chapter four demonstrates) it was not in the

²² Otto Mayr, *Authority, Liberty, & Automatic Machinery in Early Modern Europe* (Baltimore: Johns Hopkins University Press, 1986), 16–25.

²³ Ogle, 72–3.

²⁴ Michael J. Sauter, "Clock Watchers and Stargazers: Time Discipline in Early Modern Berlin," *American Historical Review* 112, no. 3 (2007), 693; citing Sauter, Ogle contrasts "the complexities of urban life" with "internalized time discipline and adopted temporal norms" as competing causes (p. 73), however Sauter's work suggests that the complexities of urban life prompted the internalization of temporal norms.

²⁵ Glennie and Thrift, 273. On p. 236 they note "the moral weight attaching to precision or punctuality."

context of the imposition of waged labour on factory workers where punctuality appeared or became a moralizing force. Rather, punctuality appeared in middle-class, or middling-sort, discussions of debt, credit, and trust.

1.3 The Invention of Punctuality

Max Engammare's study of punctuality in sixteenth century Geneva builds upon the works of Weber, Tawney, and Thompson by locating a renewed urgency with the use of time in protestant theology.²⁶ Engammare departs by locating the emergence or invention of punctuality, as he puts it, specifically in John Calvin's sixteenth century Geneva and the reformed cultures to time discipline that Calvin inspired, a century earlier than Thompson and Tawney argued that Protestantism had begun to preach a more vigorous ethic of work and time. Examining Calvin's schedule and sermons, Engammare shows how Calvin felt himself to be short of time and in response organized his days meticulously, sometimes counting time by the minute. Engammare points to punctuality through such examples as sixteenth-century church ordinances which stipulated that worshippers arrive before the start of prayer and that fines were levied against the late.²⁷ Punctuality, argues Engammare was seen as important in obtaining God's mercy and grace and Calvinists adopted the classical idea that time was a gift and should not be wasted to support the imposition of punctuality and the sinfulness of laziness.²⁸ He illustrates the pressures for adults and children to be "on time" or "in time," showing how time regimes were no small part of Calvin's social and spiritual world.²⁹

²⁶ Max Engammare, *On Time, Punctuality, and Discipline in Early Modern Calvinism*, trans. Karin Maag (Cambridge: Cambridge University Press, 2009), 9.

²⁷ Engammare, 49.

²⁸ Engammare, 50, 81.

²⁹ Engammare, 110, 112.

Engammare's richly sourced study clearly shows what Glennie and Thrift would call clock-time literacy, or time discipline in the writings and rules of reformed Genevans. Punctuality, however, the value which Engammare is tracing the invention of, is not a category or word employed by any of his actors. In the course of the book we never read Calvin's own utterance of "ponctuel," "ponctualité," or "ponctuellement." So, while Engammare states and restates that punctuality was invented in John Calvin's Geneva, based on the account given we have no idea whether Calvin ever used the word.³⁰ Rather, when the word is employed in the book it is the author's own term for the practices of scheduling, being on time, and using clocks. While the book fails to locate the invention of punctuality or even its appearance in sixteenth century Geneva, he does illustrate the pressures of timeliness and clock-time density that also characterized early modern England in Glennie and Thrift's account. So, when Engammare argues that historians are not aware of the emergence of punctuality,³¹ his analysis shows that neither is he.

Punctuality, the word which came to mean being on time, has its own history. This history is tied to the growing pressures to schedule one's day, not waste time, wake early in the morning, and to eschew idleness. Though intimately connected to industry, labour and good time use in general, to take these concepts as punctuality obscures the social, moral, and economic importance placed on the word by those who used it, promoted it, or denigrated it. Turning back

³⁰ Engammare claims that punctuality was invented in Geneva on pp. 107, 108, 122, 125, and 245. It is unclear whether Calvin engaged with the term "punctuality" himself, and if he did it is unusual that Engammare would not have quoted him. In the letters of Calvin translated into English from the Latin and French by Jules Bonnet and published in 1858, there are numerous references to Calvin's own and his correspondent's punctuality or lack thereof in replying to letters. Here too it is unclear whether Calvin would have used the word "ponctualité," "exactitude," or another term, in penning those letters. Jules Bonnet (ed.), *The Letters of John Calvin*, 4 vols (Philadelphia: Presbyterian Board of Publication, 1858), vol. 1, p. 25; vol. 3, pp. 17, 33, 481; vol. 4, pp. 78, 139, 429.

³¹ Engammare, 7.

to the invention of punctuality, this project traces its uses in Britain, its transformations, and their meaning. Understanding the use of the word punctuality and its meanings is important in locating the origins of this value, which along with other values about timekeeping have been frequently located within protestant theology and cultures. For example, although Engammare demonstrates an acute concern with time in sixteenth century Geneva, he does not demonstrate that punctuality was invented there as the title of his book suggests. So, if not there and then; where and when? Focusing on Britain, I trace the use of punctuality as being on time to the late seventeenth century and follow its use through to the end of nineteenth century. In doing so I show how the emergence of punctuality was neither a response to clock-time, the factory system, a protestant work ethic, nor as some historians have argued, the appearance of railways.

Rachel Rich, in a study of mid-nineteenth century domestic manuals and cookery books, argues how “modern, public time management” was introduced into the home often using the language of punctuality and clock time. Rich argues that the increase in thinking about timekeeping and punctuality in domestic advice books suggests that a single clock time was not imposed and that women were accused of lacking “order and punctuality.”³² Rich links this focus on punctuality in the home to the emergence of the new woman at the end of the century, but such views about punctuality and women’s lack of temporal precision predated even the nineteenth century. She suggests “that timekeeping was not something which oppressed middle-class women in their homes,” and, moreover, that the increasing evidence of advice about punctuality and managing unexpected delays reveals the failure of ‘clock time’ “to overturn

³² Rachel Rich, “If You Desire to Enjoy Life, Avoid Unpunctual People,” *Cultural and Social History* 12, no. 1 (2015), 107.

other ways of thinking about and using time.”³³ Joining those who have begun to question and reject Thompson’s claims, “Modernity,” writes Rich “did not in fact mean a full-scale rejection of more traditional ways of marking time in all areas of life.” Similarly, Cecilia Wadsö Lecaros’s study of punctuality in nineteenth century didactic literature has shown how punctuality was discussed as a matter of self-improvement, for others’ sake, and for religious improvement. Lecaros shows how texts repeatedly used mechanical metaphors and clockwork imagery to describe and impress the importance of punctuality upon readers. Unpunctuality was depicted as a cause of problems for the offender and those around them. Lecaros, however, seems to trace the emergence of fears about punctuality and the social disorder it caused to the problem of railway delays and the collisions they caused. Moreover, the concern in these texts she argues is not about “punctuality as a regulating force in society” but rather “individual adherence to punctuality.”³⁴ Lecaros also notes how punctuality was discussed as an almost mechanical trait, and that it was connected to “duty” to the community and to God.

While these works have made interesting insights into the culture of time represented by punctuality in nineteenth century Britain, they provide no insights into the origins of punctuality. They tend to see the value as the result of the increasing emphasis on clock time in society, the appearance of railways, and mechanization without interrogating whether and why punctuality might have been seen to be mechanical, bound to duty, or to God.

In exploring the longer history of punctuality this project has adopted a genealogical approach, following uses of the word in Britain from the end of the nineteenth century to the

³³ Rich, 95, 107.

³⁴ Cecilia Wadsö Lecaros, “‘One Moral Improvement, More Allied to the Machinery of Life than Perhaps any Other’: Mid-Nineteenth-Century Punctuality in Context,” *English Studies* 91, no. 8 (2010), 863–4.

seventeenth century. Following the use of the word punctuality shows clearly that the term predated the age of the railway and the factory. In fact, punctuality had not always meant “on time” as chapter two shows. This task, to use Michel Foucault’s expression, has been “meticulous, and patiently documentary,” and required a “vast accumulation of source material,” only a fraction of which has been presented to the reader.³⁵ The result has been a significant departure from previous interpretations of the development of time discipline in general and punctuality in particular. Rather than searching for a pure origin or moment of invention, this project traces the different and conflicting meanings and interpretations that have emerged in the history of the word.³⁶ Importantly, following the word rather than describing all possible references to timeliness, or being on time, has both constrained the project but also presented the opportunity to trace meaning. Interestingly, the story that has emerged about punctuality bears similarities to Foucault’s description of genealogy as “reestablishing the various systems of subjection: not the anticipatory power of meaning, but the hazardous play of dominations.”³⁷ “Force,” he argues, “masks these actions as a higher morality” and later that “the domination of certain men over others leads to the differentiation of values.”³⁸ He writes of domination that “it is fixed, fixed... in rituals, in meticulous procedures that impose rights and obligations.... “It makes itself accountable for debts and gives rise to the universe of rules.”³⁹ Following Nietzsche, Foucault interprets such dominations as violence in systems that permit dominations. Punctuality’s history is shot through with this same language of debts, accounts, obligations and

³⁵ Michel Foucault, “Nietzsche, Genealogy, History,” in Paul Rabinow (ed.), *The Foucault Reader* (New York: Pantheon Books, 1984), 77.

³⁶ Foucault, 81.

³⁷ Foucault, 83.

³⁸ Foucault, 84–5.

³⁹ Foucault, 85.

rules. As I show, punctuality at times was conceived both as a debt and a duty. The history that unfolds around punctuality is a history of domination, the domination of credit and reputation, of class struggles or work, money and of lost time and missed opportunity. But this language and the social codes they represented were subject to reinterpretations or appropriations “to impose new direction, to bend it to a new will, to force its participation in a different game.”⁴⁰

Punctuality, then, offers a unique perspective for examining time cultures as the word describes human actions and habits with reference to time as measured by calendars, clocks, schedules, and social appointments. At the same time as a value or virtue, the word’s use has been implicitly and explicitly infused with languages of domination and subjection and struggle over ownership and theft of time. But such judgements were less important in themselves than in what they reflected about the character of offending parties and the consequences for loss of reputation, credit, and trust. The violence and domination of punctuality in middle-class cultures ranged from excluding a person from access to credit and rendering moral judgements on their character, to the severe imposition of working times on factory-hands. Tracing the use of the word reveals the contours of human valuations of time and the importance of paying attention to the passage of time. Punctuality’s history involves clock time and measures of time, but punctuality was singled out as a virtuous trait not to praise good timekeeping itself, but to appraise/measure the traits which good timekeeping was understood to reflect: honesty and trustworthiness. Clocks rather, and calendars when less precision was required, acted as metrics of one’s punctuality, not as an end in itself, but as an outward symbol of honesty, reliability, and

⁴⁰ Foucault, 85.

ultimately trust. As a measure of virtue and reliability, punctuality performed as a disciplinary tool in a system of morality where reliability had social and economic implications.

1.4 Chapter Overview

Exploring the history of punctuality in Britain from the late seventeenth century through the end of the nineteenth century I show how punctuality as a form of temporal exactness emerged in the context of discussions of debt, payment, and credit. The word retained these meanings for over two centuries even as it was brought up in conversations about the coordination of clocks, the management of the middle-class home, railway safety, and management of factory labour. The chapters, while thematic in subject, are arranged chronologically beginning in the late seventeenth century and concluding at the end of the nineteenth century. Each chapter demonstrates how punctuality was adapted and employed within a particular context and in responses to a set of social demands.

Chapter two traces two changes in punctuality. The first is from punctuality as “exactness” to punctuality as “on time” which I situate in the context of credit networks and most importantly, in commercial credit networks. The second shift was from the importance of being “on time” in business and economic exchange to the diffusion of this value in middle-class society and in the conduct oriented beliefs of late eighteenth century evangelicals. The financial and social meanings of punctuality were particularly important for the emerging middle class, or middling-sort, and it was for this group of merchants, shopkeepers, professionals, civil servants with lives “marked by the experience of commerce”⁴¹ that punctuality came to mean “on time”

⁴¹ Margaret Hunt, *The Middling Sort: Commerce, Gender, and the Family in England, 1680–1780* (Berkeley: University of California Press, 1996), 1.

and became something laudable. Building on Sarah Jordan's observations about the importance of industry to middle-class identity in the eighteenth century,⁴² I argue that punctuality held a similar social meaning above and beyond its importance to individuals seeking to establish creditworthy reputations. Punctuality helped to distinguish the middling-sort from both the aristocracy and the labouring classes who they depicted as feckless. The expansion of punctuality as a broader social value at the end of the eighteenth century was similarly located within the evangelical revival's critique of manners and the elevation of conduct and morals. Manners were mere outward actions which lacked moral depth and were performed in order to be consumed. Conduct on the other hand was a reflection of inner morality and piety.⁴³

While punctuality reflected a broader social concern for industry, efficiency, and the value for time, it also represented a commitment to social order. At its root, punctuality was a form of honesty, and being honest and fulfilling one's obligations was a way of upholding social trust. Still, acting as an honest and reliable individual offered personal rewards. In this context punctuality operated as a means of securing credit and reputation. At the same time it also served to narrate the difference between the industrious man of business and the aristocratic man of leisure and privilege. By the end of the eighteenth century punctuality had been adopted by evangelical writers to express not only the duty to God but to create a gendered conception of the man of business, who was honest, punctual, and pious.

Chapter three traces how this masculine virtue of moral commerce was domesticated to the middle-class home. Early nineteenth-century journals and domestic literature reveals how the

⁴² Sarah Jordan, *The Anxieties of Idleness: Idleness in Eighteenth-century British Literature and Culture* (Lewisburg: Bucknell University Press, 2003).

⁴³ Marjorie Morgan, *Manners, Morals, and Class in England, 1774–1858* (New York: St. Martin's, 1994), 12–14.

moral economy of the home mirrors that of the place of business. Historians of class and gender have shown that one aspect of the emergence of the middle-class was a growing gendered division of labour and the movement of economic activity or the family business from the home, creating separate spheres of activity for men and women.⁴⁴ These spheres of activity (the world and the home) were characterized by distinct ideologies. Work and business were removed from the home which was redefined as a place of solace and repose for men on their return from work in the world.⁴⁵ However, domestic manuals and children's literature show that the language and ideology of business was applied directly to women's work of managing the home. In print, labour within the home was managed and moralized on the same grounds as men's work outside the home.

Punctuality, as an instance of good management (both moral and adept) applied to women's management of children and servants, but also to children's management of their own duties. At a young age texts on punctuality instilled in children the values of punctuality, honesty, and industry. Punctuality was repeatedly extolled as an example of individual duty which carried consequences for others whom one dealt with. Women and children helped to sustain the economic and social order through honesty and punctuality. In paying debts, giving orders to servants, cooks, or journeymen, in doing one's chores, school lessons, meeting friends, attending school, and, importantly, at dinner, punctuality mattered. Being on time was an issue of internal self-discipline and regulation, and also an outward sign which others could read and

⁴⁴ Leonore Davidoff and Catherine Hall, *Family Fortunes: Men and Women of the English Middle Class 1780–1850*, revised edn (New York: Routledge, 2002).

⁴⁵ On women's roles in business before the ideology of separate spheres see Peter Earle, *The Making of the English Middle Class: Business, Society and Family Life in London, 1660–1730* (Berkeley: University of California Press, 1989), 167–175.

deduce respect, care, and virtue. Chapter three reveals how women's domestic labour and children's work at school and home was moralized on the same grounds as adult male work and interpreted within the same moral understanding of timeliness and duty.

Chapter four turns towards the work involved in making punctuality possible. For Britons to arrive on time they needed a shared standard from which they could measure punctuality. Focusing on the work of George Biddell Airy, Astronomer Royal at the Greenwich Observatory, the chapter shows how punctuality, as much as the context of railway travel, drove efforts to construct electromechanical systems of coordinating clocks throughout Britain. These efforts to create shared standards of time were indications of the problems facing those who promoted punctuality. Factory owners, and Airy himself who managed the Greenwich Observatory like a factory, desired punctuality from their employees. Friends demanded punctuality from each other. Railway passengers demanded punctuality from trains. In each of these contexts and beyond measuring punctuality however depended upon a shared metric in a city where clocks notoriously told widely different times. Importantly, punctuality at Greenwich itself was a crucial element of the authority of the time signals produced and distributed there. Effective management including the division of labour, mechanization, and strict surveillance, were a significant part of Greenwich's social reputation. This reputation was embodied in the Astronomer-manager, whose authority over the observatory derived from the system of management he oversaw. The very credibility of the time signals produced at Greenwich rested on the same values that time signals were supposed to spread. It was because time signals came from an ordered punctual source that they had the social authority to themselves make others punctual.

Finally, chapter five reappraises the history of railway punctuality in Britain by addressing the claims of historians who have seen the railway as the driver of nineteenth century cultures of timeliness, exactitude, and efforts to standardize time. Looking at the complaints of railway passengers in letters to newspapers, most notably the *Times*, and legal actions against companies for unpunctuality, the chapter shows how delays were conceived as breaches of contract and examples of at the very least poor management and at the very worst the intentionally deceitful actions of railway company directors. As with the emergence of punctuality in commercial credit networks in the eighteenth century, railway delays were seen as reflections of the conduct and honesty of the individuals who managed the company. More importantly such train delays were closely connected to the risks of collisions between trains. Passengers clearly understood this risk and decried the practices of railway companies in court and in letters to the editor. As government commissions, select committees, and railway inspectors attempted to understand the relationship between delays and railway accidents, unpunctuality was eventually understood not as a problem to be resolved in order to secure safety, but as an unavoidable condition of railway operation that needed to be accounted for.

Throughout all of these debates, complaints, letters to the editor, reports, books of advice on business and home management, parables, lithographs, poems, woodcuts, conduct books, and songs about the importance of punctuality and the dangers of unpunctuality, one point remained true: punctuality was always an aspirational value and it never existed as its promoters desired. Most often those discussing punctuality were writing about it because it did not exist as the people and trains they encountered failed to keep time. Rather than telling a story of the triumph of clock time, shifting focus to the concerns about punctuality which, at times, relied upon clocks as metrics of compliance, can show how clock time use was idealized by some seemingly in the

face of widespread refusal to be punctual. Throughout the chapters I show how punctuality was repeatedly contested and how the actors and authors spread the gospel of punctuality to those who had or might neglect it. The story of punctuality is one of discipline, whether it be the economic and moral discipline of demanding punctuality from would-be debtors, the punctuality expected from railway passengers, the social discipline performed by the ideal middle-class home, or the discipline inflicted by employers on employees. In all these cases punctuality was something measured and judged about people and systems by other people. For those preachers of the gospel of punctuality, timeliness offered an internal view of an individual's and a system's (whether it be a railway, a home, a business, or an observatory) management, morality, and credibility. Paying attention to punctuality, and being punctual oneself, communicated important knowledge which extended beyond whether someone could tell time by the clock.

Chapter 2: A Punctual Fair Dealer: Credit, Morality, and the Making of

Punctuality

“Nothing can support Credit, be it publick or private, but Honesty; a punctual dealing, a general probity in every transaction; he that breaks thro’ his honesty, violates his credit.”⁴⁶

“Where London’s column, pointing at the skies
Like a tally bully, lifts the head and lies,
There dwelt a citizen of sober fame,
A plain good man, and Balaam was his name;
Religious, punctual, frugal, and so forth;
His word would pass for more than he was worth.”⁴⁷

2.1 Introduction

In his 1814 *Treatise on the wealth, power, and resources of the British Empire*, Patrick Colquhoun (1745–1820), the Scottish merchant and magistrate who founded the Thames River Police argued that what set Britain apart from all other nations—and France especially—was confidence. This confidence, or public credit, was sustained by “punctuality in the transactions between man and man.” “Punctuality,” argued Colquhoun, “generates confidence” which in turn supported commerce. This, he claimed, was “the peculiar character of Great Britain.”⁴⁸

Colquhoun’s statements are illuminating for a number of reasons. First, his claims exemplify a tradition of understanding and proclaiming punctuality to be a specifically English or sometimes British trait. Secondly, this exercise of punctuality was also frequently described as a cause of the commercial success of individuals and of the country as a whole. And finally, Colquhoun’s

⁴⁶ Daniel Defoe, *The Complete English Tradesman*, (London: Charles Rivington, 1726), 420.

⁴⁷ Alexander Pope, *Of the Use of Riches: an epistle to the Right Honorable Allen Lord Bathurst* (London: J. Wright, 1732), 17. This was the third of four epistles later published collectively as Pope’s *Moral Essays*.

⁴⁸ Patrick Colquhoun, *A Treatise on the Wealth, Power, and Resources of the British Empire* (London: Joseph Mawman, 1814), 79.

ideas have a lineage that can be traced to a moment when punctuality was being redefined as “on time” particularly in reference to business and credit. Colquhoun appears to have drawn his ideas (in some parts verbatim) from a 1797 speech in the House of Lords by the Marquis of Lansdowne, who had himself been working from Daniel Defoe’s 1710 “Essay upon Publick Credit” written in support of his patron Robert Harley, Earl of Oxford and the recently minted Chancellor of the Exchequer.⁴⁹ Lansdowne too had argued that it was credit that had elevated England and allowed its power to exceed its geography and population. But it was the credit of tradesmen, not Lords like himself, that had been responsible:

It was the known punctuality of the one placed against the known want of punctuality in the other: it was because the lender knew that the merchant was tenacious of a credit about which the nobleman was indifferent. This was the character of England.⁵⁰

These interconnected eulogies of punctuality are significant for how they tied Britain’s wealth to commerce and in turn to the trust between Britons created by punctual payment. They also reveal both the importance of punctuality as an instance of western self-conscious pride in time discipline and the critical role of class, commerce, and trust in underwriting this time discipline.

“Punctual” and “punctuality” had not always referred to being “on time,” and had a number of intersecting meanings. Punctuality could refer to scrupulousness about conduct,

⁴⁹ Daniel Defoe, *An Essay upon Publick Credit* (London, 1710). Defoe argued that public credit was not influenced by a particular person or minister, but was dependent on the trust in punctual transactions of all individuals. So long as people continued to pay each other, a newly appointed Tory minister would not materially harm the public credit. See: Carl Wennerlind, *Casualties of Credit: The English Financial Revolution 1620–1720* (Cambridge: Harvard University Press, 2011), 182–95; Robert O’Brien, “The Character of Credit: Defoe’s ‘Lady Credit,’ ‘The Fortunate Mistress’, and the Resources of Inconsistency in Early Eighteenth-Century Britain,” *ELH* 63, no. 3 (1996): 612–4; Natalie Roxburgh, *Representing Public Credit: Credible commitment, fiction, and the rise of the financial subject* (New York: Routledge, 2016), 57–60.

⁵⁰ *The Parliamentary Register; or, History of the Proceedings and Debates of the House of Lords*, vol. 3 (London: J. Debrett, 1797), 53–4. Lansdowne when speaking of public credit referred to a pamphlet written by Harley, Earl of Oxford. As Robert O’Brien has noted, as Defoe’s pamphlets were published anonymously many assumed that Harley was the real author. See O’Brien, “The Character of Credit,” 629, n. 21.

etiquette, or ceremony; attention to detail (i.e. precision and exactness); the details of punctuation; the occurrence of something at a specific time; attention to obligations or performing duties; and, the present understanding of the word “Exact observance of appointed times; the fact or habit of being on time.”⁵¹ These meanings which evoke exactness, precision, accuracy, and attention to detail can be difficult at times to distinguish. The earliest reference to punctuality as being on time given in the *Oxford English Dictionary* comes from James Howell’s (c. 1594–1666) *Dendrologia* (1640), where the author wrote of Itelia—a symbolic representation of the Low Countries—“I commend them for their plain downe-right dealing, and punctuality in payment of cambios, contracts and the Souldiers Salary.”⁵² In other instances, however, Howell employed the term to signify scrupulousness, and attention to one’s duty and obligations. Similarly in a 1632 play by Marmion Shackerley (1603–39), the character Agur praises another for keeping to “the time he promised,” telling him “Yo’ are punctuall to your hour.”⁵³ And in his *History of Great Britaine* (1611), John Speed (1551/2–1629) used the word punctual to describe Thomas Stanley’s abandoning Richard III at Bosworth Field in 1485 as well, or advantageously, timed.⁵⁴ Instances where punctuality had some reference to time appear throughout the

⁵¹ “punctuality, n.,” *Oxford English Dictionary Online* (Oxford University Press, 2019). <https://www.oed-com> (last updated (for third edition) September 2007). The *OED* notes that the second-last meaning combined into the last. “Punctual” had a set of meanings as well, including small in size as in a point; in geometry the word connotes “a point in space... having position but no spatial extent”; exactness, accuracy, or precision of details of an argument etc.

⁵² James Howell, *Dendrologia. Dodona’s Grove, or, the Vocall Forrest* (London: H. Mosley, 1640), 2. A cambio is a bill of exchange. Elsewhere Howell referred to God as “just and punctuall” (63), and used the word to denote exactness more generally: “the circumstances were punctuality related unto him” (66); “hee is most punctuall in his pietie to heaven (179).

⁵³ Marmion Shackerley, *Hollands leaguer* (London: John Grove, 1632), act 2, scene 1.

⁵⁴ John Speed, *The History of Great Britaine Under the Conquests of Romans, Saxons, Danes, and Normans* (London: William Hall and John Beale, 1611), bk 9, ch. 20, p. 738. “Money and encouragements, were hereupon lent out of England, from Such as fauoured him; among whom was Sir William Stanley Lord Camberlain to King Henry (by whose punctual reuolt from K. Richard, he had principally atchieued the Crowne of England).”

seventeenth century and it was not uncommon for different meanings of the word to appear in the same text. In Defoe's *Essay upon Publick Credit* for example, he used the word to connote exactness or precision in a clockwork metaphor, alongside using the word to describe paying one's debts on time.⁵⁵ Wordbooks and dictionaries rarely defined punctuality as being on time even into the late eighteenth century, but instead gave the word as exactness, nicety, or punctiliousness.⁵⁶ Whether these dictionaries were themselves accurate accounts of the usage of the words is unclear given that punctuality was used, if infrequently, in the seventeenth century to mean on time. In these seventeenth-century instances and as given in Thomas Dyche and William Pardon's 1740 *New General English Dictionary*, *punctual* had a specifically commercial or financial context: "doing or performing a contract, &c. according to the time and condition specified."⁵⁷ By the mid-nineteenth century, John Craig's *New Universal Etymological, Technological, and Pronouncing Dictionary of the English Language* (1849), while still defining the word as "Niceness; scrupulous exactness," signaled the closure of this transformation stating that the word was "chiefly used with regard to time."⁵⁸

⁵⁵ See for example distinct uses in Defoe's *Essay upon Publick Credit*, including 12 and 13 "pays punctually," on 17 where the word is used to describe precision or accuracy in the Clockwork metaphor of credit, on 16 "*punctual Management*", and on 23 "*Punctual Conduct*" to denote the fulfillment of duty or obligation.

⁵⁶ John Walker, *A Critical Pronouncing Dictionary and Expositor of the English Language* (London: T. Cadell, 1791); Nathan Bailey, *The Universal Etymological English Dictionary*, 2nd edn, 2 vols (London: Thomas Cox, 1731), vol. 2; Edward Cocker, *Cocker's English Dictionary*, ed. John Hawkins (London: T. Norris, 1724); Samuel Johnson, *A Dictionary of the English Language*, 2 vols (London: W. Strahan, 1755), vol. 2.

⁵⁷ Thomas Dyche and William Pardon, *A New General English Dictionary* (London: Richard Ware, 1740). Their dictionary also defined the word as exactness. In George William Lemon, *English Etymology; or, a Derivative Dictionary of the English Language in Two Alphabets* (London: G. Robinson, 1783), *punctual* was defined as "to be exact in point of time, &c."

⁵⁸ John Craig, *A New Universal Etymological, Technological, and Pronouncing Dictionary of the English Language*, 2 vols (London: Henry George Collins, 1849), vol. 2. The work was largely on Webster's *American Dictionary of the English language* first published in 1828.

Differentiating the meaning of the word can thus be difficult and requires careful attention to the context of its use. There was however a shift in meaning over the course of the eighteenth century in which punctuality increasingly came to have a more strictly temporal meaning. In 1700 the word might connote exactness or attention to detail in a wide range of activities; by 1800 punctuality more commonly referred to being “on time.” This shift in meaning was by no means abrupt or complete by the beginning of the nineteenth century. This transformation in meaning and reference was also accompanied by a change in the term’s value. Whereas seventeenth century wordbooks noted that punctuality and punctiliousness could be a vicious trait, by the middle of the eighteenth century writers had elevated punctuality to the status of a virtue.

Following the use of the word in Britain from the late sixteenth century to the early nineteenth century, this chapter traces this redefinition of punctuality as timeliness as a reflection of creditworthiness, honesty, and moral rectitude. It shows how punctuality came to mean on time in the context of questions about debt, the character and trustworthiness of tradesmen and merchants, and how this conception became an important aspect of middle-class or middling-sort identity. Whereas punctuality as scrupulous exactness might have been deemed a base quality in the seventeenth century, by the middle of the eighteenth century writers argued that punctuality as being on time was no mean trait, and moreover something to be emulated by all. To borrow from Quentin Skinner, this represented a shift in the appraisive force and the meaning of the word.⁵⁹ These shifts, I argue, involved a moralization of what Craig Muldrew has termed the

⁵⁹ Skinner used the term to denote whether a word was lauded or condemned what it described. He referred to the change in the word “shrewd” as negative before the seventeenth century but which was later seen as a positive commercial trait. Quentin Skinner, *Visions of Politics, Volume I: Regarding Method* (Cambridge: Cambridge University Press, 2002), 152.

“culture of credit” and the “economy of obligation” of early modern England.⁶⁰ Within this culture, and especially among those thoroughly engaged in commerce the timely repayment of bills, loans, and other debts became the epitome of honesty and trustworthy behaviour. A reputation for honesty and trustworthiness was important, especially to traders and merchants, because it was the basis on which all credit was distributed in an economy based significantly on word of mouth bargains and promises. It was within this context, I argue, that punctuality first emerged as timeliness, from its earlier meanings of exactness and fulfilling one’s duties and obligations and came to embody the moral codes which regulated the distribution of credit and the bestowal of trust in early modern England. So important were these codes that by the middle of the eighteenth century punctuality was espoused as the chief virtue of traders and the principal virtue of the commercial nation. Applying such codes to the rest of one’s social interactions was no easy task as a number of commentators including the lexicographer and moralist Samuel Johnson remarked. By the late eighteenth century punctuality had a new meaning within the conduct literature produced by evangelical writers who effectively sacralized punctuality as a Christian virtue.

This late eighteenth-century sacralization of punctuality drew upon the exhortations of Puritan writers of the previous century who have emphasized the importance of thrift, industry, and honesty to piety. Following E. P. Thompson I argue that there was indeed—especially after the middle of the eighteenth century— “a new insistence, a firmer accent”⁶¹ on the value of time and its proper use. Thompson saw this new insistence as a result of the marriage of puritanism

⁶⁰ Craig Muldrew, *Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England* (New York: Palgrave, 1998).

⁶¹ Thompson, 88.

with industrial capitalism, and underwritten by a Weberian capitalist ethic that stressed frugality and self-interested profit. Here I differ from Thompson in that I locate this renewed emphasis on time, and specifically the discursive construction of punctuality, within early modern codes of behaviour that regulated the extension of informal credit. What was new, I argue, was that punctuality which had been a mark of trustworthiness in commercial transactions, became cast as virtuous behaviour in general. Indeed, as Thompson fully acknowledged, discussions of industry, timeliness, and thrift were by no means inventions of this marriage of capitalism with puritanism.⁶² Historians, including Thompson, have documented calls for industry and time thrift in medieval writings, and have shown that promptness was a concern at least by the end of the seventeenth century. He himself referred to the *Lawbook of the Crowley Ironworks* (1700) which exacted penalties for late attendance. Glennie and Thrift have shown that concerns with promptness were evident in diaries in the late seventeenth century.⁶³ Max Engammare has shown the extent to which Genevan Calvinists were concerned with timeliness, though not, I argue, punctuality.⁶⁴

Whereas Thompson argued that Puritanism and industrial capitalism taught the ethic of a new time discipline and imposed it on workers, I look to punctuality, an aspect of this new time discipline, and trace how the value was generated in the first place. As I argue, it was not until the late seventeenth century that punctuality came to mean timeliness. Even then, this meaning was almost exclusively employed within the context of financial transactions and the nascent

⁶² Thompson, 87. has argued there was nothing “radically new in preaching industry, or in the moral critique of idleness.”

⁶³ Thompson, 82–3; Glennie and Thrift, 222–3.

⁶⁴ Engammare never cites the use of the word punctuality in any of his actors’ writings. Punctuality is therefore not an actor’s category in Engammare’s work, but a word he has used to describe clock-time-oriented conduct and values.

middle class or middling-sort.⁶⁵ Punctuality became a social expectation through concerns about unpaid debts and obtaining knowledge about who could be trusted to repay fully, on time.

Punctuality was thus an outward sign of one's trustworthiness. Crucially, this punctuality had less to do with clock time of hours and minutes and was more fluid, ranging from days and weeks;⁶⁶ however, by the middle of the eighteenth century, the narrowing of these limits to hours and minutes of appointments and social engagements is already visible.

In tracing the construction of punctuality as a moral signifier, this chapter begins by exploring the works of the puritans Richard Baxter (1615–91) and Oliver Heywood (1630–1702), and the nonjuror priest William Law (1686–1761) whom Thompson cited as promoting the time discipline of industrial capitalism. I show that rather than promoting the “Spirit of Capitalism,” these puritans drew upon the language of the market to both insist on punctilious behaviour in religion and condemned what they saw as a socially dangerous, unbridled lust for profit.⁶⁷ The chapter then explores how during the late seventeenth century punctuality first emerged as timeliness as an example of creditworthy behaviour in the marketplace as an effort to demonstrate that trade and traders were ethical. I show how this behaviour was codified in advice literature for traders and merchants as the foundation upon which to build a reputation and secure

⁶⁵ For an analysis of the middling-sort or middle station in the late seventeenth and early eighteenth century see Earle, *Making of the English Middle Class*, 4–17.

⁶⁶ Muldrew, *Economy of Obligation*, 174. Earle notes that it was common to give three days grace to repay debts (Earle, *Making of the English Middle Class*, 118–119). The letter books of Joseph Symson shows in detail how traders worked to reconcile their debts through complex webs of lending often writing to their customers to encourage them to pay (S. D. Smith (ed.), *'An Exact and Industrious Tradesman': The Letter Book of Joseph Symson of Kendal 1711–1720* (Oxford: Oxford University Press, 2002)). For an analysis of error and flexibility in the culture of credit of eighteenth-century New England see: Daniel Vickers, “Errors expected: the culture of credit in rural New England, 1750–1800,” *Economic History Review*, 63 (2010), 1032–57.

⁶⁷ For a history of the portrayal of merchants and traders in literature see John McVeagh, *Tradefull Merchants: The Portrayal of the Capitalist in Literature* (London: Routledge, 1981). For an account of how the commerce was re-evaluated in Britain see Dierdre McCloskey, *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World* (Chicago: University of Chicago Press, 2016), esp. pp. 151–345.

the trust and credit of others. I consider how punctuality was repeatedly depicted as a value of the middling sort, or middle class, against the nobility or aristocracy, and around the central issue of honest, upright conduct. The chapter concludes by exploring how punctuality was taken up and sacralized by late eighteenth-century evangelical moralists in middle-class conduct literature. Whereas Baxter, Law, and Heywood took up the language of the marketplace to promote punctiliousness in religion, they did not, as the evangelicals would, suggest that punctiliousness and punctuality on their own were a sign of piety. By the end of the eighteenth century punctuality, which emerged as a trait of the credit- and trust-worthy man of business, had been entrenched in evangelically inspired conduct literature as an important Christian virtue. Throughout, though, one truth remained clear: people were less punctual than they ought to be.

2.2 Redeeming the Time

Thompson's assertion that English puritanism played an important role in the internalization of a new time-discipline emphasizing industry and idleness rested squarely on his reading of Richard Baxter and Oliver Heywood.⁶⁸ As Thompson wrote:

those moralists who had accepted this new discipline for themselves enjoined it upon the working people. Long before the pocket watch had come within the reach of the artisan, Baxter and his fellows were offering to each man his own interior moral time-piece.⁶⁹

According to Thompson, references to the marketplace in puritan writings were evidence of a marriage between puritanism and capitalism. Re-reading these works in light of seventeenth-century concerns with the honesty and irreligion of traders suggests that use of the commercial metaphors in puritan writing were not necessarily intended to promote the ethic of industry and

⁶⁸ Thompson, 86–9.

⁶⁹ Thompson, 88.

profit. Rather, the puritan divines whom Thompson cited as imposing clock-time on others were drawing upon the industrious and punctilious behaviour of merchants and traders to promote the reanimation of Christian piety in contrast to worldliness and to promote the importance of constantly labouring towards salvation.

The puritan divine Richard Baxter (1615–91) devoted an entire chapter of his popular *Christian Directory* (1673) to discussing the use of time. Borrowing from Paul’s Epistle to the Ephesians V:16, Baxter titled his discussion of Christian industry “Redeeming or well-improving Time.” He emphasized thrift, order, regularity, and duty, all of which would become cornerstones of later discourses about the importance of punctuality. He also, importantly, drew upon the example of merchants and tradesmen to illustrate how time and opportunity might be properly redeemed. “In merchandise, or any trading, in husbandry, or any gaining course, we use to say of a man that hath grown rich by it, that he hath made us of his time!”⁷⁰ Redeeming the time, argued Baxter, was simply to save it for the best purposes, to use it wisely, in a productive calling and labour towards salvation. “To redeem time is to see that we cast none of it away in vain; but use every minute of it as a most precious thing, and spend it wholly in the way of duty.”⁷¹ The foremost duty of any Christian was to God; sloth and sluggishness therefore not only conflicted with industry but with true piety. “Our sluggish ease,” wrote Baxter, “is any easy price to be parted with for precious time. To redeem it, is not to call back time past; nor to stop time in its hasty passage; nor to procure a long life on earth: but to save it, as it passeth, from

⁷⁰ Baxter, *Christian Directory: or, a Body of Practical Divinity and Cases of Conscience*, 5 vols (London: Richard Edwards, 1825), vol. 2, 130.

⁷¹ Baxter, 122.

being devoured and lost, by sluggishness and sin.”⁷² The proper use of time was a Christian duty and its waste was a terrible sin.

Oliver Heywood (1630–1702), like Baxter, commonly wrote in the language of trade and merchandise. In his *Meetness for Heaven* (1679), for example, while discussing the brevity of time on earth, and the urgency and uncertainty of salvation, Heywood wrote “This is our working day, our market time”, and impressed upon readers the need “to cast that anchor safely which is entrusted with a vessel so richly laden. O sirs, sleep now and awake in hell whence there is no redemption.”⁷³ He repeated the metaphor in the *Youth’s Monitor*, “Observe exchange-time, look to your markets; ...walk on the royal exchange of ordinances.”⁷⁴ Heywood compared one’s time to stock and wares to be counted and carefully managed to profit. “Waste not time,” wrote Heywood, “it is too precious a commodity to be undervalued.”⁷⁵ As Thompson suggested, the use of such metaphors indicates that Baxter and Heywood had not “the working people” but rather merchants and traders in mind. Although Thompson emphasized the inculcation of habits of industry and economy on labourers and artisans, Baxter and Heywood’s rhetoric was strongly directed at those merchants and traders from whose social worlds they took the language of thrift and industry. To merchants, market times, the royal exchange, and credit would have been especially potent metaphors. Though Thompson noted that Baxter may have had merchants and tradesmen in mind, he mistook their use of these market oriented metaphors.⁷⁶ Baxter and

⁷² Baxter, 123.

⁷³ Oliver Heywood, *Meetness of Heaven*, in *The Whole Works of the Rev. Oliver Heywood B.A.*, F. Westley (ed.), 5 vols, (London: Idle, 1825–7), vol. 5, p. 287. Also quoted in Thompson, 87.

⁷⁴ Oliver Heywood, *Youth’s Monitor*, in *The Whole Works of the Rev. Oliver Heywood B.A.*, F. Westley (ed.), 5 vols, (London: Idle, 1825–7), vol. 5, p. 575. Also quoted in Thompson.

⁷⁵ Heywood, *Youth’s Monitor*, 574.

⁷⁶ Thompson, 87.

Heywood deployed these metaphors to urge their audience to turn their profit-oriented work ethic away from worldly pursuits and towards their own, and their families', salvation. The capitalist ethic was something to be emulated in Christianity.

The profit to be gained from the careful management of this commodity, time, argued Heywood, was more valuable than money: "This is the golden chain on which hangs eternity; the loss of time is unsufferable, because irrecoverable. Heaven and hell depend on the improvement or non-improvement of a short time in this world."⁷⁷ Repeatedly, they implored readers to serve God justly and honestly in their callings, and to spurn mammon. Time should be used for work, but puritans warned that the kind of work and its ends were as important as the work itself. As Baxter put it, "Think not that a calling can be lawful when the work of it is sin; nor that you, or your labour, or your gain in an unlawful calling, shall be blest."⁷⁸ One's calling ought to be directed first at personal salvation, second at the benefit of the community, and only last should private gain be a motivation. Baxter warned that it was "a prison and constant calamity to be tied to spend one's life in doing little good at all to others, though he should grow rich by it himself."⁷⁹ Even in his lengthy reflections on the redemption of time Baxter emphasized that true orderliness was exemplified in knowing how to prioritize work. He advised the faithful to "be acquainted with the season of every duty, and the duty of each season; and take them in their time. ...misplacing them and disordering them, sets them against one another, and takes up your time with distracting difficulties, and loseth you in confusion."⁸⁰ Elsewhere he wrote that "the neglecting of the season is the frustrating and destroying of the work" and urged readers to

⁷⁷ Heywood, *Youth's Monitor*, 574. Also quoted in Thompson, 87.

⁷⁸ Baxter, *Christian Directory*, vol. 2, 583.

⁷⁹ Baxter, 584.

⁸⁰ Baxter, 149.

“dispatch first with greatest care and diligence, the greatest works of absolute necessity.”⁸¹ The most important duty was to prepare oneself for judgement; God had set aside the present for this purpose explicitly. “Can we play and loiter away our time,” asked Baxter “that have such a work as this to do?”⁸² Salvation was not only urgent, but a duty to God, and procrastinating this work constituted a sinful waste of time.

Though “worldly business” could provide an example of industry and exertion to be emulated in devotion, it was important that such affairs be subordinated to one’s devotion to God. “Time must be redeemed from worldly business and commodity... Trades, and plough, and profit must stand by, when God called us.”⁸³ Baxter raised this subordination of worldly labour to devotion again when he stated “*even* about your lawful, worldly business, it is a time-wasting sin to be slothful. If you are servants or labourers you rob your masters and those that hire you; who to work and not to be idle.”⁸⁴ Underscoring the importance of labouring toward salvation, he compared God to an employer to whom one owed work. In exchange for this labour God would offer an eternal reward. “He that should... do his master’s work, will not be excused if he neglect it, by saying, that he was about an indifferent or a lawful business.”⁸⁵ Baxter martialed the language of duty and obligation to a master to encourage that this duty be replicated in religion.

Baxter’s advice also shows the influence of the rise of accountancy in the seventeenth century. Just as it was important to review one’s accounts, Baxter urged all to review their

⁸¹ Baxter, 145, 148. And again “Time must be redeemed from things indifferent and lawful at another time, when things necessary do require it,” 123.

⁸² Baxter, 125.

⁸³ Baxter, 124.

⁸⁴ Baxter, 158. My emphasis.

⁸⁵ Baxter, 123.

“illspent time” and “despised hours.” Appealing to those who employed account books and ledgers, he warned that “God will call you to account, both for every hour of your misspent time, and for all the good which you should have done in all that time, and did it not.”⁸⁶ Both Baxter and Heywood relied heavily upon the language of debt and credit throughout their writings. In a telling appeal to creditors among his audience, Baxter suggested that one’s obligation to God was a debt that needed to be paid.

Thou scornest men for paying but what they owe to the God that created and redeemed them:… And is this thy justice and honesty, to deride men for offering to pay their debts, and to give God his own? … But if men should not be derided for paying their debts to thee, deride not men for paying their debt to God, and giving him that which is his own.⁸⁷

Baxter appealed to the language of debt, justice, honesty, and payments to convince his audience of the importance of true religion. Heywood repeated the theme while noting that Christ, through his sacrifice, had made repaying such debts to God possible: “The red lines of Christ’s blood, blot out the black lines of our sins from God’s debt-book.”⁸⁸ Baxter and Heywood employed commercial language while appealing to those who visited the exchange, traded in merchandise, kept account-books, and who stood to profit from their careful management of time. Rather than religion promoting the thrift and punctiliousness of worldly work, these divines sought to show how such already existing cultures of thrift, accountancy, and obligation ought to be an example of how to lead a religious life.

For Baxter, Heywood, and Law, who drew upon this language, how one used time was seen as a reflection of piety, for all time was a gift from God and an opportunity to be seized in

⁸⁶ Baxter, 133.

⁸⁷ Baxter, 558.

⁸⁸ Heywood, *A New Creature*, in *The Whole Works of the Rev. Oliver Heywood B.A.*, F. Westley (ed.), 5 vols, (London: Idle, 1825–7), vol. 5, 65.

return for an eternal life. Idleness represented a failure of one's obligations towards God and a lost opportunity. While Baxter, Heywood, and others were preaching to tradesmen and merchants to turn their industrious pursuit of profit towards their own salvation, writers who sought to rescue trade from a reputation of dishonesty and distrust tried to elevate punctilious behaviour to an instance of piousness in itself.⁸⁹ This project, Quentin Skinner writes, was only partially successful, and its legacy can be seen in the way 'religiously' may be used to describe punctilious, habitual, or regular behaviour.

2.3 Trade, Honesty, and Credit

The use of these commercial metaphors to discuss the importance of Christian duty and morality was undoubtedly grounded in ambiguous views of traders and merchants in early modern England. The expansion of commerce drew criticism from some contemporaries who treated merchants, tradesmen, and their profit-oriented conduct with a great deal of suspicion well into the seventeenth century.⁹⁰ Private gain, many argued, was the result of dishonesty and fraudulent behaviour.⁹¹ Even while promoters of trade attempted to show its necessity for the health and prosperity of the nation, questions of honesty and duplicity remained pertinent to discussing traders.

This was especially the case for those puritan writers who emphasized the importance of the calling to salvation. The image of the greedy, deceitful tradesman who put personal profit before the good of the community provided an image against which the honest Christian could be defined. William Law, in his influential *Serious Call to Devout and Holy Life* (1729), wrote

⁸⁹ Skinner, *Visions of Politics*, 147–155.

⁹⁰ Donald F. Dixon, "Changing Concept of the Virtue of Merchants in Seventeenth Century England," *Business and Economic History*, 28, no. 1 (1999), 155.

⁹¹ Dixon, 157–8.

that a tradesman whose business is conducted to be mutually beneficial to himself, and to the community, could see their business as just. However, if “he trades only with regard to himself, without any other rule than that of his own temper; if it be his chief end in it to grow rich,” his business was offensive to God.⁹² The “covetousness” and “ambition” which drove “merchants and tradesmen” to be generally “ten times farther engag’d in business than they need”⁹³ was “as contrary to these holy tempers of Christianity, as cheating and dishonesty.”⁹⁴ Heywood, for example, counted “deceitful tradesmen, or wilful bankrupts, who basely get others’ estates into their hands, and never intend to pay their just debts” among the “thieves” who had no claim to or hope of salvation. “These men, without restitution, shall have their ill-gotten silver and gold to torment them like burning metal in their bowels.”⁹⁵ Similarly, he compared the pretenders to religion who appear pious, but would be found wanting on judgement day, to “vapouring tradesmen, that make a great show to gain credit, but if searched into, possibly not worth a groat, when their debts are paid”.⁹⁶ The untrustworthy trader loomed large as a central example of deceptive and dishonest behaviour. For Baxter, such deceit posed a threat to the entire community, as it undermined mutual bonds of trust.

Lying maketh thee to be always incredible, and so to be useless and dangerous to others: for he that will lie doth leave men uncertain whether ever he speak truth, unless there be better evidence of it, than his credibility. ... How shall I know that he speaketh truth to day who lied yesterday? unless open repentance recover his credibility. Truth will defend itself, and credit him that owneth it at last: but falsehood is indefensible, and will shame its patrons.⁹⁷

⁹² William Law, *A Serious Call to a Devout and Holy Life* (London: William Innys, 1729), 54.

⁹³ Law, 380.

⁹⁴ Law, 60.

⁹⁵ Heywood, *Works*, vol. 5, 300.

⁹⁶ Heywood, 73.

⁹⁷ Baxter, *Christian Directory*, vol. 2, p. 520.

Dishonesty undermined social harmony as it destroyed people's ability to trust in each other.

This language of credit, trust, honesty, industry, and thrift, as historian Craig Muldrew has demonstrated, was fundamental to the social and economic fabric of early modern England. The early modern market was conceived in terms that were "explicitly moral" and "which stressed credit relations, trust, obligation and contracts."⁹⁸ The two modern understandings of credit, as either an estimation of one's character and reputation, or the power to obtain goods in advance of payment, had yet to be differentiated from one another in the seventeenth century.⁹⁹ In an economy dominated by the informal extension of loans, a household's access to credit was based on individuals' reputations within the community. Credit, therefore, had a highly moral meaning, as it stood for the character and reputation of a household. These judgments of reputation were personally and collectively important as the nature of credit meant that one person's dishonesty could have consequences for others who might be separated by multiple degrees in the credit network. As Muldrew writes, "People were constantly involved in tangled webs of economic and social dependency based only on each other's word, or the word of others, which linked them together."¹⁰⁰ As individuals' credit networks became increasingly complex in volume and extended over distance, social knowledge about those who one did business with became more important. Extravagant spending and over-extending one's credit posed a threat to the entire community, as a single household's inability to pay its debt could have effects throughout an increasingly complex web of lending. The risk of defaulting on one's obligations

⁹⁸ Craig Muldrew, "Interpreting the Market: The Ethics of Credit and Community relations in Early Modern England," *Social History* 18, no. 2 (1993), 163, 169.

⁹⁹ Muldrew, *Economy of obligation*, 3–4, 134; Muldrew, "Interpreting the Market," 177.

¹⁰⁰ Muldrew, "Interpreting the Market," 169, 174, 177–9.

through no fault of one's own led to an understanding of society which emphasized the moral character of households and their ability to meet obligations through thrift, discipline, honesty.¹⁰¹

This form of credit, which rested heavily on information about peoples' morality, was the central means of economic exchange during the early modern period and continued to be important through the eighteenth and into the nineteenth century.¹⁰² Credit as a form of mutual trust, underwritten by evaluations of people's reputation and character, was fundamental to the fabric of society. Simply put, "people's livelihoods, and the economic stability of society as a whole, depended upon people trusting one another."¹⁰³ Indeed, the kind of punctilious and industrious behaviour that Baxter and Heywood preached was precisely that which earned a reputation of honesty and credit within one's community. As Muldrew notes, credit represented important social information about a person that could be readily communicated to others: were they honest and trustworthy enough to repay their debts and fulfill their promises.¹⁰⁴ It was within this context that punctuality, as prompt payment, became an important mark of trustworthiness.

Self-discipline, thrift, and honesty were important means to maintaining one's reputation and credit. I argue that it was within this context, where the timely payment of debts was problematized as a social and moral question, that punctuality came to mean being on time. When Heywood wrote that "a promise is a debt"¹⁰⁵ it was equally true that a debt was a promise, and being unable to keep that promise undermined one's reputation for honesty and therefore

¹⁰¹ Muldrew, *Economy of Obligation*, 4.

¹⁰² Muldrew, "Interpreting the Market, 169, 181–2; Muldrew, *Economy of Obligation*, 329.

¹⁰³ Muldrew, "Interpreting the Market," 178.

¹⁰⁴ Muldrew, *Economy of Obligation*, 152.

¹⁰⁵ Heywood, *Works*, vol. 5, 519.

one's credit. People needed to be honest as a rule, and consistent in paying their debts to maintain trust. However, as William Law warned, "it is very possible for a man that lives by cheating, to be very punctual in paying for what he buys." In such instances though the individual's punctuality was not necessarily moral, as Law noted, "everyone is assured, that he does not do so out of any principle of true honesty."¹⁰⁶

During the late seventeenth and eighteenth century the prevalence of informal credit meant that honesty, thrift, order, and industry, especially of wealthy traders, remained a significant social concern. By the middle of the eighteenth century, however, punctuality, understood as timeliness, would emerge as a form of virtuous behaviour best observed in trade. Whereas the redemption of time was a personal and familial concern, influencing the relationship between worshipper and God, punctuality's import was inherently and explicitly social.

2.4 The Virtues of Trade

It was within this context of trade, reputation, credit, the payment of debts, and of course, alongside growing exhortation to redeem the time, that "punctual" came to mean "on time." Punctuality, as timeliness, and more specifically, punctual payment, within an economy dominated by the extension of informal and often long-term loans regulated primarily by reputation, quickly became the surest way to secure credit and a trustworthy reputation. In his diary, Samuel Pepys (1633–1703), the naval administrator and Member of Parliament, used the word on three occasions, each of which referred to credit and the payment of debts. On 4 January 1664 he lamented that he had taken on more obligations than he could remember, and hoped that he would "by the blessing of God observe to perform, or pay my forfeits punctually." Pepys

¹⁰⁶ Law, 62.

described Sir Thomas Player as “a man I have much heard of for his credit and punctuality in the City, and on that score I had a desire to be made known to him.”¹⁰⁷

The letterbook of Joseph Symson (1650–1731), a shopkeeper and mayor of Kendal, shows that punctuality was a part of the economic lives of England’s middling-sort. Symson kept records of his transactions and repeatedly checked his account books. He also repeatedly used the language of punctuality when discussing payments his customers owed him.¹⁰⁸ Following up on the promise made by London merchant, Thomas Bayly, that his debts would “be punctually paid as they become due,” Symson wrote in 1712:

Sir, you must either pay your bills punctuality that we have no more discredit (of which we have had more from you than we ever had from all the men we have dealt with) for our bills being trifled with, or in short we must desist, for we will not lose the reputation our bills had.¹⁰⁹

Exhortations to repay debts, or praise for doing so without reminder, narrate punctuality’s transformation of punctuality from exactitude, or accuracy in general to accuracy in keeping time.

For traders and merchants whose networks of credit and obligations would have extended beyond their ability to have personal knowledge of one another, alternative measures of trust would have been all the more important. Such virtues as temperance, charity, diligence, justice, and faith would have been difficult to demonstrate outside of one’s immediate community and daily interactions. Punctual payment, then, could stand in as a composite of such virtues, in that it could demonstrate honesty, self-restraint, and industry. By the middle of the eighteenth century

¹⁰⁷ Samuel Pepys, *The Diary of Samuel Pepys*, ed. Henry Wheatley, St. Olave edn, 18 vols (New York: George E. Croscup, 1892–9), vol. 7, pp.4–5; vol. 10, p. 231.

¹⁰⁸ Smith, *Exact and Industrious Tradesman*, xxii. For instances of Symons used of punctuality, see 4–5, 7, 40, 143, 303–4, 375–6, 379, 381, 383, 498.

¹⁰⁹ Smith, 143.

punctuality would be elevated to the status of a virtue, found almost exclusively among traders, and all too often neglected by others.

The importance of maintaining faith in one's word through punctual payment was not limited to the individual, but extended to society as a whole. At the close of the seventeenth century the Bristol merchant and writer John Cary (1649–c.1720) argued in favour of transferrable bills of trade which could be used as a form of currency and would “produce a great Punctuality amongst Traders.”¹¹⁰

for all men to keep up the Reputation of their Bills will endeavour to be exact in their Payments, that so they may be currant, and freely accepted in Commerce, every One's Credit will then be esteemed according as he is punctual in the payment of his Bills; Besides, this Punctuality will produce another good effect, those Bills will be bought up by mony'd men for the Advantage of their discount, and it will by degrees lessen the Extortion of Usurers.¹¹¹

Punctuality supported an individual's reputation and credit. It was beneficial to the community as it created faith in others' words and promoted the general extension and repayment of credit.

This link between credit and punctual payment was well entrenched by the time Daniel Defoe (1660–1731) codified such thinking in his *Complete English Tradesman* (1726). Written in the form of letters to an aspiring trader, the book offered advice on a range of topics including correspondence, apprenticeships, partnerships, marriage, and bookkeeping. Taking up the subject which Defoe had publicized for Harley in 1710—one with which he personally struggled through numerous imprisonments for debt—credit and how to cultivate it formed perhaps the most repeated theme throughout the work. “Credit,” wrote Defoe, “is the foundation, the life and

¹¹⁰ John Cary, *An Essay on the State of England in Relation to its Trade* (Bristol: W. Bonny, 1695), 40.

¹¹¹ Cary, 40–1.

soul of business.”¹¹² He similarly described credit as “the choicest jewel the tradesman is trusted with, ‘tis better than money many ways”¹¹³ because it allowed a person to purchase stock for which they had no money. This “impregnable fortification,” had to be diligently maintained in two ways: through industry and honesty. Defoe defined this honesty as “a punctual dealing, a general probity in every transaction.”¹¹⁴

If the borrower pays it punctually without hesitation and defalcations, without difficulties, and above all without compulsion, what is the consequence? He is call’d an honest man, he has the reputation of a punctual fair dealer... Why then he may borrow again whenever he will, he may take up money and goods, or any thing, upon his bare word, or note... This is credit.¹¹⁵

The importance of punctual payment is underlined by Defoe’s having committed an entire chapter to the subject. The trader whose credit is founded on punctually paid bills he claimed was “a Bank to himself,”¹¹⁶ for “let whatever other slur be upon his reputation, his credit will hold good.”¹¹⁷ In short, as Defoe put it, “the Tradesman’s ALL depends upon his punctual complying with the payment of his Bills.”¹¹⁸ Defoe’s account of the rules of early eighteenth century commerce show that the timely payment of debts had become inseparable from both the reputation of a trader and their access to credit.

So important had punctuality become as a sign trust that Adam Smith (1723–1790) had elevated it to the status of a virtue in 1763 while lecturing as Professor of Moral Philosophy at the University of Glasgow. This virtue, however, would only be found among commercial

¹¹² Defoe, *Complete English Tradesman*, 408. Defoe discussed credit in a number of his Review in 1706, noting that credit was secured by “punctual payment at the set time by contract Agreement stated between Buyer and Seller.” *A Review of the State of the English Nation*, 3, no. 6 (12 January 1706), 21–4, on 22.

¹¹³ Defoe, *Complete English Tradesman*, 417.

¹¹⁴ Defoe, 420.

¹¹⁵ Defoe, 421.

¹¹⁶ Defoe, 443.

¹¹⁷ Defoe, 439.

¹¹⁸ Defoe, 444.

people. “When the greater part of people are merchants, they always bring probity and punctuality into fashion, and these, therefore, are the principal virtues of a commercial nation.”¹¹⁹ He claimed that the cause was commerce and the trader’s self-interest. “Whenever commerce is introduced into any country probity and punctuality always accompany it. These virtues in a rude a barbarous country are almost unknown.” According to Smith, the Dutch, “the most commercial, [were] the most faithful to their word.” In their adherence to these virtues, Smith ranked the English above the Scottish but “much inferior to the Dutch,” and distinguished the “remote” from the “commercial parts” of the country in upholding their words. For Smith, it was important to note that this had nothing to do with “national character” for “there is no natural reason why an Englishman or a Scotchman should not be as punctual in performing agreements as a Dutchman.” Instead, Smith claimed, punctuality was the result of “self-interest, that general principle which regulates the actions of every man.”¹²⁰ According to Smith, with an increased frequency of trading the risks of cheating and not honouring contracts also grew so that “a dealer is afraid of losing his character, and is scrupulous in observing every engagement.”¹²¹ Frequent dealings necessitated upholding one’s character which depended on precision, honesty, and faithfulness. A trader had more to gain “by probity and punctuality” as general habits than by any single contract. Being a trustworthy trader, merchant, or man of business demanded punctual observance of the time.

Smith was not a lone observer of the new moral status of punctuality or its origins in trade. Samuel Johnson (1709–1784), the lexicographer and moralist writer, echoed Smith’s

¹¹⁹ Adam Smith, *Lectures on Justice, Police, Revenue and Arms*, 1763, ed. Edwin Cannan (Oxford: Clarendon Press, 1896), 255.

¹²⁰ Smith, 253.

¹²¹ Smith, 253–4

sentiments in his *Rambler* of 18 February 1752 when he wrote that each profession and community had its own distinct set of virtues. Without these virtues, he wrote, “there can be no hope of honour or success, and which, as it is more or less cultivated, confers within its sphere of activity different degrees of merit and reputation.”¹²² Values differentiated members of a community in relation to one another so that they could be judged accordingly. “The chief praise to which a trader aspired,” claimed Johnson “is that of punctuality, or an exact and rigorous observance of commercial engagements.” He went so far as to argue that it was in “the interest of mankind” that punctuality be more widely valued and practiced “through all the ranks of life.” Johnson lamented that the punctual behaviour of traders was neglected and abhorred by others, and even considered “a vulgar and ignoble virtue, below the ambition of greatness or attention of wit.”¹²³ In general, people could be trusted to keep their word in important engagements concerning “property or danger.” That said, it was all too frequent that people failed to be punctual: “he allows himself to forget at what time he is to meet ladies in the park, or at what tavern his friends are expecting him.”¹²⁴ Just as William Law had warned, the result, according to Johnson, was a breakdown of trust: “promises and appointments have lost their cogency, and both parties neglect their stipulations, because each concludes that they will be broken by the other.”¹²⁵ The absence of such trust or agreement imperiled social and economic intercourse.

To illustrate the hazards of treating punctuality as vulgar or ignoble, Johnson related the case of Aliger, once a model of punctuality, but who had been worn down by the influence of his

¹²² Samuel Johnson, *The Rambler* (1750–2), 2 vols (London: F. C. and J. Rivington, 1820), vol. 1, pp. 510–1 (no. 201, 18 February 1752).

¹²³ Johnson, 511.

¹²⁴ Johnson, 512.

¹²⁵ Johnson, 512.

friends. His once “scrupulous anxiety” became a “turpitude of falsehood” and his disregard for social engagements became a generalized habit that appeared in all of his dealings: “he was prudent, but suffered his affairs to be embarrassed for want of regulating his accounts at stated times.”¹²⁶ For Aliger and those like him, declared Johnson, “time slips imperceptibly away, while he is either idle or busy.” Yet, warned Johnson, this was not the chief danger posed by unpunctuality. What was so important about punctuality was its ability to affect others, not the unpunctual person alone. According to Johnson, the unpunctual man’s “friends lose their opportunities, and charge upon him their miscarriages and calamities.”¹²⁷ This was the fundamental issue with punctuality which made it distinct from early rising or time thrift in general; punctuality concerned others and society as much as the individual who either was or was not punctual. The very meaning of the word derived from its social nature and reflected the expectation that one fulfill their obligations and duties. While credit and reputation might be gained through the exercise of this virtue, punctuality was inherently social. Its hazards and rewards extended beyond the individual and throughout the community.

2.5 Morality, Class, and Conduct

It was not uncommon for Johnson to dwell on the shortness of time, time management, the importance of industry, and the dangers of sloth in his prolific writings. He also frequently chided himself for his own mismanagement of time.¹²⁸ In one such instance he moralized the problem of wasting other’s time, writing in 1758 that because time lost could never be regained, “time therefore ought, above all other kinds of property, to be free from invasion.” And yet,

¹²⁶ Johnson, 513.

¹²⁷ Johnson, 514.

¹²⁸ Jordan, *Anxieties of Idleness*, 153–7.

despite the generally acknowledged precious nature of time, Johnson lamented “there is no man who does not claim the power of wasting that time which is the right of others.”¹²⁹ Perhaps calling attention to his rebuke three years earlier of Philip Dormer Stanhope, 4th Earl of Chesterfield (1694–1773), and the incident which had led to it, Johnson claimed that followers of “the Great... linger from year to year in expectations, and die at last with petitions in their hands.”¹³⁰ In the late 1740s Johnson, who was then compiling his *Dictionary of the English Language* (1755), had called upon Chesterfield, a well-known patron of literature, seeking support for his project. Having been told Chesterfield was detained, as the story goes, Johnson was kept waiting before the actor and playwright Colley Cibber exited Chesterfield’s parlour revealing the cause of the delay. Johnson apparently stormed out indignant that his time had been wasted so callously and would later claim that he had been “repulsed” from Chesterfield’s door.¹³¹

In 1755, when Johnson’s *Dictionary* finally appeared, Chesterfield published a glowing letter of support in the fashionable London journal, *The World*. Johnson quickly penned a scathing letter of rebuke, critiquing Chesterfield’s delay in offering support until *Dictionary* was complete.¹³² The letter, however, also symbolically rebuked the aristocratic unpunctuality that had wasted Johnson’s time. Writing that he was not “accustomed to favours from the Great”

¹²⁹ Samuel Johnson, “Robbery of Time,” *The Idler* 14 (15 July 1758), in *The Idler*, 3rd edn, 2 vols (London: T. Davies, 1767), vol. 1, p. 78.

¹³⁰ Johnson, 78.

¹³¹ John Wilson Croker (ed.), *Boswell’s Life of Johnson* (1831), new edn (London: John Murray, 1876), 84–7.

¹³² J. C. D. Clark, *Samuel Johnson: Literature, religion and English cultural politics from the Restoration to Romanticism* (Cambridge: Cambridge University Press, 1994), 187; Leslie Stephen, *Samuel Johnson* (New York: Harper & Brothers, 1878), 43–7.

Johnson told Chesterfield that his patronage which could have assisted him during his years of work on the *Dictionary* came too late, now that it had been published:

the notice which you have been pleased to take of my Labours, had it been early, had been kind; but it has been delayed till I am indifferent and cannot enjoy it, till I am solitary and cannot impart it, till I am known, and do not want it.¹³³

The timing of patronage as much as the payment of debts carried consequences. Several years later, Johnson may have had Chesterfield in mind when discussing the petitioners of the great who “linger from year to year in expectations.”¹³⁴ And yet, despite his experience with Chesterfield, he remarked that “the Great”—statesmen, patrons, etc.—were not the most significant obstacle to keeping “every man in possession of his own time.”¹³⁵ Such characters as Chesterfield could be easily avoided as they were well-known—no doubt due to public rebukes like Johnson’s. Instead, Johnson advised readers to “rescue the day” from those “who are not resisted, because they are not feared, and who work on with unheeded mischiefs, and invisible encroachments.”¹³⁶ Among the “tyrants” who would take what was not theirs he counted the boaster, the projector, the politician, the economist, and at the top of Johnson’s list “the loiterer, who makes appointments which he never keeps.” While one might expect “great men,” Chesterfield among them, to rebuke punctuality as “ignoble,” neglect appointments, and waste others’ time, one had to look out for those less well known characters whose actions would have the same consequence.

Though punctuality might not always be practiced by one’s neighbours, for Johnson, a person had a reasonable expectation to honesty and respect for one’s time. Importantly, he

¹³³ Quoted in Stephen, *Samuel Johnson*, 45–6.

¹³⁴ Johnson, *Idler*, vol. 1, 78.

¹³⁵ Johnson, 81.

¹³⁶ Johnson, p. 81.

upheld punctuality as a virtue of the middling sort, of merchants, traders, and men of business. The obligation, honesty, and duty to others, which encapsulated punctuality, were considered explicitly middle-class values. Johnson was not alone in his belief that punctuality was the preserve of a certain group of people, nor in his condemnation of courtly pretense. In 1711 in *The Spectator* Joseph Addison and Richard Steele had the satirical Roger de Coverely contrast the punctuality of traders with the qualities of the gentleman.¹³⁷ Sixty years later, in 1772, and more than a decade after Johnson wrote on the robbery of time, an article in the *Political Register*, which took aim at punctuality, echoed this tension between the cultures of time of the “great,” and the middling-sort. The unattributed essay, “Thoughts on Regularity, Exactness, and Punctuality,” originally written by the French moralist Jacques ‘abbé’ Esprit (1611–78) in his *La Fausseté des vertus humaines* (1673), first appeared in English as *Discourses on the deceitfulness of human virtues* in 1706. There was nothing “more estimable” Esprit had claimed, “than the regularity, exactness, and punctuality of a prince or a minister of state, who forgetful of their elevated station, subject themselves to all the laws of custom like men of the lowest class.”¹³⁸ Although “these virtues” might appear exemplary when found among those “of a superior cast,” argued Esprit, they were mere dissimulations of virtue. As he claimed “they who are so exact and punctual, are only so for the love of themselves.” Esprit warned that the “punctuality and exactness of persons of the first rank and in great employments” was deceitful. They were merely “adorning themselves with some pretty trifle” only practiced so that it could be seen and admired. This self-love and falsehood revealed itself for such characters “set forth

¹³⁷ Joseph Addison and Richard Steele, *The Spectator* (1710–14), Stereotype edn (London: Isaac, Tuckey, and Co., 1836), no. 109 (5 July 1711), p. 126; no. 174 (19 September 1711), pp. 198–9; no. 214 (5 November 1711), p. 244.

¹³⁸ “Thoughts on Regularity, Exactness, and Punctuality,” *Political Register* 10, no. 62 (1772), 209.

their punctuality, declaring how exact they are to the appointed hour.”¹³⁹ This ran against the very principle which underwrote punctual behaviour: honesty.

The appearance of this century-old French critique of courtly deceit and selfishness in 1770s England points to the growing tension between the evangelically inspired emphasis on conduct and the mere manners of courtiers and fashionable society. What precisely about Esprit’s words resonated with John Almon—the editor of the *Political Register*, a whig journalist and supporter of John Wilkes—is unclear, but the tension which Esprit had written of was at the very heart of late eighteenth century conduct literature. “The real person of integrity,” he wrote, “fulfils all the duties of civil life, with the view to the good of his neighbour; and this benevolent consideration does not suffer him to be wanting in the least respect, which seems requisite to perfect in him this regular, exact, and punctual conduct.”¹⁴⁰ Punctuality, therefore, was not a matter of etiquette, but conduct; not of manners, but morality.

Beginning in the 1770s evangelically-inspired conduct literature written for a middle-class audience codified a morality that openly critiqued the centuries-old aristocratic courtesy books. Popular from the renaissance until around the 1770s, courtesy books had presented a “picture of an ideal social type—the aristocratic gentleman.”¹⁴¹ Sometimes written in the form of parental advice or as guidebooks to success at court, courtesy literature attempted to “render gentlemen fit for their preordained role as social leaders.” For writers of courtesy books, claims Marjorie Morgan, “manners and morals were inseparable and indistinguishable.”¹⁴² In contrast, conduct literature distinguished manners from morals. Manners were “valued as the outward

¹³⁹ “Regularity, Exactness, and Punctuality,” 209.

¹⁴⁰ “Regularity, Exactness, and Punctuality,” 210.

¹⁴¹ Morgan, *Manners, Morals, and Class*, 10.

¹⁴² Morgan, 11.

manifestation of religious and moral principles.” Above all, this literature was aimed at maintaining trust within society and so a repeated refrain was to condemn dissimulation and dishonesty. Whereas reputation, the object of courtesy literature, was worldly and vain and could be gained by a deceitful emulation of fashion, character could only be maintained by eschewing such worldly behaviour and seeking the confidence of God.¹⁴³

Chesterfield’s posthumously published *Letters to His Son on the Art of Becoming a Man of the World and a Gentleman* (1774) represent one of the last significant examples of this gentlemanly courtesy literature which gave way to an explosion of conduct books. The four hundred letters included in the edition published in 1774 were written to his son, Philip Stanhope (1732–1768) over the course of thirty years. In the tradition of courtesy literature Chesterfield had advised his son about proper manners, reading, and the kind of company a gentleman should keep. Throughout the correspondence Chesterfield repeatedly discussed the importance of industry and the value of time. Exhortations for his son to “employ [his] whole time”¹⁴⁴ and to impress upon him “the true use and value of time”¹⁴⁵ form a constant theme in the correspondence. He cautioned against idleness, sloth, and indolence and advised his son to be industrious and rise early. He repeated the warning that lost time could not be recovered and advised that planning, order, and method could ensure that no time was wasted. On several occasions Chesterfield asked his son to account for how he spent his time and let him know that informants were sending their own accounts. Although, as Sarah Jordan illustrates, industry held

¹⁴³ Morgan, 64.

¹⁴⁴ Philip Stanhope, *Letters written by the Earl of Chesterfield to his Son* (1774), 3 vols (London: Thomas Tegg, 1827), 9 December 1746 (vol. 1, pp. 197–8); 6 November 1747 (vol. 1, pp. 230–1); 27 April 1749 (vol. 2, pp. 5–8); 31 May 1752 (vol. 3, pp. 41–6).

¹⁴⁵ Stanhope, 11 December 1747 (vol. 1, pp. 235–7).

a special significance to middle-class British identity in the eighteenth century, clearly it was not the preserve of the middling-sort.¹⁴⁶

One significant omission in Chesterfield's advice on the use of time was the way to treat *another's* time. Amongst the dozens of instances in the correspondence where Chesterfield advised his son about the value of time and the importance of industry, he neglected to mention the importance of not wasting others' time. Indeed the letters only mention timeliness once, when he counselled his son to be early, as he would regret being late.¹⁴⁷ There was no discussion of how the use of time, procrastination, or tardiness would affect others. Industry and economy, in Chesterfield's formulation, ought to be exercised for one's own sake and benefit. Time wisely spent and accounted for would return interest to oneself in the future.

Such self-interested behaviour was observed by those moralists who read Chesterfield's letters. Indeed, as Marjorie Morgan notes Chesterfield's *Letters* was "a spur to palpably moral publications." "Moralists felt compelled to denounce and counteract the advice." "it was pernicious because it was subversive of Christian morality and conducive to hypocritical, self-interested behaviour."¹⁴⁸ Perhaps the most vociferous critique of Chesterfield's *Letters* came from the Church of England clergyman Thomas Hunter (1711–77), who suggested that the *Letters* be retitled "*An entire Code of Hypocrisy and Dissimulation*"¹⁴⁹ and deemed Chesterfield "a frivolous and superficial man; engrossed by selfishness, vanity and ambition."¹⁵⁰ Hunter

¹⁴⁶ Jordan, *Anxieties of Idleness*, 19–21.

¹⁴⁷ Stanhope, 7 February 1749 (vol. 1, pp. 384–90).

¹⁴⁸ Morgan, *Manners, Morals, and Class*, 11, 13–14.

¹⁴⁹ Thomas Hunter, *Reflections critical and moral on the letters of the late Earl of Chesterfield* (1776), 2nd edn (London, 1777), 92–3

¹⁵⁰ Hunter, 93.

accused Chesterfield of “dissipation,”¹⁵¹ “self-love,” and preferring “French manners” over “the rudeness and savageness of British Bumkins.”¹⁵²

His advice to his son recommending truth, virtue, honour and the purity of his moral character, we should have valued the more, had we not seen them afterwards explained away by court-casuistry, by the documents of politeness, by political logic, by and indulgence to pleasure and passion, to avarice and ambition.¹⁵³

For all of this promotion of irreligion, selfishness, and dishonesty—which were all destructive to society—Hunter claimed Chesterfield was “one of the worst enemies to his country that Britain ever produced.”¹⁵⁴ For Hunter, like other late eighteenth-century evangelically-minded moralists, proper conduct ought to be characterized by sincerity, honesty, self-discipline, and a steadiness or orderliness of thought and action. Punctuality embodied all of these values. Taking aim at courtly pretension and dissimulation, conduct literature sought to make peoples’ actions the outward manifestation of inner moral probity and piety. In emphasizing honesty and condemning dissimulation, a central goal of this literature was addressing a problem of trust within society.¹⁵⁵ Just as in trade prompt payment was a sign of creditworthiness, moralists claimed that punctuality was a symbol of moral, honest conduct.

2.6 Timeliness is Next to Godliness

Punctuality emerged within cultures of credit and economic exchange that were equally social and moral. The moral value of this symbol of trust was important to others because of the social interdependence of individuals on word of mouth contracts and bargains. This language

¹⁵¹ Hunter, 10.

¹⁵² Hunter, 63.

¹⁵³ Hunter, 33–4.

¹⁵⁴ Hunter, 245.

¹⁵⁵ Morgan, 3.

was well codified in the early eighteenth century by Defoe and others later in the century who saw punctuality as commercial in origin and best exemplified by commercial people. However, by the late eighteenth century evangelicals took up punctuality and sacralized this business oriented conduct. “Method,” the evangelical clergyman Richard Cecil (1748–1810) wrote, “is the very hinge of business; and there is no method without punctuality.”¹⁵⁶ Cecil’s brief tract on punctuality, published shortly after his death in a collection edited by Josiah Pratt (1768–1844), would be quoted and republished at length throughout the nineteenth century.

A disorderly man, is always in a hurry; he has no time to speak to you, because he is going elsewhere; and when he gets there, he is too late for his business; or he must hurry away to another before he can finish it.

Conversely, argued Cecil, “Punctuality gives weight to character.” The practice of being on time created trust and as Defoe had advised supported one’s good reputation and credit. Whereas dishonesty and want of punctuality bred distrust and further broken engagements, punctuality’s influence spread to others who observed it. “‘Such a man has made an appointment.—Then I know he will keep it.’ And this generates punctuality in you; for, like other virtues, it propagates itself.” Punctuality was again affirmed as a virtue.

Tying punctuality’s origin in credit and debt to a broader social meaning of wasting others’ time through delay, Cecil noted that “Appointments” were “debts.” “I owe you punctuality if I have made an appointment with you,” he proclaimed, “and have no right to throw away your time if I do my own.”¹⁵⁷ Johnson and Defoe would have undoubtedly agreed. Throughout the nineteenth century Cecil’s tract would be reprinted both in excerpt and in its

¹⁵⁶ Josiah Pratt, *The Life, Character, and Remains of the Rev. Richard Cecil* (London, 1811), 344–5.

¹⁵⁷ Pratt, 344–5.

entirety and used as the primer to more lengthy discussions of the importance of punctuality.¹⁵⁸ But Cecil himself had attributed this doctrine which allied method, order, business, timeliness, and honesty to the evangelical moralist Hannah More (1745–1833). More made explicit that punctual behaviour was an instance of piety. She and other moralists who discussed method and punctuality effectively sacralized such behaviour in their writings. In doing so they blended puritan ideals of piety, honesty, and discipline with more worldly conceptions of timeliness centered on business. Whereas Heywood told merchants to look to markets as an instance of how to be more serious Christians, More saw that the best example of a Christian could be found in the man of business. God and Mammon need not be at odds.

More, an influential member of the Clapham sect which included such notable evangelicals as William Wilberforce (1759–1833), Zachary Macaulay (1768–1838), and Thomas Gisborne (1758–1846), wrote her *Estimate of the Religion of the Fashionable World* (1790), and her earlier *Thoughts on the Importance of the Manners of the Great to General Society* (1788), to effect a moral reformation of the aristocracy and fashionable London society. More believed that the moral reform of society as a whole could only be achieved if elites were similarly reformed. To bring about such change she argued that a “religious education” should teach “an habitual interior restraint... and a course of self-countrol.” Restraint, exercised through “wholesome discipline” produced “virtuous character.”¹⁵⁹ Responding to the objection that such a “deep sense

¹⁵⁸ “On Method and Punctuality,” *The Primitive Methodist Magazine* 8 (May 1838), 188; “The Importance of Punctuality,” *The Spirit of the Public Journals for the year 1823* (1824), 39; “Anecdotes and Extracts: On Punctuality,” *The Church of England Magazine* 7, no. 189 (October 1839), 262; “Method,” *The Saturday Magazine* 1, no. 1 (July 1832), 7; “The Benefits of Punctuality,” *The Leisure Hour* 3, no. 139 (July 1854), 544; Labourers’ Friend Society, *Useful Hints for Labourers* (London: John W. Parker, 1841), 118–19.

¹⁵⁹ Hannah More, *An Estimate of the Religion of the Fashionable World*, (London: T. Cadell, 1791), 88–90. “Without this habit of moral restraint, which is one of the fundamental laws of Christian virtue, though men may, form natural temper, often *do* good, yet it is perhaps impossible that they should ever *be* good.”

of religion” would interfere with “the business of human life” and create “a race of monks and ascetics,” More claimed that sincere religion would improve, not hinder, the execution of business, commerce, and other worldly pursuits:

For where are we to look for so much punctuality, diligence, application, doing everything in its proper day (the great hinge on which business turns), as among men of principle? Oeconomy of time, truth in observing his word, never daring to deceive or to disappoint—these are the very essence of a man of business; and for these to whom shall we most naturally look? ... Will not he be most regular in dealing with men who is most diligent in ‘serving the Lord?’¹⁶⁰

The orderly, industrious, and creditworthy man of business was a pious Christian, and punctuality described this man to a word.

More was not the first, or the last, to describe punctuality as a Christian virtue. Turn of the century moralists regularly emphasized the value of time and importance of punctuality when discussing the need for reform. “In business or religion it is the true path to honour and respect”, wrote the independent minister, Charles Buck, in his popular *Anecdotes, Religious, Moral and Entertaining* (1799). Whoever wishes to advance his own interest, and to secure the approbation of others, must be punctual.”¹⁶¹ Repeated punctuality was connected to piety.¹⁶² Thomas Gisborne, the Anglican priest fellow member of the Clapham sect, repeated this theme just a few years later when he wrote that to earn credit and confidence the tradesman should

give them no grounds to reproach him with the want of punctuality. A failure in this point may frequently be of material detriment to their plans and prospects;

¹⁶⁰ More, 97–8.

¹⁶¹ Charles Buck, *Anecdotes, Religious, Moral, and Entertaining*, 3rd edn, 2 vols (London, 1805), vol. 2, 245. “Nothing begets confidence sooner than punctuality.” On notes of confidence, and the role of discredit ensuring punctual payments, see also Thomas Gisborne, *Enquiry into the Duties of Men in the Higher and Middle Classes of Society* (London: B. and J. White, 1794), 259–60.

¹⁶² “On judging by Appearances”, *Evangelical Magazine* 12 (1804), 389; Hester Chapone, *Letters on the Improvement of the Mind*, 8th edn (London: J. Walter, 1778), 82–4.

and will always excite in them a great share of dissatisfaction, greater perhaps in many instances than ought to be felt under the circumstances of the case.¹⁶³

Like More's *Estimate and Thoughts on the Importance of Manners*, Gisborne's *Enquiry into the Duties of Men in the Higher and Middle Classes of Society* (1794) sought to root social rules in Christian morality. His goal, as he described it was

to apply moral truths to practical purposes; to point out their bearings on modern opinions and modern manners; and to deduce from them rules of conduct by which the inhabitants of this country in particular, each in his respective station, may be aided in acquiring the knowledge and encouraged in the performance of their several duties.¹⁶⁴

It was possible for morality to inform the right conduct of an individual regardless of their social position and occupation.

In separate chapters written on peers, members of parliament, officers of the government, lawyers, clerics, physicians, and "persons engaged in Trade and Business," Gisborne delineated both the beau ideal of duty and the faults to which each profession was particularly liable. Probably with the events of the French Revolution in mind Gisborne argued first and foremost that Christian morals reaffirmed "the duty of every British subject to obey with punctuality, promptitude, and cheerfulness, the laws of the land."¹⁶⁵ As Gisborne noted, punctuality was an important duty in professions outside of commerce as well. He recommended "Punctual obedience" for military and naval officers¹⁶⁶ and in addition to "strict regularity and method," government officers ought to be characterized by "punctuality even in matters of comparatively small importance."¹⁶⁷ For physicians specifically Gisborne wrote, "Punctuality in attending at

¹⁶³ Gisborne, *Duties of Men*, 220.

¹⁶⁴ Gisborne, 1.

¹⁶⁵ Gisborne, 59. Here is another example of the non-temporal meaning of punctuality, as attention to fulfill duties.

¹⁶⁶ Gisborne, 188, 190.

¹⁶⁷ Gisborne, 157, 164.

appointed times... should not be in any degree neglected.”¹⁶⁸ Failure here might lead patients to think that their health did not matter to the physician, and worse yet produce anxiety and disappointment in the sick. As a general rule, being on time was an instance of honesty and evidence of trustworthiness.

For those engaged in trade, Gisborne dwelt specifically on the importance of commercial credit which he defined as “confidence in respect to his mercantile, and more particularly his pecuniary transaction.”¹⁶⁹ At the end of the eighteenth century punctuality remained a central part of this credit: “The foundations of a trader’s credit are property, integrity, punctuality, industry, prudence, openness of dealing, freedom from extravagance, from a spirit of wild speculation, and from vice, and the character of the partners and of others with whom he is closely connected.”¹⁷⁰ Upholding the ideal described by More, Gisborne warned that even an “avaricious, voluptuous, and irreligious” man might have good credit as he might also be “rich, punctual in his payments, and possibly also prudent, and tolerably fair in his dealings.”¹⁷¹ The trader with the best credit, however, would unite good commercial credit with a good, Christian character.

The conduct literature of the late eighteenth century elevated punctuality to the status of a Christian virtue. Whereas punctuality was primarily valued for its ability to bestow confidence on the person who exhibited it, consistent with the emphasis on sincerity in conduct literature, punctuality came to be valued especially for its impact on an individual’s behaviour rather than simply what credit it brought to a person. The method, order, and system which supposedly

¹⁶⁸ Gisborne, 397.

¹⁶⁹ Gisborne, 453.

¹⁷⁰ Gisborne, 217.

¹⁷¹ Gisborne, 454.

accompanied punctuality became a central part of the appeal of this virtue. Timeliness, honesty, and trust, moralists argued, while the lifeblood of a trader's credit, was no longer the preserve of men of business alone but were general duties of respectable Christians. Indeed moralists began to preach the importance of punctuality to women and children as well.

2.7 Too Late

While conduct literature preached the connection between Christian duty and punctuality in worldly business, a chorus of voices began to publicly denounce what they saw as a socially, and spiritually, vicious activity that had been growing in intensity: late attendance at Church. In the pages of magazines, in sermons, and in separately published pamphlets and tracts complaints about unpunctual churchgoers elided the distinction between the social consequences of punctuality and the need to redeem oneself through the calling and moral conduct. While evangelical moralists had sacralized punctuality, a litany of churchgoers and preachers complained that want of punctuality was all too common. Like other genres which discussed the negative consequences of failing to be punctual, texts which denounced late attendance at church services define want of punctuality as a grave problem for the transgressor and those who had the misfortune to suffer them.

Despite the emphasis on the specifically Christian quality of punctuality, where punctuality might be expected most at Church on Sunday, many found their fellow worshippers wanting. One correspondent to the *Evangelical Magazine* in 1797 claimed that it was not uncommon to find that less than two thirds of the congregation had arrived by the time services began.¹⁷² Describing late attendance as an “evil that ought to be exposed” they outline its

¹⁷² S. B. “Attendance on Public Worship,” *Evangelical Magazine* 5 (Dec 1797), 491.

negative consequences. The noise of latecomers opening and closing the doors and shuffling to their seats distressed the minister and influenced his delivery of the sermon or prayer. Such distractions also made it so that more timely worshippers could neither hear the sermon nor themselves while praying.¹⁷³ Evoking Paul's First Epistle to the Corinthians ("let all things be done decently and in order") the author condemned late attendance as neither orderly or decent.¹⁷⁴ Arriving late at worship was contrary to God's order, but latecomers also defied established social mores: "when the hours for buying and selling in fairs and markets are fixed, they who have business there will mind not to be too late."¹⁷⁵ Good conduct in business meant being at market ready to buy or sell at the appointed hour. Those who would expect to profit from attendance at church should similarly arrive on time to receive the full benefit of the prayer and sermon. In social visits to friends "common politeness, as it is called, requires punctuality; and if it so happen that the visitors be not exact to the time, reasons are generally assigned and apologies are made."¹⁷⁶ Such were some of the customs regarding the use of time and appointments among "men." Already entrenched expectations of punctuality in social visits and in business stood as examples to be emulated in Christian worship.

Appeal to worldly social rules of punctuality once again supported the call for more rigorous attention to the duties of religion. While one might apologize to friends and neighbours, the author asked rhetorically, "what apologies can be made for those who profess the highest regard for God and his Gospel, to his ministers and servants, to his worship and the orders of his

¹⁷³ S. B., 491.

¹⁷⁴ S. B., 492.

¹⁷⁵ S. B., 493.

¹⁷⁶ S. B., 493.

house, while, notwithstanding, they are generally behind the time.”¹⁷⁷ Of course, they acknowledged that there would be situations “when punctual attendance” would be impossible. To demand punctuality all the time would be unreasonable. The problem, however, was that late attendance had become habitual; the worst offenders might arrive on time only once in a month, while normally arriving five to ten minutes late. They were not alone in this belief; two years later the Independent minister John Townsend (1757–1826) went so far as to claim that late attendance “pervades all our churches.”¹⁷⁸ He too appealed to Paul’s Epistle to the Corinthians reminding readers that it was “the established law of the house of God.”¹⁷⁹ The problem had grown so great that late arrival was now “a matter of custom” and there was no longer any “shame” associated with the “indecent behaviour.”¹⁸⁰ Want of punctuality was a habit.

Both of these examples show that late attendance was perceived as a problem affecting Christian worship. Just as in trade, punctuality represented a solution to a social problem which had far-reaching consequences. During the first half of the nineteenth century concerned churchgoers took it upon themselves to rebuke unpunctuality at church in a relatively coherent and consistent set of arguments about the practice, its consequences, and the way to correct the behaviour. These represent more than simple complaints. Authors writing against late attendance at Church presented punctuality as timeliness, and timeliness as Christian. The author frequently first condemned late attendance as a “great and prevailing evil,” a “very common, though indecent practice” and variously estimated the percentage of latecomers among their

¹⁷⁷ S. B., 493.

¹⁷⁸ John Townsend, *Nine Discourses on Prayer* (London, 1799), 109. ‘Let all things be done decently and in order.’ I Cor. xiv. 40.

¹⁷⁹ Townsend, 108.

¹⁸⁰ Townsend, 106.

congregation and throughout the country.¹⁸¹ The sheer volume of latecomers and the “habitual” lateness made such behaviour all the more reprehensible. Moreover, regularly late attendance demonstrated that the causes were foreseeable, avoidable, and a matter of personal choice and, consequently, a moral failing.¹⁸² Latecomers simply did not care to arrive on time.

Writers also identified the unpunctual by class in ways that suggested unpunctuality was to be expected or accepted of labourers, but was unfit behaviour for members of the middle-class.¹⁸³ In another complaint to the *Methodist Magazine* the correspondence wrote explicitly about the question of class: “the habit is not wholly confined to the labouring classes, but obtains to an equal extent among those whose circumstances in life render their conduct peculiarly inexcusable.”¹⁸⁴ Who arrived late was noteworthy in that it showed such conduct was not the preserve of a particular class: all arrived late.¹⁸⁵ The reported consequences of late attendance were manifold. Arriving at Church late not only disturbed and distracted others by creating noise during the sermon or prayer, but it contradicted the stated will of God in His own house,¹⁸⁶ and those who committed this “evil” were accused of being “irreverent towards God.”¹⁸⁷ Disregard for divinely commanded orderliness, intruded on the grace that worshippers were expecting to

¹⁸¹ “On the evil of late attendance on Public Worship,” *Christian Guardian and Church of England Magazine* 3, no. 9 (September 1811), 297, which claimed that “not one fifth of the congregation assembled together”; A. B. C., “Attendance on Public Worship,” *Evangelical Magazine* 8 (September 1800): 367.

¹⁸² “On the evil of late attendance on Public Worship,” 297, “It is an habitual custom of entering the house of god after divine service is begun.”; *The Evil of a Late Attendance on Divine Worship* (London, 1800), 1; J. H., “On Late Attendance at Public Worship,” *Evangelical Magazine* 18 (March 1810), 101, “not 20 people in the chapel.”;

¹⁸³ A. B. C., “Attendance,” 367.

¹⁸⁴ Gaius, “Early Attendance at the House of God,” *Evangelical Magazine* 30 N.S. [60] (September 1852), 526.

¹⁸⁵ B. “On Regularity of Attendance at the House of Prayer,” *The Wesleyan-Methodist magazine* 22 (February 1843), 128.

¹⁸⁶ “On the evil of late attendance on Public Worship,” 297. “How much would it tend to the beauty, to the decency and order, which ought to be observed in the worship of God, were all the congregation to be present before it begins.”; *The Evil of a Late Attendance*, 1, “How much would such a line of conduct contribute toward the order and beauty of the worship”.

¹⁸⁷ A. B. C., “Attendance on Public Worship,” *Evangelical Magazine* 8 (September 1800), 367.

receive. Possibly dismayed at the worldliness of parishioners, one commentator noted that few would neglect the opportunity to receive a reward given by a friend. In going to Church one was there to receive God's grace. "how anxious then ought we to be in our punctual attendance at the sanctuary."¹⁸⁸ As Townsend had noted, "Our outward senses are inlets to the soul, and when these are attracted by new objects in the house of God, they open the heart to every intruder, and render our sacrifices accessible to every bird of prey."¹⁸⁹ Punctuality's highly social meaning meant that lateness affected others beyond the offender. Just as in the context of credit, unpunctuality spread ruin to others in the community, but at Church, the consequences were eternal. Those who arrived late were "unprofitable hearer[s] of the Gospel," and "accessory to the making of others such."¹⁹⁰ Distracting ministers by arriving late "hinder[ed] the effusion of his saving benediction upon the assembly of his people."¹⁹¹ Not only was the minister interrupted in giving the sermon, but other churchgoers were hindered in hearing it. Commotion, the noise of doors interrupted the prayer and reflection of the punctual and "obstructs the descent of heavenly influences upon them."¹⁹²

Discussions of the problem of late attendance at Church from the late eighteenth century onward rehearsed a fairly consistent set of arguments which depicted punctuality as a question of morality and piety. Authors expressed frustration and disgust that punctuality was so neglected, and went to lengths to show how punctual attendance was consistent with Christian worship and even inscribed in the New and Old Testament. These exhortations to be on time at Sunday

¹⁸⁸ "On the evil of late attendance on Public Worship," 298.

¹⁸⁹ Townsend, *Nine Discourses*, 108–9.

¹⁹⁰ *The Evil of a Late Attendance*, 1.

¹⁹¹ "Late attendance on public worship," *Wesleyan-Methodist Magazine* 20 (June 1841), 478.

¹⁹² "Late attendance on public worship," 478.

church services show how punctuality was understood as an instance of public morality and upright social behaviour. Prompt attendance was a duty, it showed respect to others, and preserved the social and spiritual harmony of the community. The complaints also reveal that practice differed significantly from the ideal.

Complaints about late attendance at church are significant in that they show the blending of the language of business conduct and the imperative to tend to one's own salvation. The complaints continued a tradition from Baxter and Heywood which appealed to punctilious and exact behaviour in commerce to convince professed Christians to give the same devotion to God that they did to mammon. These texts also highlight a trend of complaints about the want of punctuality which was not restricted to attendance at Church. In fact, most of the discussions of punctuality condemned its want. While these turn-of-the-century texts decried lateness at Church and appealed to commercial propriety to compel Christians to come on time, those in the world of commerce had their own complaints. A correspondent to the *St. James's Chronicle* in 1781 decried the current neglect of punctuality. The habits of punctuality that he had been raised with, and "considered as a most laudable Virtue, I now experience to be the greatest Inconvenience imaginable."¹⁹³ In arriving at dinner parties, going to the exchange, and meeting a coach, his punctuality was a nuisance as no one else is on time. Even paying his bills on time before being drawn upon caused distress to bankers who were unused to the practice. The sentiment that punctuality had fallen out of estimation would be repeated by successive generations. William Cobbett (1763–1835), writing nearly half a century later in 1829 felt that the English reputation

¹⁹³ Old Regularity, To the Editor, *St. James's Chronicle or the British Evening Post* (28–30 June 1781).

for punctuality had suffered among the rising generation in favour of idleness, sloth, and their desire to be perceived as “gentlemen.”

A nation famed for its pursuit of wealth through the channels of patience, punctuality, and integrity; a nation famed for its love of solid acquisitions and qualities, and its hatred of everything showy and false: so general is this really fraudulent desire amongst the youth of this now ‘*speculating*’ nation, that thousands upon thousands of them are, at this moment, in a state of half starvation, not so much because they are too *lazy* to earn their bread, as because they are too *proud*!¹⁹⁴

If there were two truths about punctuality from the late seventeenth century to the nineteenth century, it was that no one was punctual enough for those who were writing about it, and the previous age was always more punctual than the present.

2.8 Conclusion

From the late seventeenth to the late eighteenth century a motley crew of writers on business, credit, conduct, Christian morals, and attendance at Church helped to redefine punctuality as “timeliness.” This new meaning, which still carried with it the more general and older meaning of exactness, precision and duty had also been highly moralized by the writers who explored the importance of being punctual to the “man of business.” Within the conduct literature written by English evangelicals in the late eighteenth century punctuality functioned as a means of assessing the trustworthiness of others. Being on time, moralists like Hannah More argued, demonstrated respect for others’ time and gave important information about a person’s character as it symbolized order, self-discipline, and integrity. Not least of all, punctuality was an important sign of piety in that it demonstrated the value a person placed on the time God had given to work out their salvation. Punctuality therefore was viewed as part of a more general

¹⁹⁴ William Cobbett, *Advice to Young Men, and Incidentally to Young Women* (London, 1829), n.p.

refrain to prepare oneself for judgement. The punctual man, and he was almost invariably a man, was a pious, hardworking, and honest Christian. He scheduled his daily work into portions that were easily managed. He paid his debts on time, was never late for an appointment, gave his full attention to whatever task he was engaged in, never procrastinated, regularly attended religious services and though he might make haste, he was never in a hurry. Such a man led a devout life, but also made a modestly profitable one.¹⁹⁵ This behaviour earned praise and bestowed respect upon a person's character. The vast majority of sources in this chapter have been reprimands to those who were not punctual, and admonitions to those who might be. In its formation punctuality was a value defined against its absence.

Turn of the century obituaries however commended the deceased for their punctuality as a sign of morality and piety. They reveal that punctuality mattered to some beyond those who complained about it, and that this virtuous behaviour was significant enough to include in texts which memorialized a person's life and character. That of W. J. Gambier, from 1797 provides a typical example of how punctuality was constructed as an example of a person's good conduct:

The business he executed at the East India House, and on the Royal Exchange, rendered him eminent in his profession. His great integrity in business commanded confidence and esteem from all who had any dealings with him. He was remarkable for industry and punctuality in his commercial affairs; but he did not suffer his attention to temporal concerns to supercede the more important duties of religion.¹⁹⁶

For those who valued economy and thrift, punctuality encapsulated virtuous activity. Obituaries like Gambier's not infrequently made note of such praiseworthy attention to the division of time by discussing an individual's reputation for punctuality. Similarly, a 1799 obituary for Mrs.

¹⁹⁵ Davidoff and Hall, 110–112.

¹⁹⁶ "Obituary," *Evangelical Magazine* 6 (January 1798), 32.

Elizabeth Barton, daughter of John Harrison of longitude-fame, noted how she took after “her father’s countenance, his industry, punctuality, and domestic habits.”¹⁹⁷ Numerous examples abound. These not uncommon accounts of punctilious behaviour in turn-of-the-century obituaries communicated that a punctual person had lived honestly, performed their duties and obligations, respected others, lived within their social station, undoubtedly, as a devout Christian. This value-laden understanding of the act and habit of being on time developed over the course of the eighteenth century within a nexus of commercial etiquette and Christian morality.

Concerns about unpaid debts and the personal, financial risks involved in extending credit to others made punctuality an important symbol of trustworthiness and ultimately creditworthiness. Combined with the economic concerns about indebtedness were also the fears about whether early modern tradesmen and merchants—with their questionable goals of earning profit—could be trusted within the community. Industry, early rising, thrift, and honesty might then earn tradesmen reputations as creditworthy and fair dealers. Most importantly, paying one’s debts on time, or punctually, was an act of honesty, and showed that one had been industrious and thrifty and could meet their obligations at the agreed upon time. In this context punctuality evinced a sense of obligation and duty to others. Over the course of the eighteenth century the importance imbued in punctually paid bills was placed on appointments and other engagements. Keeping one’s word in a social engagement was seen as a species of this economic

¹⁹⁷ “In Paradise-row, Stoke-Newington, after a few weeks illness, and in her 67th year, Mrs. Elizabeth Barton, wife of Mr. John Barton, and only daughter of the late ingenious Mr. John Harrison, whose mechanical inventions for ascertaining the longitude at seas did honour this country, and were a basis for, and have been a spur to, the executing of those machines, for which it is now so famous. She had much of her father’s countenance, his industry, punctuality, and domestic habits, and filled with unremitting attention that station in society which Providence had assigned her.” “Obituary of remarkable persons; with Biographical Anecdotes,” *The Gentleman’s Magazine* 69 (January 1799), 81.

punctuality and showed that even in trivial matters one could be trusted. The obverse was that one who could not be trusted with something so small as meeting a friend on time, could not be trusted to repay their debts. It was along these lines that punctuality was constructed as a *virtuous* character trait of the trustworthy man of business, who was also, importantly, a devout Christian. Punctuality helped to sustain a truly moral economy.

Chapter 3: Domesticating Time: Order, Method, and the Middle-class Family

“I endeavoured to become punctual, and this was my hardest task. Again and again I tried, and failed—I could not be exact.”¹⁹⁸

“nothing whatever so chafes my temper as failure in punctuality in those with whom I have transactions.”¹⁹⁹

3.1 Introduction

Eliza Warren’s didactic book *How I Managed my House on Two Hundred Pounds a Year* described a middle-class housewife’s reformation into an orderly, economical domestic manager which ultimately secures the love of her husband. One of the key challenges the young wife in Warren’s book faced in becoming a good manager, among spending wisely, needlework, cooking, and overseeing servants, was learning to be punctual. She felt her husband’s love drifting, and sought in winning it back “to live for him alone.” She noted that her “punctuality was unheeded; it mattered not to me whether dinner was ready at the appointed hour.” Her husband’s frequent disappointment at late dinners reflected her management and affected his affection. To be punctual was her main goal and one of the greatest she had to conquer. In reading *The Life of Nelson* she learned from his example that to be ready fifteen minutes before an engagement was the key to success. From friends she learned to be armed with punctuality so as to influence her servants in turn. Warren’s work, like others in the domestic guidebook genres, hinged the survival of the household on the housekeeper’s good management, rehearsing dominant themes in the ideology of female domesticity. Whether one did the cleaning, cooking,

¹⁹⁸ Eliza Warren, *How I Managed My House on Two Hundred Pounds a Year* (London: Houlston and Wright, 1864), 32.

¹⁹⁹ Harriet Martineau, *Household Education* (London: Edward Moxon, 1849), 299–300.

or minding of children themselves, or had a number of servants to carry out the work, punctuality was absolutely essential to good domestic management.

While men and women's roles were socially prescribed and separated, they were motivated and underwritten by the same values. Warren's work reveals a tension in the expectations around women's time-management. It could be difficult for housekeepers to be punctual themselves and to influence all the other members of the home to be punctual as well. The contrast between the narrator's reported difficulty in learning to be punctual themselves and how the household depended on her for its success points to a broader theme in the discourse of punctuality and how it was domesticated or brought into the middle-class home in the early nineteenth century. As Leonore Davidoff has argued, there was an inherent contradiction at the heart of efforts to rationalize women's domestic work in domestic magazines, cookery books, and didactic books.²⁰⁰ This contradiction rested in the gender ideologies described by Davidoff and Catherine Hall in their foundational work on the establishment of the separate spheres ideology in England.²⁰¹ Davidoff and Hall showed how ideals of gender and class in England were mutually constituted between the 1780s and 1830s. Evangelical writers, and Hannah More in particular, helped to redefine gender difference and confine middle-class women's labour as unpaid labour within the home. Middle-class men were supposed to be active in the world outside the home and produce income to support their family. Women, as wives, mothers, and daughters, were supposed to create a space apart from the world for their husbands to seek shelter and to raise

²⁰⁰ Leonore Davidoff, "The Rationalization of Housework," in *Worlds Between: Historical Perspectives on Gender and Class* (Cambridge: Polity Press, 1995), 74.

²⁰¹ Davidoff and Hall, *Family Fortune*. For more on the historiography of separate spheres in British history see: Susie Steinbach, "Can We still Use 'Separate Spheres'? British History 25 Years After Family Fortunes," *History Compass* 10 (2012): 826–37; Kathryn Gleadle, "Revisiting Family Fortunes: reflections on the twentieth anniversary," *Women's History Review* 16 (2007): 773–82.

their children.²⁰² One of the contradictions in this ideology of domesticity was that women were considered morally more virtuous than men, and therefore were responsible for the moral guidance of the family. At the same time, women were more vulnerable and needed to be protected from the influences of the world and were also supposed to be subordinate to men. Women's confinement to household unpaid labour additionally symbolized their not needing to earn an income as dependents which helped to sustain ideals of male middle-class independence.²⁰³ Davidoff noted that "values of business" appeared in the home as part of attempts to rationalize women's housekeeping work in line with men's commercial activity. She argues that these efforts to rationalize domestic work ultimately failed precisely because women's activities were non-economic and were not directed as expansion and profit.²⁰⁴ Turning towards the discourse of punctuality in the didactic and domestic literature of the nineteenth century, there was indeed a significant effort to instill the value of punctuality into women's roles as housekeepers. Davidoff has argued that this kind of rationalization was contradictory because women's prescribed domestic labour was non-remunerative like men's work outside the home.

By the middle of the nineteenth century, as Michael Curtin has argued, etiquette books began to turn inward from the public to the private social worlds as they prescribed good conduct at home.²⁰⁵ Etiquette manuals, cookery books, as well as magazines and journals directed at women and youth readerships domesticated good conduct. In the early nineteenth century,

²⁰² Davidoff and Hall, *Family Fortunes*, 114–118; John R. Gillis, *A World of Their Own Making: Myth Ritual, and the Quest for Family Values* (Cambridge: Harvard University Press, 1996), 76, 95.

²⁰³ Matthew McCormack, *The Independent Man: Citizenship and Gender Politics in Georgian England* (New York: Manchester University Press, 2005), 22–4.

²⁰⁴ Davidoff, "Rationalization," 83.

²⁰⁵ Michael Curtin, *Propriety and Position: A Study of Victorian Manners* (New York: Garland, 1987).

punctuality had become a staple characteristic of the well-ordered and respectable middle-class household. While fathers, children, and servants all had their part to play, the responsibility of ensuring that the household was a scene of order and regularity fell heavily on mothers, wives, and daughters. For mothers who were expected to be managers of the home, punctuality became an idealized quality. As fathers and children from middle-class families left the home to work and go to work and school during the day, mothers and wives remained to take on the considerable labour of maintaining the home. The labour of preparing the dinner was the responsibility of mothers. Mothers set the example for children's behaviour, before they entered school, and in the evenings after school. The home was the primary place of moral instruction and a mother was, as an ideal, in charge of this instruction.

In a study of domestic manuals, Rachel Rich has called attention to the importance of clock time and time management in the home in the second half of the nineteenth century. Rich importantly notes that women were the timekeepers of the home while still being subject to others' timetables.²⁰⁶ She claims that the repeated exhortations in domestic guides for women to be punctual at the end of the nineteenth century show that "timekeeping was not something that oppressed middle-class women in their homes" and that women were less inclined towards punctuality than men.²⁰⁷ Furthermore, she argues that "the public sphere infiltrated the private" in the second half of the nineteenth century through the inclusion of business management language in domestic advice literature.²⁰⁸ Similarly, Celia Wadso-Lecaros has discussed the mid-century proliferation of punctuality in didactic literature to point out that punctuality was

²⁰⁶ Rachel Rich, "'If You Desire to Enjoy Life, Avoid Unpunctual People': Women, Timetabling and Domestic Advice, 1850–1910," *Cultural and Social History* 12, no. 1 (2015), 99.

²⁰⁷ Rich, 106–7.

²⁰⁸ Rich, 96–97.

connected to a general wish for social and personal improvement, but also to the change to timed work from task-oriented labour. Lecaros' reading, while describing how punctuality was discussed as consequential (personal, outward directed, and religious), suggests that male and female ideals around punctuality differed, and that women in the fictional texts she discusses were "less oriented towards punctuality than men."²⁰⁹ Lecaros argues that women were portrayed as less punctual because men's work in "the realm of business and production" meant that they needed to be more punctual than women.²¹⁰ As I show in this chapter, punctuality was a central feature of middle-class women's domestic ideal and was connected to punctuality's grounding in credit, duty, and trust.

In this chapter, I examine the discourse of punctuality in domestic literature to show that women's work and its rationalization had clearly defined economic and social elements and it was the female domestic ideal that impressed upon women the burden of punctuality in the home. Indeed the very language that characterized the masculine ideal of punctuality in business was reflected in conduct literature as women's confined domestic roles were first being articulated. Attached to the conception of credit and to the fulfillment of one's obligations and duties, punctuality was a commercial value which applied equally to the management of the home as the firm. The domestication of punctuality shows the extent to which the virtue underwrote the conception of middle-class self-identity. It both justified the wealth they had attained as the result of hard work and prudence and supported their claims to respectability and independence both as individuals, families, and as a class separate from workers and the

²⁰⁹ Cecilia Wadsö Lecaros, "'One Moral Improvement, More Allied to the Machinery of Life than Perhaps any Other': Mid-Nineteenth-Century Punctuality in Context," *English Studies* 91, no. 8 (2010), 862, 875.

²¹⁰ Lecaros, 875.

aristocracy.²¹¹ From the late eighteenth century through the nineteenth century, a variety of authors, from evangelical Anglicans and nonconformists to philosophical atheists like Harriet Martineau, discussed punctuality as an integral aspect of women's domestic deal within the middle-class home. At the same time, the ability of women to be punctual was frequently contested. Their roles as the guardians of domestic life were idealized as managers of the highest order and the discourse of punctuality applied to women's management of meals, servants, and to the education of children. Children themselves were also expected to be punctual. Everything from the payment of bills, the hour of waking, the timing of meals, and instilling punctuality into servants and cooks was discussed as part of good household management.

This chapter explores how the discourse of punctuality formed a part of the middle-class home and its ideology of domesticity. Examining didactic literature and domestic guides for women and children, I show how punctuality was prescribed for women and children's duties in the same terms that it was for adult men. The house was ideally a site of cultural reproduction of punctuality and it was not merely being on time that was at stake. Writers who argued that mothers and wives as housekeepers and children as obedient members of the home should embrace punctuality drew on a range of associations and meanings that punctuality had in commerce: as credit or reputation, as an obligation to others, and as good management. Timeliness was part of the public and increasingly masculine world of commerce. However, by the beginning of the nineteenth century punctuality would also become an important aspect of the ideal middle-class home. Whereas the man of business was the exemplar of punctuality in the

²¹¹ Anna Clark, *The Struggle for the Breeches: Gender and the Making of the British Working Class* (Berkeley: University of California Press), 43–4.

eighteenth century, by the beginning of the nineteenth century middle-class women and children were increasingly impressed with the importance of punctuality. Literature directed at these readerships made explicit how all members of the middle-class home should reflect the good management, creditworthiness, and economy that continued to be integral to the meaning and significance of punctuality. Texts for children, both fiction and educational materials, demonstrate how middle-class youths were steeped in a belief in the importance of punctuality and its crucial role in their class's elevated position—both moral and economic—in society.

This chapter begins by considering the way late eighteenth-century moralists discussed punctuality and timekeeping in relation to women and children and the management of the home. It shows how women were similarly moralized by the discourse of credit and debt and the language of punctuality. It explores how the gendered dimensions of punctuality were contested into the nineteenth century by the ideals established for women's management of the home. In particular, the middle-class conception of femininity embodied in the housewife was constructed as an exemplar of punctuality, not unlike the manager of a business. Finally, the chapter examines how literature for middle-class children taught the consequences of lateness primarily in negative terms and construed punctuality as virtuous behaviour which averted the risks of unpunctuality and procrastination. This chapter demonstrates that nineteenth century advice about punctuality discussed in terms of regularity, order, and being on time continued eighteenth-century concerns about trust, credit, and class. The social credit of the household, like the financial credit of the trader or public credit of the nation, were tied to evaluations of honesty and economy which could be demonstrated by punctuality. An ordered and efficient home—run like the family business—earned credit and respectability in the community, and allowed a family to live within their means and fulfill their social and economic obligations. In literature

for mothers, wives, and children, the language of time management and punctuality re-inscribed the social importance of timekeeping on their individual roles in the household and the larger community.

3.2 The Morals of Good Management

Already in the late eighteenth century punctuality, which had been discussed in reference to credit and moralized as a virtue of and for commercial people, was suggested as an instance of good conduct for women. Indeed, even as the discourse of punctuality crossed the gender division of labour then being constructed, credit, trust, and management remained fundamental to its rhetorical purchase. The evangelical clergyman Thomas Gisborne (1758–1846) had written of the obligations of men in their various employments in his *Enquiry into the Duties of Men* (1794). As discussed in chapter two, Gisborne enumerated how punctuality formed part of men's social responsibilities in work. Three years later in his *Enquiry into the Duties of the Female Sex* (1797), Gisborne elaborated on a wife's duties as manager of the home. A good manager incorporated the qualities of the man of business with Christian charity. The financial aspects of account-keeping were already present in the discourse of domestic management, no doubt as they had emerged from women's roles in family firms prior to the sequestration of women's work to the home and the withdrawal of income generation from the home. "Be regular in requiring, and punctual in examining, your weekly accounts. Be frugal without parsimony; save, that you may distribute."²¹² Christian charity dictated that waste of any amount should be limited whether or not the household needed what was saved. Any sum could be used to feed and clothe others, or put to the service of the community. For the wife of a tradesman who worked in the

²¹² Thomas Gisborne, *An Enquiry into Duties of the Female Sex* (London: T. Cadell, 1797), 274.

shop, her “conduct” should be an example of “industry, punctuality, accuracy in keeping accounts, the scrupulousness of honesty shewing itself in a steady abhorrence of every manoeuvre to impose on the customer, and all other virtues of a commercial character.”²¹³ As work and home separated, domesticity was highly inflected with commercial metaphors. Even for those women who were not managers of households or involved in business, they needed to “pay their bills punctually.” This was more than a purely monetary issue. Reflecting the social nature of credit, how one paid one’s debts was a matter of honesty and moral conduct. To not pay on time had consequences for others and could affect a household’s reputation and respectability. “Those persons will discern just cause of reprehension,” Gisborne warned, “who do not consider the honest payment of bill, at the customary times, as comprising the whole of human duty with regard to the expenditure of money.”²¹⁴ In their roles as managers of the home, women’s duties mirrored those of the commercial duties of their husbands, fathers, and brothers. Punctuality, as in matters of finance, was indispensable to good management.

For women, as with men, punctuality represented an example of good conduct that was directed outward into the community. Despite the separation of work and home, bills, credit, and reputation were important fiscal aspects of women’s domestic ideal as managers of the private sphere. Paying a bill on time represented concern for others and demonstrated duty-oriented conduct; this was paramount to the construction of punctuality as a form of virtuous behaviour. Gisborne’s advice on women’s punctuality reflected his views about men’s duties, so too did Hannah More’s. For More, punctual payment was a matter of unselfish behaviour that

²¹³ Gisborne, 359.

²¹⁴ Gisborne, 127.

demonstrated concern for others. One paid punctually out of a sense of Christian duty, not for the desire to maintain and secure credit and reputation. While credit and good reputation might result, to have such concerns guide one's actions was inconsistent with good conduct which needed to stem from right moral action, not self-interested, aristocratic manners. One owed this duty in equal measure to one's social inferiors. "To check the growth of inconsiderateness," More wrote in her *Strictures on the Modern System of Female Education* (1799),

young ladies should early be taught to discharge their little debts with punctuality. They should be made sensible of the cruelty of obliging tradespeople to call often for the money due to them; and of hindering and detaining those whose time is the source of their subsistence, under pretence of some frivolous engagement, which ought to be made to bend to the comfort and advantage of others.²¹⁵

The punctual payment of debts was an instance of Christian duty. However, it also presented an opportunity for moral conduct to create social harmony. The exercise of "virtues of both classes" were intimately connected: "the generosity, kindness, and forbearance of the superior" were as necessary to social harmony enjoyed in England as the "patience, resignation, and gratitude of the inferior."²¹⁶ Perhaps a reflection of More's counterrevolutionary response to the events of the French Revolution, she argued that the privileged would need to remember "considerate virtues" that their position thrust upon them.²¹⁷ The benefits of a higher social position came with duties that should never be neglected; social harmony between the classes was at stake. Punctuality towards those of a lower station was an example of this kindness and virtue. As Louis XVIII is

²¹⁵ Hannah More, *Strictures on the Modern System of Female Education* (1799), in *The Works of Hannah More*, 11 vols (London: T. Cadell, 1830), vol. 5, 88.

²¹⁶ More, 89.

²¹⁷ More, 90. For Hannah More's response to the French Revolution see Anne Stott, *Hannah More: The First Victorian* (Oxford: Oxford University Press, 2003), esp. chapter 6 "Revolution and Counter-Revolution"; Kevin Gilmartin, *Writing Against the Revolution: Literary Conservatism in Britain, 1790–1832* (Cambridge: Cambridge University Press, 2007), esp. chapter 2 "'Study to be Quiet': Hannah More and counterrevolutionary moral reform."

reported to have said, “Punctuality is the politeness of Kings.”²¹⁸ Indeed, in what other way could one show respect towards one’s social inferiors?

Consistent with this concern for punctuality, More implored parents to teach children to respect the time of others. Children, she wrote, ought “not to be insolently exercising their supposed prerogative of rank and wealth, by calling for servants where there is no real occasion; above all, they should be accustomed to consider the domestics; hours of meals and rest as almost sacred.”²¹⁹ The proper exercise of rank was “considerate” and, as later texts on domestic management would affirm, clear, well-timed orders were a hallmark of consideration or common courtesy in the manager. As Cecil noted earlier one had no right to throw away the time of others. In addition to this social concern for the value of others’ time More discussed at length what she called “the religious employment of time,” or “the duty of consecrating to God every talent, every faculty, every possession, and of devoting their whole lives to his glory.” Though “religious characters” and “people of piety,” More claimed, were more apt to be honest, punctual, and diligent, they “should be more peculiarly on their guard against a spirit of idleness, and a slovenly habitual wasting of time.”²²⁰ Given that they had rejected more worldly concerns and had “more time upon their hands” there was a greater risk of mispending it or throwing it away in what More called “an habitual frivolousness.” “Unprofitable small-talk, idle reading, and a quiet and dull frittering away of time” could make the pious person’s day as unproductive as “more worldly characters.” True piety demanded being on guard against “unprofitableness” through habits of regularity, order, and industry.²²¹ Creating a plan and allotting time for

²¹⁸ Jennifer Speake (ed.), *Oxford Dictionary of Proverbs*, 6th edn (New York: Oxford University Press, 2015), 258.

²¹⁹ More, *Strictures*, 88.

²²⁰ More, *Strictures*, 80–1.

²²¹ More, 81, 86.

particular purposes was absolutely essential to avoid idleness and wasted time. Conscience, duty, punctuality, and profit, these were the values More offered as principles of female education.

More closely allied punctuality with industry and argued that impressing these values upon children was absolutely indispensable to future practices. “An exact habit of *economy*” similarly was important to instill in children at an early age. In addition to economy or thrift, she also recommended that children be taught “a sound principle of integrity” and “the habit of unremitting *industry*.” More sought to elevate industry from vulgar associations with labourers, pleading to readers that industry was not to be rejected “as a plebeian quality... exercised only by those who have their bread to earn, or their fortune to make.” Rather, industry should be valued as “sober and unostentatious quality.”²²² More’s advice constructed virtue negatively as a series of warnings of what not to do. Morality could be acquired by resisting vice, through self-discipline, restraint, and denial.²²³

Both Gisborne’s and More’s observations on punctuality and industry were directed mainly at the higher and middle ranks of English society. More critiqued the “fantastic code of artificial manners” and sought to improve the values of society by reforming those of the “more important class.”²²⁴ Women of the “middle orders” or “middle class” had so far emulated the “high” that the class had begun to lose its exalted status: “this very valuable part of society declines in usefulness, as it rises in its unlucky pretension to elegance.” In matters of both commerce and Christianity, a group once revered for their “worth and virtue” has now fallen behind “the very high and the very low.”²²⁵ Attending to industry and punctuality were a means

²²² More, 103–4.

²²³ More, 98–9.

²²⁴ More, 50.

²²⁵ More, 47–8.

for women to have a moral influence on others in their station and to raise the morality and conduct of English society as a whole. More and Gisborne distinguished punctuality as an element of both social and religious duty for women in their roles as wives and mothers.

As writers began to produce more literature aimed at elucidating the roles of middle-class women, they too saw punctuality as an important way to create and preserve social harmony. *The Female Instructor* (1811), in addition to repeating verbatim Gisborne's advice to pay bills promptly, added that early rising and industry were central to domestic economy. Speaking to wives in their roles as managers of the household, the author suggested they internalize a methodical approach to all they do:

There is a strange aversion in many, and particularly in youth, to regularity and punctuality. Be assured it is of more consequence than you can conceive, to get the better of this procrastinating spirit, and to acquire early habits of constancy and order, even in the most trifling matters.²²⁶

Punctuality's construction as a social virtue meant that it was inherently public and texts which described its importance placed significance on how one acted outside of the home and how actions affected one's community and one's reputation in the community.

One early example of this literature can be found in Ann Taylor's *Practical Hints to Young Females* (1815). Taylor (1757–1830), who shared her name with her daughter Ann (1782–1866) of “Twinkle Twinkle Little Star” fame addressed her work to “females in the middle ranks of life” and not the “upper walks of life.” These middle-class women, wrote Taylor, “occupy a station of sufficient eminence to render their conduct highly important to society.” Individual women's examples of “domestic virtue” would spread beyond their home and lead to

²²⁶ *The Female Instructor; or, Young Woman's Companion* (Liverpool: Nuttall, Fisher, and Dixon, 1811), 177–8.

“national prosperity.”²²⁷ Women, and particularly middle-class women, had a very important place both within the home and within the nation as moral guides. She told readers that to be a wife “is of vast, of vital importance” and she urged them to “support the dignity of it by your conduct.”²²⁸

Much of her work revolved around the issues of debt, duty, management, order, and idleness. Economy and thrift, while seemingly ends in themselves, permitted a household to meet its obligations. “Better management” implied that saved money should be reserved to build up “stock” for larger expenses and the wages of servants, “and if the day upon which they became due were previously marked in the account-book, it would ensure their punctual payment.”²²⁹ Debts, however, were not the only duties that ought to be tended to in a timely manner. Taylor wrote “that house only is well conducted, where there is a strict attention paid to order and regularity. To do every thing in its proper time, to keep every thing in its right place, and to use every thing for its proper use, is the very essence of good management.” In particular, “Meals should always be ready at the stated time; and servants, if possible, obliged to be punctual.” Though servants were expected to be on time and prepare meals in a timely fashion, the labour of managing this punctuality fell upon the mistress of the house by providing “clear and early orders.”²³⁰ Orders needed to be punctually given and followed, and servants’ good conduct should be justly rewarded and reprimanded. Taylor’s instructions presented an image of a middle-class household managed along the lines of a place of business. A wife was in charge of

²²⁷ Ann Taylor, *Practical Hints to Young Females, on the Duties of a Wife, a Mother, and Mistress of a Family*, 6th edn (London: Taylor & Hessey, 1816), iii–vi.

²²⁸ Taylor, *Practical Hints*, 4.

²²⁹ Taylor, *Practical Hints*, 22.

²³⁰ Taylor, *Practical Hints*, 27–8.

the accounts, making sure they were balanced, that servants were paid, and also performed their duties. The mistress of the house ensured that all ran smoothly. Such advice was frequently repeated in the domestic economy literature written for and by women, through the middle of the nineteenth century.

The regularity and order which the mistress should aspire to were found in the example of God. Taylor, whose father had been a disciple of the Methodist George Whitefield, compared the relationship between the servant and mistress to the relation between the Christian and God:

Even the remissness and ingratitude of our servant may furnish us a lesson; and while we feel displeasure rising against them, we may ask ourselves, if there is not One who is punctual to His engagements, be our duties ever so remissly performed; whose mercies are new every morning, and whose sun shineth on the just and on the unjust: though finally He will reward everyone according to his works?²³¹

The grace offered to imperfect Christians by a forgiving, loving God should provide the example of a just and moral manager. This construction of women's domestic management in terms of punctuality and timekeeping reflected the ideologies established for men's duties outside the home. Women's exercise of their roles had an impact which extended beyond their home and reverberated throughout society. Appeals to women in their important social roles as domestic managers to be punctual and require punctuality from others continued through the mid nineteenth century.

Domestic literature continued to extoll the value of punctuality through the mid nineteenth century and retained a remarkable consistency. An 1853 essay prize on punctuality in the *Englishwoman's Domestic Magazine* reveals how writers sustained the arguments of their

²³¹ Taylor, *Practical Hints*, 158.

forebears.²³² The winning essay on punctuality written by Mary Barling began with a reference to Samuel Johnson. “Punctuality,” she argued, was “a social virtue” in that it not only affected the person who practiced it but had an influence on those around them. Failure to keep appointments spread as a person kept waiting would quickly learn to not be on time as well. The consequences of not being punctual were a breakdown in trust: “Truth and honour are violated, and want of confidence is necessarily engendered towards one who is never exact in his engagements; and any transaction with him must be rendered extremely undesirable.”²³³ Characterizing those who were regularly behind time, Barling claimed that “they are always a little too late for meals—not quite ready when it is time to go out—just a few minutes behind their engagement—and true to *their* time at the house of God, but not to *the* time.”²³⁴ Punctuality at Church, argued Barling, was “both decorous in itself and as showing respect to the feelings of others, both pastor and people.” Like Johnson, Barling claimed that punctuality was not “ignoble” and asserted that the most “successful” people were “eminently distinguished” for their punctuality. Bringing this discourse full circle, Barling told readers that Hannah More was herself an example of this virtue, and named herself “the Ultra-anti-procrastinator.” Barling equated lateness with idleness and argued that punctuality was connected with “the virtue of reliability,” and could be achieved through “early rising, [and] by systematic arrangement of our duties.”²³⁵ Johnson and More would have undoubtedly agreed.

²³² “Prize Compositions.—No. IX,” *Englishwoman’s Domestic Magazine* (October 1853), 181. The magazine had initially awarded the prize to an essay on procrastination: Suzanne, “Procrastination,” *Englishwoman’s Domestic Magazine* (December 1853), 250.

²³³ Mary Barling, “On Punctuality,” *Englishwoman’s Domestic Magazine* (February 1854), 314.

²³⁴ Barling, 314.

²³⁵ Barling, 315.

3.3 Domestic Duties

Already at the beginning of nineteenth century, texts written for middle-class female audiences preached the importance of punctuality to their roles within the home, the family, and society at large. The values espoused in this literature reflected those values directed at male audiences in their professions. While the prescribed social worlds of men and women differed, the pressures to be punctual were present both inside and outside the home. However, throughout the century two contrasting views of women's timekeeping abilities persisted in print. One cast women as the temporal and moral regulators of the home, whereas the other chided women as inherently late and being incapable or unwilling to keep time.

A typical example of this latter view appeared on the front page of the February 10, 1838 issue of *Chambers' Edinburgh Journal* in an essay entitled "Non-punctuality of the fair sex." The author charged women with "thoughtlessness respecting time"²³⁶ and proclaimed that women were not punctual one in ten times. "The most perfect 'lady's man' on earth would shrink from alleging, even in joke, that woman and punctuality are compatible terms." He charged that this low value placed on time was nothing constitutional or beyond women's control. On the contrary, women were quite capable of punctuality but simply chose not to be: "they study to be late." The young, the author claimed, were more likely to be unpunctual than the old. While exemplary in the directness of its misogyny, the author's assertion that women lacked the concern for time-keeping was not entirely unusual. Short stories for adults and children alike featured wives, young ladies, and daughters who deranged the orderly world of the

²³⁶ "Non-punctuality of the fair sex," *Chambers's Edinburgh Journal*, no. 315 (10 February 1838), 17–18.

men around them.²³⁷ “The Broken Engagement” printed in the London comic *Judy* in 1887 rehearsed just such a well-trodden theme when it depicted an engagement being called off over a missed appointment. After receiving a telegram from his fiancé Emily, asking him to meet her at 6 “sharp” to discuss something “most important,” Mr. Dick struggles to leave his office. Having made great haste he arrives flustered and on time. When Emily finally appears an hour late she finds Dick disgruntled by his long wait. Emily’s tardiness “was too much” and so he called off their engagement on the spot.²³⁸ Here were the consequences of unpunctuality.

Another fictional account published some forty years earlier similarly depicted female unpunctuality upending courtships. Throughout a series of social engagements between Anna Milnor and Henry Alton, “The Young Lady who was not Punctual” described how a budding romance was dashed by young woman’s “thoughtlessness” and “want of punctuality.”²³⁹ Through a series of misfortunes caused by Anna’s bad habit, Henry’s own reputation for punctuality was eroded, earning him the riposte from a friend: “a lecturer on punctuality should be punctual himself.”²⁴⁰ Perhaps reflecting the prevalence of the practice as decried by ministers and parishioners, it was ultimately Anna’s late arrival at Church which drove Alton to break off their courtship as he reflected “I don’t want a wife who has not a regard for punctuality. It would annoy me to death.”²⁴¹ As the story revealed, Alton’s decision was a good one, as Anna’s habits

²³⁷ “Punctuality,” *Chambers’ Edinburgh Journal* (1845), 24; “Mr. Method,” *Chambers’ Edinburgh Journal* (1845), 379. *Don’t Be Late* (London: Society for Promoting Christian Knowledge, 1845); “The Young Lady Who was Not Punctual,” *Eliza Cook’s Journal*, 11 August 1849, 231–3; Maud, “Punctuality,” *Child’s Companion*, February 1838, 44–9; Mrs. Barwell, *The Value of Time: A Tale for Children* (London, 1834), A Friend of Children, *Thoughtless little Fanny: or, the unhappy results of procrastination* (Halifax, 1855).

²³⁸ “The Broken Engagement.—A Tale of a Telegram,” *Judy*, 9 March 1887, 111.

²³⁹ “The young lady who was not punctual,” *Eliza Cook’s Journal*, 1 (1849), 231.

²⁴⁰ “The young lady,” 232.

²⁴¹ “The young lady,” 233.

went unchanged and she continued to show no regard for others' time. The story concluded, as did many of the genre, with a warning to the reader to seriously consider their own conduct and reform.

Such stories rehearsed a narrative of female unpunctuality, selfishness, and generally undisciplined behaviour. Yet, though these fictional accounts depicted a world in which women's troublesome irregularity was lamented, rebuked, and in some cases cured, domestic guidebooks and books on household economy written by and for women depicted women as the timekeepers of the middle-class household. Queen Victoria frequently stood as the exemplar of an orderly mother and wife upon whom fell many important responsibilities. Harriet Martineau wrote in her *Household Education* (1849) that:

The Queen, who is extraordinarily punctual, and statesmen, and landed-proprietors, and all who bear a burden of very important duty, are more sensible than those who have less responsibility of the mischief of wasting minutes which are all wanted for business; and yet more, of the waste of energy and freedom of thought, and of composure and serenity which are caused by failures in punctuality.²⁴²

Similarly, the *British Mothers' Journal* praised the Queen "for her habitual punctuality." As the head of state she kept no one waiting, and impressed the importance of time upon those around her. And as a mother, "never in the history of the court of Britain has there been such an example of domestic purity and household order."²⁴³ A series of anecdotes published in 1840 described the Queen's successful education as owing "to the habit of early rising, united to the punctuality with which every movement in the Palace was regulated."²⁴⁴ Moreover, her "moral" education

²⁴² Martineau, *Household Education*, 299.

²⁴³ F. C., "Punctuality," *British Mothers' Journal*, January 1857, 20–2.

²⁴⁴ *Anecdotes, Personal Traits, and Characteristic Sketches of Victoria the First* (London: William Bennett, 1840), 230. "Each hour of the day had its allotted employment, and the Princess turned from one to the other with an alacrity which went far towards ensuring her success."

was indicated by her re-payment, from a young age and from her private money, of her father's debts, which she continued to pay when she became Queen. Here, in the head of state of a self-defined commercial nation, was a woman whose social role was both public and private, and integrated domesticity with commercial punctuality and obligation. The Queen's conduct, so accounts ran, instilled in her household the good example of domestic and public punctuality.

A manager's duty was not, however, restricted to leading by example. The occasional reprimand was necessary to ensure that the example was followed. Anecdotes repeated how the Queen reproached a lady, watch in hand, for arriving ten minutes late: "I trust such a circumstance will not occur again, as punctuality is of the utmost importance to *me*, and must be a ruling principle in my Palace."²⁴⁵ Another account published some forty years later praised the Queen's punctuality:

Frugality, exactitude in business, faithfulness to call engagements, great or small, punctuality, that economy of time, are usually set down among the minor moralities of life, more humdrum than heroic; but under how many circumstance and conditions do they reveal themselves as cardinal virtues, as things on which depend the comfort and dignity of life!²⁴⁶

Still the author warned that "rigid principles" might become "tyrants of one's life" as they apparently had with the Queen, whose household routines and regulations were characterized by "inexorableness and inflexibility."²⁴⁷ While Queen Victoria might have been used as an exemplar (or extreme case) of this feminine punctuality, domestic literature reveals that the prompt payment of debts, rigid management of servants, serving the day's meals regularly,

²⁴⁵ *Sketches of Victoria the First*, 556.

²⁴⁶ Grace Greenwood, *Queen Victoria, Her Girlhood and Womanhood* (London: Sampson Low, Marston, Searle & Rivington, 1883), 39.

²⁴⁷ "The sun the moon and the tides are scarcely more punctual and regular... in their coming and going, than she in the daily routine of her domestic and state duties." Greenwood, 39–40.

among other duties, were the beau ideal of domestic management. In domestic manuals and other literature for female audiences, significant emphasis was placed on the importance of punctuality and of the necessity of women's roles as the timekeepers of the middle-class home. The values that underwrote this ideal of the housewife as manager resembled those of the factory, or the counting house, but domestic management needed to be just, considerate, as well as systematic. So, in the anecdote of Victoria reprimanding her lady in waiting, she "kindly" also sought to comfort the agitated lady, placing her hand on her shoulder, while saying "we shall all understand our duties better by and by."²⁴⁸ This was the dual nature of moral domestic management—disciplined, but kind; orderly, but not inflexible; and punctual without being tyrannical.

Frances (Byerley) Parkes repeatedly emphasized punctuality as an aspect of household management in her *Domestic Duties* (1825) which went through eleven editions by 1862. Themes of class were firmly entrenched within Parkes's account, itself intended for a middle-class readership and being addressed in title to "young married ladies."²⁴⁹ Parkes suggested that an unpunctually served meal deserved "reprimand" and if repeated the servant should be dismissed.²⁵⁰ But the obligation of punctuality ran both ways. It was equally expected of the manager of the home as it was from her servants. Anyone who was unpunctual in paying debts, Parkes argued, was "chargeable with a breach of faith. ...you cannot with credit hold back a day after it becomes due."

²⁴⁸ *Sketches of Victoria the First*, 557.

²⁴⁹ Sarah Richardson, *The Political Worlds of Women: Gender and Politics in nineteenth Century Britain* (London: Routledge, 2013), 43–4.

²⁵⁰ Mrs. Parkes, *Domestic Duties; or, Instructions to young married ladies* (London, 1825), 59. See also advice about punctuality in footmen (159–60).

Whenever I hear of the rich acting with the littleness of the poor;—of their being compelled... to delay the payment of their just debts, frequently to the detriment of honest and laborious people,—I cannot but lament their neglect of this virtue.²⁵¹

The question of debt and credit would have been familiar to Parkes as her family's fortunes were significantly affected when her husband's uncle went bankrupt in around 1817. Perhaps reflecting her own family's straitened circumstances, she advised to live with economy and warned against unrestrained indulgence in pleasure and leisure.²⁵² Living without regard for duty or obligation, Parkes warned readers, could have disastrous consequences and presented a cautionary tale of a wife who indulged without concern for the household income or "the dictates of duty and principle."²⁵³

Meanness and faithlessness mark her conduct to those with whom she is involved in pecuniary debts, while a selfish indulgence of all extravagant propensities grows each day in strength, and urges her on to still great improprieties, until it ended in the overthrow of every virtuous principle within her.²⁵⁴

The management of one's own passions through discipline and self-restraint were an essential aspect of good—both moral and efficient—domestic management.

The writer Sarah Stickney Ellis (1799–1872) described a similar pattern of obligation and rigid discipline coupled with kindness in her *Women of England* (1838). Addressing her work to those who were "connected with trade and manufactures, as well as to the wives and daughters of professional men of limited incomes" or those who could afford "one to four domestics," Ellis warned that managing a home was difficult work. It would be especially so for those who had

²⁵¹ Parkes, 464.

²⁵² Parkes, 91.

²⁵³ Parkes, 394–5.

²⁵⁴ Parkes, 395.

been brought up in leisure and idleness.²⁵⁵ Ellis looked to middle-class women “for the highest tone of moral feeling” precisely because they were subject to “domestic duties.” They, she argued, raised “the best energies of the female character” and to be subject to them was a “privilege.”²⁵⁶ It was their middling station between those who need not labour at all and those needing to work outside the home that gave middle-class women a moral advantage as the ideal of industrious English femininity.

It was the difficulty of this work of household management that Ellis claimed raised it to the status of a “science” and one particularly suited to women of the English middle-class.²⁵⁷ Drawing out the metaphor, Ellis noted that a woman “has to calculate with precision, or the machinery of household comfort is arrested in its movements, and thrown into disorder.”²⁵⁸ This mechanical metaphor, though, was two-fold, as too rigid and mechanical a regime could dehumanize the home. She noted that the pressures of modern life had reduced the amount of time fathers spent with their families: “every morning brings the same hurried and indifferent parting, every evening the same jaded, speechless, welcomeless return—until we almost fail to recognize the man, in the machine.”²⁵⁹ This danger of reducing humans to machines was something the mistress of a home had to be on guard against and to combat with “consideration and kindness.” The growth of middle-class wealth and position had influenced how mistresses

²⁵⁵ Sarah Stickney Ellis, *The Women of England, their Social Duties, and Domestic Habits* (London: Fisher, Son, & Co., 1838), 19–20.

²⁵⁶ Ellis, *Women of England*, 20–1.

²⁵⁷ Ellis, *Women of England*, 26.

²⁵⁸ Ellis, *Women of England*, 23.

²⁵⁹ Ellis, *Women of England*, 55.

treated their servants—increasingly without regard for how their actions and orders affected dependents.²⁶⁰ A key example of this inconsiderateness had to do with the timing of meals:

There are thousands of little acts of this description, such as ordering the tired servants to rise at an unseasonable hour to prepare an early breakfast, and then not being ready yourself before the usual time—being habitually too late for dinner, without any sufficient reason, and having a second dinner served up . . . surely those servants must be more than human, who can experience the effects of such a system of behaviour, carried on for days, months, and years, and not feel, and feel bitterly, that they are themselves regarded as mere machines.²⁶¹

Good management entailed forethought and conscientiousness from the manager of the home. It was not enough that her orders be carried out with haste and exactitude. Too rigid a regime would make servants “feel that they pay too dearly... for the cleanliness, order, and punctuality of the mistress.”²⁶² Good management took into consideration others’ time, work, and feelings while also exacting discipline; the balance of these two expectations was delicate but essential to the work of a housekeeper.

Ellis expanded her reflections on time management in subsequent works *The Daughters of England* (1842) and *The Wives of England* (1843). In these popular books written for middle-class audiences Ellis presented punctuality as an imperative for the moral well-being of the home. Women, in Ellis’ view, were instrumental in inculcating this habit into their husbands, children, and servants. In particular, wives faced the challenge and “grievance very difficult to bear” of their husbands’ “causeless and habitual neglect of punctuality.” Turning the supposed unpunctuality of women on its head, she depicted women as the timekeepers of the middle-class home. The problem with a husband’s unpunctuality arose from his position as patriarch: “the

²⁶⁰ Ellis, *Women of England*, 168–73.

²⁶¹ Ellis, *Women of England*, 181–2.

²⁶² Sarah Stickney Ellis, *The Wives of England, their Relative Duties, Domestic Influence, & Social Obligations* (Ldonon: Fisher, Son, & Co., 1843), 241–2.

whole machinery of domestic management must necessarily be dependent upon his movements.”²⁶³ The trouble, she claimed, with punctual people was that those “who are accustomed to keep others waiting, have the least patience to wait for others.” This asymmetry created no small dilemma for the order and peace of a home:

it not unfrequently occurs, that a wife is all day urging on her servants to a punctual attention to the dinner-hour appointed by her husband, and when that hour arrives, he has either forgotten it himself, or he allows some trifling hinderance to prevent his returning home until one, or perhaps two, hours later. Yet the same man, though in the habit of doing this day after day, will be excessively annoyed, if for once in his life he should be punctual to the appointed time, and not find all things ready on his return.²⁶⁴

Ellis warned her readers that their time was “too precious to be wasted” in this way, but also that they should not attempt to “control” their husbands “to make him true to his own appointment.” Instead, as the moral role of wives and mothers dictated, they should try to convince their husbands of the injustice they perpetrated by not arriving on time, and remind him that “common honesty” demanded he give the hour he will arrive.²⁶⁵ Honesty and trust, so crucial to the function of credit, were also the foundation of a properly managed home.

In her *Womankind* the English novelist Charlotte Mary Yonge (1823–1901) reflected on the problem of men’s unpunctuality, writing that “men are bound to absolute punctuality by most professions, but they think they may make up for it at home, and are both more sheerly lazy than women, and more apt to be really delayed by unforeseen business.”²⁶⁶ *Moonshine* similarly captured such an encounter between husband and wife, revealing perhaps both the extent that a woman’s time centered around the coming and going of men in her life, but also how husbands

²⁶³ Ellis, *Wives of England*, 175.

²⁶⁴ Ellis, *Wives of England*, 175.

²⁶⁵ Ellis, *Wives of England*, 176.

²⁶⁶ Charlotte Mary Yonge, *Womankind* (London: Mozely and Smith, 1877), 244.

might resist the kind of accountability expected of their wives. As a middle-class husband returns home his wife approaches reminding him he is “never punctual” and always “a quarter of an hour late.” The husband promptly replied, “Exactly, dear, I’m always just a quarter of an hour later. How can I be more punctual than that?”²⁶⁷ The reader is left to imagine the crestfallen expression on the wife’s face as she simply sought to encourage in her husband what Ellis had described as “common honesty.”

This “common honesty” was at the heart of the language of credit and trust. Ellis emphasized how the use of time bore upon others and the far reaching social consequences of unpunctuality. Punctuality behaved like a debt, and lateness rippled through the community in the same way that defaulting on a payment did. Unpunctuality deranged peoples’ schedules in the same way that unpunctual payment deranged peoples’ accounts. Ellis warned that to be “habitually negligent of punctuality” upset the “whole machinery of [human] intercourse.”²⁶⁸ While it was reasonable that friends might forgive one another for lateness, this “evil,” “want of punctuality,” she argued “extends in its consequences, and widens in its influence, beyond all calculation.”²⁶⁹ She urged readers to consider the plight of those who laboured for a living, and appealed to the case of a letter carrier whose day was scheduled to collect and deliver dispatches at fixed times. Were the courier delayed from starting in the morning, all the other couriers he had to meet in the day would be delayed while awaiting his arrival. Each delay inflicted on

²⁶⁷ “Punctuality.” *Moonshine*, 14 May 1887, 240.

²⁶⁸ Sarah Stickney Ellis, *The Daughters of England, their position in Society, Character & Responsibilities* (London: Fisher, Son, & Co., 1842), 40. See also 37–9: “No one can fail in this point, without committing an act of injury to another.”

²⁶⁹ Ellis, *Daughters of England*, 39.

others in turn, producing further delays for anyone they might have appointments with. One person's unpunctuality could affect untold numbers of people.

the mistress of a house, who detains a poor workman half-an-hour by her want of punctuality, may be the means of his receiving reproof, nay, even abuse, from others who have lost their time in consequence of his delay; while others still, and others yet beyond, through the wider range of a more extensive circle, may have been calculating their time and means in dependence upon the punctuality of this poor man.²⁷⁰

One's own unpunctuality should be considered as causing another's loss of money or reputation.

As Ellis put it, the case demonstrated the principle that "none of us act alone." One's actions—and specifically one's delays—carried consequences that extended beyond one's own appointments. "It is not," she argued "our own time only that is wasted by our want of punctuality, but hours, and days, and months, and years of the precious property of others, over which we had no right."²⁷¹ Nothing, she claimed, is

more fatal to domestic peace, than the habit of being always a little too late—too late to come—too late to go—too late to meet at the place of appointment—too late to be useful—too late to do good—too late to repent and seek forgiveness while the gates of mercy are unclosed.²⁷²

The importance of punctuality in mid nineteenth-century England rested on the social consequences that had made punctuality imperative to the maintenance of credit; failing to do as promised had consequences throughout a vast and interconnected social network, and by mere interaction with an unpunctual person, one could be made late through no fault of one's own.

Domestic advice books and other literature for middle-class women created an ideal of feminine timekeeping that starkly contrasted the perception of women as poor timekeepers. Rather, as managers of the home women were the temporal regulators of family life, even if they

²⁷⁰ Ellis, *Daughters of England*, 40.

²⁷¹ Ellis, *Daughters of England*, 38.

²⁷² Ellis, *Daughters of England*, 42

were subject to the swings of male unpunctuality and unpredictability. How much these discursive ideals reflected reality, or to what extent advice indicated women's divergence from the ideal, is unclear. However, this temporal component of the ideal of domesticity was present from its articulation by More in the late eighteenth century just as profit-oriented work was being removed from the home. The persistence and expansion of punctuality in domestic literature reveals the kind of challenges that women might face on the road to being punctual and making their homes so. The difficulty of self-discipline, recalcitrant husbands, servants, children, and friends could all upend the best-laid plans. Acting as exemplars of punctuality exerted an important moral influence. Women affected those around them through their management, the punctuality they exacted from servants, the payment of accounts, guiding friends and husbands to be more punctual, and ensuring that meals and children were punctual too. All of this, according to contemporaries, spread its influence out from the home and impacted the punctuality of society as a whole.

3.4 Unfashionably Late: The Meal and its Timing

Discussions of timekeeping and punctuality in domestic literature encompassed a wide range of themes that were present in other didactic works also directed at men. Admonishing wasted time, keeping others waiting at appointments, and not repaying one's debts were key components of the discourse of punctuality from the mid eighteenth century onward. One crucial element of this discourse directed specifically at women's domestic roles was the punctuality of the family meal. While punctual attendance at mealtimes was a social obligation all should uphold, making sure the meal itself arrived on time fell to the lot of the mistress of the house. This was a crucial element of punctuality's specific application to the feminine domestic ideal. According to John Gillis it was in domestic literature of the early nineteenth century that the

etiquette of the family meal first appeared, with routines and set times clearly established by the middle of the century. The dining room was separated from the kitchen. The timing of the middle-class dinner shifted to early evening and took on the status of the most important meal of the day. The meal became a reflection of a family's social status and respectability, as well. All members came together after their day's work, father presided, children attended, and mother organized and laboured to produce.²⁷³ This importance of the dinner resulted in a significant emphasis on the meal's punctual arrival at the prescribed hour. No mean task to ensure that all members of the family were also present, domestic books stressed to housekeepers how much the unpunctual arrival of food would impact the enjoyment of the dinner. Indeed, one of the most repeatedly discussed aspects of time management and punctuality in the middle-class home was the timing of, and attendance at meals, and in particular dinner.

This emphasis on punctually served and attended meals was not, however, an innovation of the mid-century obsession with punctuality described by historians Rich and Lecaros. Already in the 1810s Ann Taylor (1757–1830) had articulated the expectations of the regularity of meals and the organizational labour demanded of women. Taylor recommended that “meals should always be ready at the stated time; and servants, if possible, obliged to be punctual.” But continuing the emphasis placed on a wife's good management, she noted that servants needed “clear and early orders.”²⁷⁴ The prolific didactic writer Esther Copley repeatedly made timeliness a crucial aspect of the meal in a number of her domestic works. “Health, peace, and competence” frequently fell victim to “the appearance of unsightly, ill-prepared dishes; or by the want of

²⁷³ Gillis, *A World of their Own Making*, 88–92.

²⁷⁴ Taylor, *Practical Hints*, 28.

punctuality and neatness.”²⁷⁵ “Punctuality in a cook,” she advised, “is no mean virtue.” The exercise of this virtue rested on good management which entailed setting a proper example for one’s dependents.

Employers who expect a cook to be punctual should be so themselves. To secure punctuality, the cook should exercise thought and early rising. In case of company to dinner, the cook should be as early as possible apprized of it, that she may prepare... There should be no after-thoughts in the arrangements for dinner, but let the cook have at once specific orders of all that will be required, that she may allow the exact time necessary for each article, and have each ready at hand to set forward in due succession.²⁷⁶

A good housekeeper should plan her meals and give her orders to the cook early in the day; this way the cook could have a well ordered plan of their own to execute. In keeping with the pattern of discussing punctuality, Copley raised the consequences of neglecting this advice. Calling at the last minute and giving no forethought created “a scene of confusion, weariness, and ill-temper, and the result almost invariably is an unpunctual and ill-dressed dinner.”²⁷⁷ Elsewhere Copley advised her readers to “act by a plan” and arrange work so that each task followed naturally from the last. Without such “good management,” all members of the household would be disheartened and dissatisfied with the result. The meal might be undercooked, perhaps cold; servants would be upset that their hard and hurried work failed, “and the family irritated by the general want of punctuality and arrangement.”²⁷⁸

Copley’s belief in method, order, and punctuality centered on the conception of duty and social obligation. The method and planning required to punctually serve a meal were instances of

²⁷⁵ Esther Copley, *The Housekeeper’s Guide, or A plain & Practical System of Domestic Cookery* (London: Longman & Co., 1838), iv.

²⁷⁶ Copley, 2.

²⁷⁷ Copley, viii.

²⁷⁸ Esther Copley, *Female Excellence; or, Hints to Daughters* (London: Religious Tract Society, c.1839), 126–8.

the broader social obligations of middle-class women. As the moral force of the family they were also the moral fabric of society, around which turned the family, and therefore English Society. Copley began her *Female Excellence* (c.1838) with a solemn condemnation of idleness and asserted, following More, that individuals and classes had their own distinctly prescribed duties.²⁷⁹ As with the delaying of a letter carrier or the poorly or unclear orders given to a cook, an inadequately performed duty rippled through society with untold consequences: “The happiness of individuals, and the well-being of society, alike depend on the regular and orderly fulfilment of every duty, however seemingly small.” In a metaphor that could tie a punctually served meal to social harmony, Copley drew upon the image of the day, the machine:

As the failure or irregularity of one small wheel in a complicated machine would disarrange the movements of others, and throw the whole concern into confusion; so the indolence, or impetuosity, or irregularity, or selfishness of one individual, even in a humble sphere, will entail inconvenience and injury on every connexion; indeed it is impossible to say how widely the evil may extend.²⁸⁰

Homes were tied to one another through mutual social obligations which were likened to teeth on a cog. Should one fail in their obligations it would be as if the cog had lost its teeth, leaving the rest of the machine deranged as a result. Keeping the home a place of punctuality and order served to keep the rest of the social world moving regularly as well.

As discussed in the introduction to this chapter the tasks that wives faced in making the home orderly and punctual were seen to reflect love and commitment to husband and family. In Eliza Warren’s account, want of punctuality and exactness were positioned as key obstacles in the moral transformation of a young wife into an efficient and orderly manager. As the narrator

²⁷⁹ Copley, *Female Excellence*, 1.

²⁸⁰ Copley, 1.

tells the reader “I could not be exact.”²⁸¹ This struggle manifested in cold dishes and a waiting and increasingly distant husband: both were signs of an unhappy home. Furthermore, she was unable to extract punctuality out of her servants. After a series of trials she was only able to make her servants punctual through clear orders and enforced obedience. Wives and mothers had no small task in ordering the home and its members. Harriet Martineau (1802–76) enumerated punctuality as one of the “family habits” in her *Household Education* (1849). She also noted that punctuality did not depend on wealth or station. Martineau had seen “order and punctuality prevail... in very humble households, where, instead of a score or two of servants, there were a few well-trained children to do the work.”²⁸² She also confessed to knowing of large estates that were run haphazardly, where meals were ruined and calls to servants went unanswered. Punctuality and regularity did not depend on the material wealth or the number of servants available to execute one’s orders. The manager made the home punctual.

At outward facing events such as the dinner party the housekeeper’s ability to manage her home was on display. In her *Household Management* (1861), Isabella Beeton warned that the half-hour immediately preceding dinner was the greatest trial, as all the mistress’ labour came together. No small amount of social judgment rested on the outcome as the hostess “will either pass with flying colours, or, lose many of her laurels.” The punctual arrival of the meal was one way a wife could earn social credit and reputation among her peers. “Waiting for dinner... is a trying time, and there are few who have not felt—

How sad it is to sit and pine,
The long half-hour before we dine!
Upon our watches oft to look,

²⁸¹ Warren, *How I Managed*, 32.

²⁸² Martineau, *Household Education*, 300.

Then wonder at the clock and cook,
And strive to laugh in spite of Fate!
But laughter forced soon quits the room,
And leaves it in its former gloom.
But lo! the dinner now appears,
The object of our hopes and fears,
The end of all our pain!²⁸³

For guests at such a dinner party the obligation was similarly to be on time. Although acknowledging that “it has been considered fashionable to come late to dinner,” Beeton advised this was no longer the case and that guests to a dinner party should “be punctual, and the mistress ready in her drawing room.”²⁸⁴ The burgeoning genre of etiquette books frequently noted the impropriety of late arrival at meals as in the *Hand-book of Good Manners* (1865),

Punctuality is said to be the soul of business; it is the soul of pleasure also. Be punctual in your attendance at dinner. The dinner cannot be served till the guests have arrived. If it is spoiled through your tardiness, you justly incur the indignation—indignation which, of course, cannot be expressed—not only of the host, but of every one of their guests. A dinner, however, never should be delayed for one guest; it is a breach of politeness to all those who have arrive punctually.²⁸⁵

While the dinner party was an important community-facing event for the middle-class home, the family dinner was the daily event around which that home turned.

Wives and mothers were expected to ensure that the meal arrived on time and that all who were to partake also be present. Regarding a mistress’ “moral government of her household,” Mrs. Beeton wrote “having risen early... the first meal of the day, breakfast, will then be served, at which the family should be punctually present.”²⁸⁶ The difficulty of this task was reflected in Sarah Stickney Ellis’s above-noted contrast of the expectations around the

²⁸³ Isabella Beeton, *The Book of Household Management* (London: S. O. Beeton, 1861), 12.

²⁸⁴ Beeton, 12.

²⁸⁵ *Hand-book of Good Manners* (London: Cassell, Petter, and Galpin, 1865), 29.

²⁸⁶ Beeton, *Household Management*, 9.

punctual provision of dinner by a wife and a husband's tendency to arrive whenever he pleased.

Children too could resist the efforts of their mother's management:

it sometimes happens that young people through thoughtlessness or indolence, do not make their appearance at the breakfast table in time... The dinner, perhaps, is kept waiting, because they have not been punctual in returning from a walk, or are detained by some frivolous morning visitor.²⁸⁷

Within the family, each person had their work, and one of the most important duties of children was deference to their parents. Punctual attendance at mealtimes was an instance of this deference.²⁸⁸ Children were supposed to obey and respect their parents and a symbol of this obedience was being present at meal time.

3.5 Don't be Late: Children's Time

Domestic literature provided an idealized vision of the middle-class home: punctually served meals, ordered accounts, and calmness and repose for a husband and father to enjoy after returning from work in the outside world. Literature for middle-class children similarly prescribed the temporal habits of obedient children who would eventually become profitable adults. In juvenile fiction children were taught to be punctual by being shown the negative consequences of procrastination and disorder. Children represented in fiction were instructed by elders, or by the good example of other children, about the importance of performing duties and keeping one's word. Alternatively, children bore witness to those whose unpunctuality led to social and financial ruin, thus providing an example to avoid in youth while their habits might still be reformed. Authors promoted a conception of the idealized middle-class youth who would become the ideal adult. Repeatedly, this image of the orderly, creditworthy, industrious, and

²⁸⁷ Copley, *Female Excellence*, 138

²⁸⁸ Esther Copley, *The Family Book* (London: Religious Tract Society, 1833), 35.

punctual individual was upheld as the moral ideal for children. This individual both explained middle-class wealth and justified claims to cultural and moral authority.

Unsurprisingly, it was Hannah More who was one of the earliest to observe the importance of teaching children to be punctual. “A habit of punctuality,” she argued in 1799, was “one of the earliest which the youthful mind may be capable of receiving.”²⁸⁹ Learning this habit early in “childish business” would help them save time later in life, when engaged in “the more important business of life.”²⁹⁰ “Scrupulous punctuality in the division of time” taught children to do one thing at a time and in the time allocated. It taught order and regularity and to make use of the smallest portion of time that would otherwise be “lost between successive duties, for want of calculation, punctuality, and arrangement.”²⁹¹ Punctuality, she told parents, “is so connected with truth, with morals, and with the general good government of the mind, as to render it important that it should be brought into exercise on the smallest occasions.”²⁹² Punctuality was a matter of industry, labour, and social credit, and it was the foundation of good conduct and morality through establishing a regular and disciplined course of action. This held equally true for children as it did for their mothers and fathers.

The division of children’s time between work and play and the consequences of indulging in play when one had work to perform appeared as a constant theme in early nineteenth century juvenile literature. Work—whether it be school lessons or duties in the home—was their first duty.²⁹³ Only after fulfilling these obligations to their parents could they

²⁸⁹ More, *Strictures*, 105.

²⁹⁰ More, *Strictures*, 104.

²⁹¹ More, *Strictures*, 104.

²⁹² More, *Strictures*, 105.

²⁹³ “to children, their tasks are their business; to them a French or Latin exercise is as serious an occupation as the exercise of a trade or profession is to a man.” More, *Strictures*, 91.

then expect to indulge in play. The case was made repeatedly in Ann Taylor's (1782–1866) *Rhymes for the Nursery* (1806) written with her sister Jane (1783–1824). The collection, which was the first to include their well known “Twinkle, Twinkle, Little Star” also included the poems “Idle Mary” and “The Old Beggar.” In the former poem, Mary's mother reprimands her because her sewing “work is sadly done” and “little of it too!” The poem critiques the quality of Mary's work and chastises her for playing rather than working, reminding children that “The little girl who will not sew, | Should neither be allow'd to play.”²⁹⁴ Taylor's “The Old Beggar” shared this emphasis on the importance of work and distinguishing the time for leisure and the time for labour. In Taylor's poem, a child has asked a beggar why he sits outside in the cold instead of in his home. The beggar's reply was that sloth, idleness, and excessive leisure led to poverty and ruin:

When, I like you, was young and gay,
I'll tell you what I us'd to say,
That I would nothing do but play.

And so, instead of being taught
Some useful bus'ness, as I ought,
To play about was all I sought.

And now that I am old and grey,
I wander on my lonely way,
And beg my bread from day to day.

But oft I shake my hoary head,
And many a bitter tear I shed,
To think the useless life I've led!²⁹⁵

²⁹⁴ “Idle Mary,” in Jane and Ann Taylor, *Rhymes for the Nursery*, 16th edn (London: Harvey and Darton, 1824), 34-5.

²⁹⁵ Jane Taylor, “The old Beggar Man,” *Rhymes for the Nursery*, 40–1.

The moral for children was that their school lessons and chores were work, and that those who neglected their work would end up like the old beggar—without a home, employment, food, or a family. In both cases work was a duty, and to neglect a duty had consequences beyond the specific work to be done. Much of the juvenile literature on punctuality made this case painfully explicit to young readers.

As with other literature that discussed the importance of time and industry, children's literature upheld punctuality as the keystone around which morality, filial obedience, and future success inevitably rested. It mattered not only that children be employed in doing something, but also how and when they did it. Exploring these texts reveals the extent to which punctuality was an element of middle-class identity in the early nineteenth century and how children became the target of this improving rhetoric. Importantly, while these texts promoted punctual behaviour with remarkable consistency, they also tended to focus on the failure to be punctual, want of punctuality, or unpunctuality. The primary reason for adopting this virtue, children were told, was for its ability to avoid disorder and missed opportunity. The consequences of unpunctuality were imagined and explored as a way of inculcating children into a life of self-discipline and duty-bound conduct first and foremost in the home.

One notable feature of this literature written for children was the repeated emphasis on the timing of the family meal. A short story published in the Religious Tract Society's *Child's Companion* in 1838 depicted the scene of a child arriving late for breakfast only to interrupt her father giving the prayer. Emma had thought her father's facility for punctuality "too particular," and so she "idled" away her time before breakfast. Then, in her rush to be on time, she accidentally broke a dish and entered the room as her father had already begun prayer. "[E]very eye was fixed upon her" and "Emma heard not a word." As the consequences of her actions

weighed on her, she finally broke into tears, crying “I thought papa was too particular in being so very punctual.” Throughout the day Emma’s elder sister teaches her the lessons of punctuality. It produced calmness of mind, gave an order to one’s duties, demonstrated respect for others, and made one’s work easier. As Emma and the young reader were told, “you are not too young to be punctual.” Emphasizing this message to audience, the author spoke directly to the reader: “Are you punctual? Do you try to be in school quite in time? Do you never get behind in your lessons? Are you never late at family prayer? ...try if punctuality will not make every duty more easy.”²⁹⁶ Children’s stories which discussed punctuality impressed upon the reader that order, method, and economy made work easier than if it were conducted without a plan. Importantly, it also taught obedience to one’s parents—often singling out the father—as a model of future duty-bound conduct. Children, like their mothers, played an important role in keeping the home a scene ordered for their father’s enjoyment.

Building on the theme of the dangers of unpunctuality, Louisa Barwell’s *Value of Time* (1834) discussed at length the potential problems her young readers would face if they neglected the passage of time. Set in the middle-class Howard family’s home, the three youngest children Jane, William, and John, are depicted to be wasting time. Eventually through the efforts of their mother and elder sister, Caroline, they are shown how important time is, and why it should be managed carefully. Having such work to do as sewing, studying, or gardening, the three youngest children become distracted from their work, chat idly, play, or begin other tasks while leaving the previous one unfinished. Jane, who ought to have been doing her French lessons, began helping her brother, John, make a net, only to abandon him before the work was done,

²⁹⁶ Maud, “Punctuality,” *Child’s Companion*, February 1838, 49.

leaving it ruined. As a result, both Jane and John's time were wasted. Jane in particular was singled out for her attitude towards time, as she told her brother William "you are always so fond of that word, *punctual*: five or ten minutes cannot make much difference."²⁹⁷ She continued to remark that "'precisely,' 'punctually,' 'exactly,' are all such favourite words with him."²⁹⁸ Jane's repudiation of William's punctuality stood as a lesson to young readers of the dangers of neglecting even the smallest portions of time, which if put to good use might be made profitable. As her elder sister Caroline tells Jane, industry was only truly useful if it was guided by a plan.²⁹⁹ Just as good household management required regularity, order, and a system or plan of action, so too did the tasks and duties of children.

Barwell's story also upheld the family dinner as a carefully scheduled event over which the father presided. On two separate instances the children's other inattentions and idleness caused them to be late for family meals. In each of these instances it was their father who asked why his children were late for dinner. As Barwell related through the children's dialogue with their parents, and their elder, wiser sister, they have wasted their time. Through the mishaps of Jane, William, and John young readers were told that even when actively doing something, one could be said to be idle if they were doing nothing of value. Barwell's story takes readers through the moral reformation of children in their attitudes towards work. The right education of children entailed setting them on the path towards an industrious, useful, and virtuous life. Children were taught the value of time by relating the negative consequences of unpunctuality and idleness, and the benefits of industry and economy.

²⁹⁷ Louisa Barwell, *The Value of Time: A Tale for Children* (London: Frederick Westley, 1834), 24.

²⁹⁸ Barwell, *Value of Time*, 25.

²⁹⁹ Barwell, *Value of Time*, 52–3.

Emily Ospringe's short story "Punctuality" (c.1840) similarly explored the negative consequences of unpunctuality and the way delays spread both within and beyond the life of the unpunctual person. Cecilia Lecaros has rightly read this story as an example of the dangers, both to oneself and to others, of "following one's own inclinations."³⁰⁰ Like other historians who have discussed punctuality, Lecaros has missed the role of credit in underwriting the importance of punctuality. Ospringe relates to children the very real consequences—legal, financial, and social—that can befall one for not honouring their obligations. The value of a person's promise, their trustworthiness, and perceptions of their judgement depended on whether they upheld their word. The story is set around the family of a Manchester manufacturer, Mr. Morely, who we meet at the breakfast table describing the nature of virtue to his children: "moral virtues shine forth for the benefit of others—for the benefit of all who will adopt them—for our benefit."³⁰¹ As a striking clock announced the end of breakfast Morely continued his lesson:

We are now reminded of one moral improvement, more allied to the machinery of life than perhaps any one; and like the machinery of our manufactory, will always be found productive of advantage in proportion as it is strictly worked—I mean *punctuality*.³⁰²

Illustrating again how the middle-class home turned around the rhythm of meal times with the final strike of the clock, wrote Ospringe, "the family separated till the hour of dinner."³⁰³

Through this family the reader encounters Allons, a wealthy cousin, who represents the very antithesis of punctuality. He breaks his dinner plans (or a "bond" as Morely put it), he withdrew a marriage proposal, and he missed business engagements. Whereas Allons did not meet his

³⁰⁰ Lecaros, 878

³⁰¹ Emily Ospringe, *Punctuality, Sensibility, & Disappointment* (London: Edward Lacey, 1840), 7.

³⁰² Ospringe, 7. Also quoted in Lecaros, 875.

³⁰³ Ospringe, 8.

obligations to others, the Morleys in contrast were “obliged in honour and honesty, to fulfil them.”³⁰⁴ Allons’ lack of discipline and character ultimately set in motion a series of missed appointments, a loan falsely taken out in his name, and an arrest warrant for the debt. Throughout the series of losses and mishaps, Ospringe emphasized to the reader that unpunctuality was the ultimate cause of Allons’s demise. “In less than six months after he came to the possession of his splendid fortune, half of it had disappeared through the neglect of punctuality.”³⁰⁵ Reminding Allons that these misfortunes were preventable, Morely quipped, “had you been punctual to your engagement, this might not have happened.”³⁰⁶ The message to the young reader was simple and clear—be honest, trustworthy, faithful and industrious, in other words punctual, or you will lose your friends and your money. Even in literature for children punctuality retained its association with creditworthiness and social and financial obligations from which it had been derived as an example of virtuous behaviour in the eighteenth century. Allons broke his “bond,” was associated with false loans, had been arrested for debt, and had a marriage proposal rebuked because the lady in question loved “integrity.” The significance of punctuality in the middle-class self-image is further underlined in the story through patterning Allons’ behaviour after the aristocratic man of leisure who had no occupation, whose wealth was inherited, and whose “time was entirely his own.” Such freedom from labour and the drive for self-improvement lead to immorality and laziness. The Morelys, in contrast, were examples of middle-class regularity, faithfulness, and punctuality. They kept their word, sought to

³⁰⁴ Ospringe, 10.

³⁰⁵ Ospringe, 26.

³⁰⁶ Ospringe, 13.

continually improve their factory, and were anxiously concerned with the morality of their conduct.

While the negative consequences of adult unpunctuality were emphasized in writing for children, so too were the inconveniences that a child's unpunctuality caused others.

Procrastination, "the twin of delay" and the chief adversary of punctuality as *The Boys Own Book* claimed,³⁰⁷ could lead to more than inconvenience or frustrated patience. The subject was taken up in Mary Elliott's *No Time like the Present* (c. 1840), with two boys, George and Richard, presented as contrasting examples of the consequences of delay and procrastination. Richard "was sometimes foolish enough to delay what his own good sense told him should be done at once."³⁰⁸ This left Richard often in "disgrace." By contrast George "would never indulge himself in play" before his work was done. Spurred on by George's example, Richard decided to "attend to all his duties before he would indulge in play."³⁰⁹ Despite his attempt at reform, Richard's bad habits return quickly and put a poor farmer and a missing child in further danger. The moral of Richard's mishaps centered on his lack of self-discipline and sense of duty which led him to put off doing as he promised and resorting to leisure instead.

One final story from the first half of the nineteenth century reveals the potentially violent reality for children who were late and neglected time at school. *Tom Linger, or the Half an Hour Too Late* (c. 1842) was written in the form of a personal memoir of the aptly named Tom Linger, who from childhood had the habit of being a half an hour late. The story impresses on the reader the dangers of letting bad habits such as unpunctuality take root. Once habits had been

³⁰⁷ William Clarke, *The Boys Own Book* (London: Crosby Lockwood and Co., 1885), 74.

³⁰⁸ Mary Elliott, *No Time Like the Present* (London: Darton and Clark, 1840), 6.

³⁰⁹ Mary Elliott, 9.

established they could take a lifetime to unlearn. Tom's memoir begins with an account of his twelfth birthday when he was caned for arriving too late for school. Having the value of time physically impressed upon him, with every strike the schoolmaster repeated "Half an hour too late!", "time lost is never regained. You know not the value of time. ...remember its loss. Half an hour too late."³¹⁰ This punishment did little to teach Tom the value of time, so the story tells. His disregard for time consistently led to his missing opportunity after opportunity. He missed a parade of knights in armor, neglected to study for an exam, missed the ascent of a balloon, and the first half an hour of a lecture on astronomy. He lost the sale of horse, he was too late to dinner, and he was regularly too late for Church. Later in life he was arrested and imprisoned two days for a debt which he could have easily paid and suffered financial ruin when he missed the departure of a coach carrying his luggage. The memoir concludes with Tom's advice to the young reader, emphasizing that only too late did he learn his lesson:

I have been careful in the management of time, and although I cannot boast of having been rich, Providence has blessed my attention to punctuality with some share of prosperity. I leave it to you to gather a moral from the history of my experience.³¹¹

Didactic texts for children subjected readers to the same lessons as adults. They depicted the home as a space that ought to be characterized by peace, order, and regularity, much of which depended on their own punctuality and obedience to their elders. Morals about adults' misfortunes preached that the work they did as children would establish patterns for the rest of their lives—if they chose not to reform they would end up destitute and disgraced. Their time and their promises, now and in the future, carried consequences not only for themselves but for

³¹⁰ *Tom Linger, or the Half an Hour Too Late* (London: Dean & Co., c. 1842), 7.

³¹¹ *Tom Linger*, 30.

others. Such literature focused on children's duties to parents, to others in the community and how neglecting these duties would lead to ruin. Industrious, punctual youths would ideally become creditworthy and productive adults.

Tom Linger's experience at school may have reflected that of many middle-class children who arrived late to class. Corporal tardiness was just one of the possible infractions that could have incited corporal punishment for students as well as child factory workers. Finding an alternative to corporal punishment guided the Hill family's establishment of the Hazelwood school established in 1819 in Edgbaston, Birmingham.³¹² Rowland Hill, credited with the invention of the penny post, established Hazelwood school with his father, mother, brothers and sister all taking part in running the school. In 1822, Matthew Davenport Hill and Arthur Hill published an account of Hazelwood popularly known as "Public Education." The pamphlet and the school received an outpouring of public attention in the periodical press and was praised for its new methods of education and discipline by self-government.³¹³ Time-discipline and schedules formed a critical part of this discipline and apparent success of the educational model the Hills established first at Hazelwood and later at Bruce Castle school. The emphasis on timekeeping reflected the middle-class and largely dissenting communities the Hills' schools served. The school day was meticulously divided by the ringing of bells which announced the beginning and end of classes and meals. A monitor appointed from among the students was charged with operating the bells and "as a great deal depends upon his punctuality, a system has

³¹² Davidoff and Hall, *Family Fortunes*, 237–8.

³¹³ "Public Education," *Edinburgh Review* 41 (1825): 315–35; "A Visit to Hazelwood School," *London Magazine* 3 (1829): 367–86; "System of Education adapted to India," *Oriental Herald* 1 (1824): 261–74; "Improved Plans of Public Education," *Oriental Herald* 9 (1826): 231–43; "Public Education," *Literary Chronicle* 6 (1825): 598–9; "Improved System of Education established at Hazelwood School," *Kaleidoscope* 6 (1825): 25–6.

been arranged, by which he is held to the strictest responsibility.”³¹⁴ As in the home, meal time was a noteworthy occurrence requiring special regulations “to ensure uniform punctuality” otherwise the cook, in this case Hill’s mother, might “keep all the boys waiting at the table.”³¹⁵ This was surely an expectation that young boys might carry with them into their own future domestic arrangements. As the Hill’s noted, “strict economy of time” was the “second great end” of the school. Their system of discipline had been designed to “induce an almost superstitious punctuality.”³¹⁶ By increasing the number of bells rung throughout the day, they could reduce “the difficulty of being punctual.”³¹⁷ Furthermore, they noted that changing the responsibility of bell monitor from boy to boy would “gradually infuse a habit, and somewhat a love of punctuality, into the body scholastic itself.”³¹⁸ The result was nothing less than “precision” in adherence to the school’s schedule so that teachers themselves were held to be on time by the regularity of students. After Hazelwood was relocated to Tottenham, London and renamed the Bruce Castle School, the Hills published a further account of their “System of Education.” At Bruce Castle, where Jeremy Bentham and Charles Babbage sent their children, strict timekeeping, precision, and exactness were a central element of the pedagogy. “Securing punctuality” depended on a student knowing “the precise time” and imposing penalties for arriving even a second after the bell.³¹⁹ Defending this discipline against parents who might see it

³¹⁴ Matthew Hill and Arthur Hill, *Plans for the Government and Liberal Instruction of Boys, in Large Numbers* (London: G. and W. B. Whittaker, 1822), 30–1. A second edition was published in 1825: Arthur Hill, *Public Education: Plans for the Government and Liberal Instruction of Boys, in Large Numbers, as Practised at Hazelwood School* (London: C. Knight, 1825).

³¹⁵ Hill and Hill, *Liberal Instruction*, 57–8; On Matthew Hill’s asking his mother to be more punctual in timing the meals see Davidoff and Hall, *Family Fortunes*, 238.

³¹⁶ Hill and Hill, *Liberal Instruction*, 88.

³¹⁷ Hill and Hill, *Liberal Instruction*, 89.

³¹⁸ Hill and Hill, *Liberal Instruction*, 89.

³¹⁹ *Sketch of the System of Education, Moral and Intellectual in Practice at Bruce Castle School, Tottenham* (London: C. Knight and Co., 1837), 10.

as too strict, the Hill's argued from experience that "moderate regularity" could only be achieved by aiming for "exact punctuality."³²⁰ They warned that small delays compounded and "that the seconds will soon swell into minutes, the minutes into hours, the hours into days, and the days into weeks."³²¹ As others had argued before, only the strictest attention to regularity and punctuality secured "the economy of time." The proper functioning of the school, as a productive enterprise, rested on the same values that were supposed to secure profit in business: order, method, regularity, and punctuality made sure one's labour was profitable. The efficient use of time, was crucial to training children away from habits of "incurable idleness" and into "virtuous and intelligent men."³²²

3.6 Conclusion

During the eighteenth century punctuality was largely depicted as a virtue of the creditworthy, and therefore profitable, man of business. It described him as reliable, honourable, and moral. His goods could be trusted as well as his payments. Just as punctuality described this man, and his business, it also described the home in which he, ideally, lived. Rachel Rich has argued in her study of mid-nineteenth century punctuality in women's didactic literature that the public sphere entered the private. Similarly, Catherine Hall has argued that domestic guides and cookery books which offered advice on the rationalization of housework were inherently contradictory because they sought to impose economic rationalization on fundamentally non-economic or non-productive work. This chapter has shown that punctuality was not a value of the public sphere imported into mid nineteenth century domestic texts but was rather an explicit

³²⁰ *System of Education*, 11.

³²¹ *System of Education*, 11.

³²² *System of Education*, 3–4.

aspect of both the public and private ideals of separate spheres from its early articulation by Hannah More and others. Similarly, reflecting what Craig Muldrew has said of credit,³²³ punctuality was both social and economic, and these two meanings had yet to be fully separated. Rather than being an economic value imported from the public world into the private, punctuality played an important role in articulating the feminine ideal of domesticity from its inception and probably reflected a conception of creditworthiness that was tied to business and home before the two became disentangled and increasingly separated from one another.

Punctuality became an explicit aspect of the middle-class ideology of domesticity from the end of the eighteenth century as an instance of good management. The same rhetoric which was increasingly directed at men's work outside the home was simultaneously applied to women's domestic duties.³²⁴ While the ability of women was at the time contested, both husbands and wives could be subject to reproach for their failure to be on time. Exhortations for women to be punctual should be treated on the same grounds as those to men. Domestic literature therefore does not show that women may have been poor timekeepers, as Rich and Lecaros have argued. Rather such literature shows that women were held to the same standards of punctuality as men, even if highly circumscribed within their domestic duties. An abundance of domestic literature depicted the ideal manager of the home as ordered, systematic, well-timed, but also just. In the same way that credit, as the obligation to pay one's debts, was constructed around the concept of duty to others, this punctuality represented part of the middle-class wife's domestic duties. Still thoroughly social, punctuality entailed considering how one's actions

³²³ Muldrew, *Economy of Obligation*, 3.

³²⁴ See for example Ann Taylor's (1757–1830) husband, Isaac Taylor's (1759–1829), discussion of punctuality in his *Character Essential to Success in Life: Addressed to those who are approaching manhood*, 3rd edn (London: Baldwin, Cradock, and Joy, 1824), 93, 120–1.

affected others in the home, including servants, in order to ensure that all ran like a well-oiled machine.

Nineteenth-century domestic literature presented a relatively unified vision of the temporal order of the middle-class household. Women's roles in this temporal order included responsibilities as managers of servants and cooks and household accounts, as educators of children, and in some cases as managers of their husbands. The very traits which sustained a reputation of creditworthiness in business were also the beau ideal of a woman's work in the home. Keeping the household running efficiently meant ordering the duties of all members of the home and making sure that no time was lost, either in the preparation of meals, the cleaning of rooms, or in the education of children. Where stakes appeared highest was dinner time, when all of the day's labour, and all the household's members, came together. This was also one instance where the male and female ideals of punctuality differed most. Around this daily event all aspects of management could be judged. Were clear orders given early enough? Was the meal served warm and on time? Were the children present? Did one's husband arrive? As an important event in the middle-class family's day that became highly ritualized through domestic literature, the family dinner was an opportunity for family members to exercise their roles. The dinner re-inscribed the social order of the household into the day's events and reaffirmed the role of women, whose work it was to manage and order the home. The successful management of the whole event and the participants fell to wives and mothers, until the meal began and the father and husband presided.

For children, too, whose duties were ideally regulated and timed, one's attendance at the dinner table was an instance of filial obedience. In juvenile fiction the themes of timekeeping, punctuality, and method were applied to all children's activities and were highly inflected with

the language of credit and trust. Children's schoolwork, chores, and any instructions given to them by elders were work, and should be taken as serious duties to perform without delay.

Young readers were warned that cultivating the habit of procrastination would lead to a life of poverty and unhappiness. This ideal directed at children could also be seen in the way educators imposed punctuality at school and connected the successful education of children into adults to their ability to keep time. If they failed in punctuality they might never accomplish anything of worth. Children's education in the home by parents, elder siblings, and the example of both the punctual and the unpunctual taught that just as in business, only prudent steady exertion led to profitable employment of one's time.

Examining how punctuality was specifically directed at women and children reveals an idealized image of the home structured around the values of order, economy, and regularity. These values were also those of commerce, from which the middle-class drew its wealth and its claim to prestige and moral superiority over the leisure-oriented aristocracy and the labouring class. During the nineteenth century punctuality became an important feature of middle-class domesticity in significant ways. The use of time, and being on time, were easily visible metrics of whether one was fulfilling their duties. But while punctuality performed as a middle-class virtue, both explaining and justifying their moral and economic status, it was also used to mark difference. Punctuality needed to spread throughout society and while all should abide by it, promulgators of the virtue continued to lament that too few did.

Chapter 4: Disciplining Clocks and People: George Biddell Airy, Electrical Timekeeping and ‘the Money Value of True Time’

4.1 Introduction

In June 1851 George Biddell Airy (1801–92), Astronomer Royal, at the Greenwich Observatory, corresponded with the horologist Charles Shepherd Junior (1830–1905) about going to see the electric clocks at the Great Exhibition: “I will call on you tomorrow morning at 9, as punctually as I can.”³²⁵ Shepherd had been selected to build an electric clock for the Crystal Palace. His clock moved the hands on the twenty-four-foot dial built into the Great Transept, as well as two other dials in the Crystal Palace.³²⁶ Shortly after visiting the exhibition with Shepherd, Airy had contracted him to build an electric clock and a series of dials for it to drive around the Greenwich Observatory. In addition, this new clock would automatically drop the Greenwich time ball, by an electro-magnet, and send a signal via telegraph that could be used to drop time balls elsewhere, and provide a signal denoting any desired second of Greenwich Mean Time (GMT). The clock Charles Shepherd constructed for Airy would keep and distribute GMT from 1852 through 1893. Just two years after agreeing to meet Shepherd “punctually,” Airy told the Royal Observatory’s Board of Visitors that through Shepherd’s new clock and the time signals it was distributing “the Royal Observatory is thus quietly contributing to the punctuality of business

³²⁵ George Airy to Charles Shepherd, 23 June 1851, Royal Greenwich Observatory Archives, Papers of George Airy, (hereafter RGO 6), Cambridge University Library, RGO 6/612/16/191.

³²⁶ “Shepherd’s Electric Clock for the Great Exhibition Building,” *Illustrated London News*, 8 February 1851, 104. Shepherd’s clock notoriously failed to keep accurate time and were publicly critiqued by the controversial horologist Edmund Beckett Denison (first Baron Grimthorpe) who later came into conflict with Airy over the clock for the new Palace of Westminster. Shepherd left England in 1853 to take part in the construction of the telegraph network in India under William Brooke O’Shaughnessy. For Denison’s critique of Shepherd see Edmund Beckett Denison, *Clock and Watch Work* (Edinburgh: Adam and Charles Black, 1855), 90–2. For Airy and Denison’s work on Big Ben see Edward Gillin, *The Victorian Palace of Science: Scientific Knowledge and the Building of the Houses of Parliament* (Cambridge: Cambridge University Press, 2017), chapter 6.

through a large portion of this busy country.”³²⁷ While this statement has been frequently cited as evidence of the social role of the Observatory, the importance of punctuality to Airy, Greenwich, and Victorian society have been largely overlooked within the historiography of the standardization of time. Rather, railways have been treated as the prime mover of the standardization of time and efforts to coordinate clocks.³²⁸ This chapter seeks to refocus attention on the moral values and disciplines which prompted mid-century Britons, and Airy chiefly, to build electric clocks, and to connect them to Greenwich via a growing network of telegraph cables. Punctuality was chief among these values—it spoke to the efficiency of Airy’s managerial system at Greenwich; it lent authority to assistants and observers, and therefore the observatory’s products; it spoke to the trustworthiness or creditworthiness of people in general; and for better or worse it was at the heart of the efficiency of the controversial factory system.

Historians have frequently ascribed to the theory that the railway created “the frenetic pressure to be ‘on time’” and, as a result, standardized time as the social world of Britons expanded geographically and contracted temporally.³²⁹ Such space-time compression—to draw on the phrase of David Harvey—demanded that people’s temporal world be better coordinated through shared standards of time. In Britain the narrative is often illustrated through a series of events: (1) the establishment of Railway Time in 1847–8 by the major railway companies; (2)

³²⁷ George Airy, *Report of the Astronomer Royal to the Board of Visitors*, 4 June 1853, 8, Royal Greenwich Observatory Archives, Reports of the Royal Observatory, (hereafter RGO 17), Cambridge University Library, RGO 17/1/1.

³²⁸ Michael Freeman, *Railways and the Victorian Imagination* (New Haven: Yale University Press, 1999), 21; Jack Simmons, *The Victorian Railway* (New York: Thames and Hudson, 1991), 345–7, 372–3; Allan Chapman, “Standard time for all: the electric telegraph, Airy, and the Greenwich Time Service,” in *Semaphores to Short Waves*, ed., Frank James (London: Royal Society for the encouragement of Arts, Manufactures & Commerce, 1998); Derek Howse, *Greenwich Time and the Discovery of Longitude* (Toronto: Oxford University Press, 1980).

³²⁹ Michael Freeman writes, “punctuality and timekeeping were transplanted from railway operation directly into people’s lives. The frenetic pressure to be ‘on time’ was born out of the railway age.” Freeman, *Railways and the Victorian Imagination*, 21; Simmons, *The Victorian Railway*, 346.

the establishment of a system for distributing Greenwich Mean Time via telegraph in 1852; and (3) the establishment, in 1880, of GMT as the legal standard of time in England, Wales, and Scotland.³³⁰ In this narrative the 1880 Definition of Time Act³³¹ merely codified what already existed in practice; railways had imposed a single time on British railway passengers which extended to all aspects of Britons' daily lives.

While this narrative is both appealing and logical, recent research by historians of timekeeping suggests that it is time to question the causal connection between railway travel and the adoption of a single shared standard of time. Hannah Gay, for example has shown that well into the twentieth century people still switched between railway and local time, as shown by the existence of clocks and watches with two minute hands, and repeated calls for uniformity and the end of local time. David Rooney and Richard Nye have shown that the technological systems developed to coordinate clocks were unreliable until the end of the century.³³² The existence of a uniform system of coordinated clocks and public demand for a single time has, according to these studies, been overstated. The level of commitment by railway companies to driving and supporting coordinated clocks has also been overstated. The Greenwich Observatory's archive shows that fifteen years after the time signals were established some railway companies were unaware they existed, and few employed them systematically.³³³ Claims made by Airy and

³³⁰ Whitrow and Howse for example claim that "1855 98 percent of the public clocks in Great Britain were set to GMT." Derek Howse, *Greenwich Time and the Discovery of Longitude*, 113; G. J. Whitrow, *Time in History: Views of time from prehistory to the present day* (New York: Oxford University Press, 1988), 164.

³³¹ Statutes (Definition of Time) Act, 1880, 43 & 44 Vict., c. 9.

³³² Hannah Gay, "Clock Synchrony, Time Distribution and Electrical Timekeeping in Britain 1880-1925." *Past & Present* 181, no. 1 (2003), 107-140; David Rooney and James Nye, "'Greenwich Observatory Time for the public benefit': standard time and Victorian networks of regulation," *British Journal for the History of Science* 42, no.1 (2009), 5-30.

³³³ As R. S. Culley wrote to William Ellis, "the evidence was not as satisfactory as I could wish." R. S. Culley to William Ellis, 18 June 1869, RGO 6/631/14/496.

electricians that GMT could be had anywhere in Britain are probably more indicative of aspirations than reality. Indeed, as chapter five demonstrates, railway companies frequently resisted passenger demands to enforce the punctual arrival of passenger trains. Railway unpunctuality and disagreeing station clocks were a relatively common passenger complaint in London newspapers.

Emphasis on the role of the railway in “standard time” has had the effect of effacing other important aspects of the spread of shared standards of time and the social values that underwrote the construction of electric clocks, and the networks of people and machines which connected and coordinated them. In this chapter I turn to the history of the Greenwich time signals and their main architect, the Astronomer Royal, George Biddell Airy, to show how the middle-class value of punctuality underwrote Airy’s project to discipline the Royal Observatory, and the rest of Britain. Not surprisingly electric time signals and electrically coordinated clocks were perceived as offering a solution to the problem of both undisciplined timekeeping devices and undisciplined people. As this chapter shows, the promoters of publicly displayed, reliable standards of time understood them as a means of inculcating punctuality. As chapters two and three have illustrated, punctuality meant more than simply being on time. From the late eighteenth century onward, punctuality and its associated values of method, order, economy, and regularity appeared in texts of all genres as a sign of character, honesty, and piety.³³⁴ Being on time demonstrated that one could be trusted whereas wasting one’s own and another’s time was

³³⁴ For an insightful discussion of punctuality in mid-nineteenth-century didactic texts see Cecilia Wadsö Lecaros, “‘One Moral Improvement, More Allied to the Machinery of Life than Perhaps any Other’: Mid-Nineteenth-Century Punctuality in Context,” *English Studies* 91, no. 8 (2010), 861–83.

the basest of vices. In either case knowing who was on time depended upon trustworthy measures.

This chapter centers around Airy's efforts to distribute GMT via electric time signals and situates these efforts within the social context of creditworthiness, the reform of scientific knowledge, and the management of factory labour. While other historians have been apt to note Airy's claims about "contributing to the punctuality of business" in 1853, little attention has been paid to the significant role punctuality played in Airy's project and in the social lives of nineteenth-century Britons. I argue that punctuality was a crucial part of Airy's goal of distributing GMT. Exploring how Airy managed Greenwich and went about distributing Greenwich time, this chapter demonstrates the fundamental role of punctuality in the construction of coordinated clocks and the spread of Greenwich time in Britain. I show how punctuality and time discipline played a crucial part in the factory-like regime at Greenwich, and how these were rooted in contemporary ideas about the nature of factory production and mechanization, the maintenance of social and economic credit, and the proper means of producing scientific knowledge.

4.2 Galvanizing Time: Time Signals and Coordinated Clocks

When Airy had begun to formulate his plans to distribute GMT by telegraph in 1849, the electric telegraph patented by Cook and Wheatstone in 1837 had only recently been through the trials of being proven as a useful technology by its early pioneers and promoters.³³⁵ Airy told the

³³⁵ George Airy, *Report of the Astronomer Royal to the Board of Visitors*, 2 June 1849, 15–16, RGO 17/1/1. Iwan Morus, Ben Marsden, and Crosbie Smith note that the telegraph had failed to secure an audience as a communication device until the mid to late 1840s. Railway companies found them too expensive. See Ben Marsden and Crosbie Smith, "The most gigantic electrical experiment': The Trials of Telegraphy," in *Engineering Empires:*

Board of Visitors that before long the Royal Observatory would harness “galvanism” for “the extensive dissemination throughout the kingdom of accurate time-signals.”³³⁶ After accompanying Charles Shepherd to the Great Exhibition in 1851, Airy commissioned him to build a clock and set of connection dials for the observatory. Airy also contacted telegraph engineers for support in his efforts to distribute time signals over the growing cable networks. The responses reflected those the initial telegraph entrepreneurs had received in the 1840s when appealing to the railway companies for support.³³⁷ Through his correspondence with telegraph engineers Charles Vincent Walker, superintendent of the South Eastern Railway telegraph, and Edwin and Latimer Clark of the Electric Telegraph Company, Airy began his plans to establish a telegraph connection to Greenwich and a partnership in electrical experiments that would last decades.

From the 1850s Airy’s efforts to introduce what he called “galvanic time” resulted in a number of different projects. He employed electric time signals to determine the relative longitudes of European and British observatories. He introduced the barrel chronograph, an electromechanical apparatus of his own design for registering transit measurements. Galvanic clocks formed part of the system of monitoring the rate of chronometers during the annual trials held at Greenwich. A series of electrically activated time balls were erected at different locations, each controlled by or monitored against the Greenwich times signal. Airy became involved in the

A Cultural History of Technology in Nineteenth-Century Britain (New York: Palgrave Macmillan, 2005), 178–225; Iwan Morus, “To Annihilate Time and Space: The Invention of the Telegraph,” in *Frankenstein's Children: Electricity, Exhibition, and Experiment in Early-Nineteenth-Century London* (Princeton: Princeton University Press, 2014), 194–230.

³³⁶ Airy, *Report to the Board of Visitors*, 1849, 16.

³³⁷ The directors of the London and North Western Railway company thought Airy’s proposal would cost too much and result in too much inconvenience to the regular telegraph business (Henry Booth to George Airy, 14 January 1850, RGO 6/612/1/6).

distribution of time signals to Big Ben, the London Post Office, the Royal Exchange, as well as a number of telegraph companies and private business which received the signals either from Greenwich or through the South Eastern or Electric Telegraph Company.³³⁸ Each of these projects depended on the clock Charles Shepherd constructed for Airy, which employed electromagnets and batteries to replace the driving weight and the wheel train of a normal pendulum clock. A spring and electromagnet drove the pendulum, and the pendulum's motion activated electromagnets which moved the hands on the clock's face.³³⁹ Behind the face, a series of electrical contacts could be arranged to close a circuit at any second of the day.

Initially the clock began to automatically drop the Greenwich time ball which, since its erection on top of Flamsteed House in 1833, had been dropped by the hand of an observer who watched the clock for the instant of 1pm. During the nineteenth century, time balls formed part of a global metrological network that helped sustain shipping networks.³⁴⁰ Time balls had acted as an important visual standard for rating ships' chronometers and fulfilled an important social function of the observatory closely connected to its role in publishing the *Nautical Almanac*

³³⁸ See Derek Howse, *Greenwich Time and the Longitude* (Philip Wilson, London: 1997), esp. chapter 4; Michael Kershaw, 'A thorn in the side of European geodesy': measuring Paris-Greenwich longitude by electric telegraph," *British Journal for the History of Science* 47, no. 4 (2014), 637–660; Caitlin Homes, "The Astronomer royal, the Hydrographer and the time ball: collaborations in time signalling 1850–1910," *British Journal for the History of Science* 42, no. 3 (2009), 381–406; Allan Chapman, "Standard time for all" the electric telegraph, Airy, and the Greenwich Time Service," in Frank James, ed., *Semaphore to Short Waves: Proceedings of a Conference on the Technology and Impact of Early Telecommunications* (London: Royal Society for the encouragement of Arts, Manufactures & Commerce, 1998): 40–59; J. A. Bennett, "George Biddell Airy and horology," *Annals of Science* 37, No. 3 (1980): 269–85.

³³⁹ Charles Shepherd, *On the Application of Electro-Magnetism as a Motor for Clock* (London, 1851), RGO 6/590/15/252–65; "Shepherd's Electric Clock for the Great Exhibition Building," *Illustrated London News*, 8 February 1851, 104.

³⁴⁰ *List of Time Balls in actual operation*, May 1861, RGO 6/615/1/2. In addition to those at Greenwich and the Strand, by 1861 there were time balls at Deal, Liverpool, Portsmouth, Edinburgh, Glasgow, Madras, Calcutta, Quebec, Sydney, and the Cape of Good Hope

since 1767 as a reference for finding longitude at sea.³⁴¹ As all clocks lose or gain time, knowing what time would be lost or gained on a months-long ocean voyage became a problem for calculations of longitude. The difference of just a second of time could translate to nearly a half kilometer of east-west distance at the equator.³⁴² Having a more accurate knowledge of a chronometer's rate, or their "character and conduct,"³⁴³ could mean the difference between safely navigating a dangerous shoal or running aground and losing lives and valuable commodities at sea. Automatically dropping the time ball through the use of switches, batteries, and electromagnets was intended to reduce the amount of error and reduce the perception of human error in the standard on display.

When Charles Shepherd finished installing the system of electric clocks at Greenwich in 1852, the clock, in addition to dropping the Greenwich time ball, soon after sent time signals to the South Eastern Railway Company and dropped a newly erected time ball at the London offices of the Electric Telegraph Company at 448 Strand, near Charing Cross. The Charing Cross time ball and electric clock located on the street below were undoubtedly the most celebrated node in this early Greenwich time signal network.³⁴⁴ Just as at Greenwich, a few minutes before

³⁴¹ Ian Bartky and Steven Dick, "The First Time Balls," *Journal for the History of Astronomy*, 12 (1981), 160. According to Bartky and Dick the first time ball was erected by the Admiralty in 1829 at Portsmouth, at the suggestion of Royal Navy Captain Robert Wauchope (p. 156). Wauchope is also credited with the idea of a time ball at Greenwich in 1833, which the Admiralty forwarded to Pond and was constructed within the year. Bateman, 206-207; Homes, 383. W. E. May, "How the Chronometer went to Sea," *Antiquarian Horology* 10 (1976): 638-663; Derek Howse, *Greenwich Time and the Longitude*; Rebekah Higgitt, Richard Dunn, and Peter Jones (eds), *The Navigational Enterprises in Europe and its Empires, 1730-1850* (Palgrave Macmillan, Basingstoke; 2016). Doug Bateman, "The time ball at Greenwich and the evolving methods of control: Part 1," *Antiquarian Horology* 34 (June 2013), 198-218.

³⁴² The Earth rotates approximately one degree of longitude in four minutes (240 seconds). One degree at the equator is 111.3km (111.3km/240s = .463km per second of time).

³⁴³ Table descriptive of the Character and Conduct of the Chronometers embarked on board H.M. Surveying Ship Hecate; their final disposal &c. 1857-1864, RGO 6/600/60/542-5.

³⁴⁴ "Regulation of Time by the Electric Telegraph," *Illustrated London News*, 26 June 1852, 516; "The Electric Time-Ball," *Illustrated London News*, 11 September 1852, 204-205; "Electric Time-Ball in the Strand," *The Times*, 19 August 1852, 6; "Illuminated Clocks," *The Observer*, 22 August 1852, 5, "The Electric Time Ball in the Strand,"

1 pm each day the time ball raised to full mast. At 1 pm the signal which dropped the observatory time ball also closed a set of springs allowing a signal to pass from Greenwich to an electromagnet in the Electric Telegraph Company's office and released the time ball above the Strand. An electric clock in the street in front of the company's office had a gaining rate, and automatically stopped at 12:59 to await the 1pm signal from Greenwich that set the clock going again.³⁴⁵



Figure 1 The Electric Time-Ball³⁴⁶

The Observer, 22 August 1852, 7; "The Electric Time Ball and Clock at Charing Cross: Latest Particulars.-Saturday Night," *The Observer*, 6 September 1852, 5; "Something like a Ball," *Punch*, 14 August 1852, 75.

³⁴⁵ Edwin Clark to George Airy, February 27, 1852, RGO 6/611; C. V. Walker, "Telegraphs: Simultaneous Messages and Time-Signals," in Edward Hughes (ed.), *Reading Lessons: Advanced Series*, vol. 3 (London 1856), 324-6.

³⁴⁶ "The Electric Time-Ball," *Illustrated London News*, 11 September 1852, 205 (© Illustrated London News Ltd.; © Cengage, Gale Primary Sources, <https://www.gale.com/primary-sources>).

On the day of the Strand time ball's opening, London newspapers hailed it an achievement of the highest order. *The Times* deemed the plan to drop the ball from Greenwich "one of the most complete improvements of the present day,"³⁴⁷ and yet for eight days after Greenwich time was supposed to have been on display the ball did not move. When the current from Greenwich finally did drop the ball on August 28th it was 28 seconds slow. Despite these setbacks all parties remained optimistic. Edwin Clark wrote to Airy "the public assemble in crowds and the chronometer makers think it a great boon."³⁴⁸ Despite such high hopes, during the first few weeks of operation the signals failed on August 31, September 1, 2, and 10.³⁴⁹ Airy himself saw the failures as a necessary part of any new undertaking. On September 1st he wrote to Clark, "all machinery goes wrong at the same time: and the more heartily it goes wrong at first, the better. So that we are rather fortunate in the ball-failures."³⁵⁰ Several London newspapers including *The Times*, *The Daily News*, *The Standard*, *The Morning Post*, and *The Morning Chronicle* published articles speaking to the accuracy of the time ball and the signal from Greenwich which dropped the ball, while remaining utterly silent on the failures.³⁵¹ In speaking to the reliability of the time signals and the accuracy of the time they distributed, reports emphasized galvanism's ability to replace human actions and to act instantly at a distance. At the same time they also reinforced the importance of replacing human observers with electromagnets. Newspapers presented electrical timekeeping as a rational system understood and perfected by experts. The *Observer* informed its readers that arrangements for

³⁴⁷ "Electric Time-Ball in the Strand," *Times*, 19 August 1852, 6.

³⁴⁸ Edwin Clark to George Airy, 28 August 1852, RGO 6/611/2/168–9.

³⁴⁹ See RGO 6/611/2/174–185.

³⁵⁰ Airy to Edwin Clark, 1 September 1852, RGO 6/611/2/176–7.

³⁵¹ See n. 19. Only the *Ipswich Journal* appears to have contrasted Clark's report with the events at 448 Strand. "The Electric Telegraph Clock and Ball at Charing Cross," *Ipswich Journal*, 11 September 1852.

placing the time ball and clock “under the influence of the voltaic current from Greenwich” were completed “after several days of careful experiments.” “[H]enceforward,” the article claimed, “the inhabitants of the metropolis may confidently rely upon the descent of the Strand time ball simultaneously with that at Greenwich at one p.m.”³⁵² “[F]ailure,” it continued, “is seldom anticipated, as the arrangements made by the company, in conjunction with the Astronomer Royal at Greenwich, and the South Eastern Railway Company, are of so perfect a nature as to ensure unerring success.”³⁵³ By newspaper laudatory accounts the reading public might have perceived that the Astronomer Royal, in conjunction with telegraph engineers, had tamed electricity and rendered true time visible.

Other methods of obtaining Greenwich Mean Time did, of course, exist, but they relied on the labour judgement, perception, and skill of humans. One might observe the sun to determine noon, using a sextant, or a device like E. J. Dent’s Dipleidoscope designed so that anyone could determine mean time by making observations of solar noon. One could also do as was done at Greenwich and observe the transit of stars along a meridian and adjust their clock to mean time according to published equation of time tables and astronomical ephemerides.³⁵⁴ Additionally one might observe the drop of the Greenwich time ball or send someone else with a watch to observe the drop. John Henry Belville, an assistant at Greenwich, began a time service in 1836 that he continued until his death in 1856. Belville carried a chronometer, set to GMT

³⁵² “The Electric Time Ball and Clock at Charing Cross: Latest Particulars.-Saturday Night,” *The Observer*, 6 September 1852, 5. This appears to have been an addendum to a report published on 22 August 1852, also published in *The Times* on 19 August, “The Electric Time Ball in the Strand.”

³⁵³ “The Electric Time Ball and Clock at Charing Cross: Latest Particulars.-Saturday Night,” *The Observer*, 6 September 1852, 5.

³⁵⁴ Edwin Clark to Airy, 28 August 1852, RGO 6/611/2/168–9. Clark used his observations from a transit instrument to test the accuracy of the Greenwich time signal.

according to the Observatory's clock, to various subscribers in London, many of whom would have been chronometer makers. After his death, Belville's wife Maria continued the time service until 1892 when her daughter Ruth took over until 1939.³⁵⁵ Such methods of finding the time depended on people: people carrying watches, people taking observations of the stars and sun, and people converting those observations using the *Nautical Almanac* or equation of time tables to find GMT.³⁵⁶ Both the character of these people and the methods used to produce time influenced the perceived reliability of the standard. If a person did not obtain the time themselves, they had to rely on their trust in others' skill, judgement, and honesty to accept that the measure they used was true GMT. The perceived accuracy of standards of time was a matter of the character and reputation of the people who made them.

Electric clocks and time signals were one instance of an emerging machine ensemble directed at disciplining, restraining, and even erasing human judgements from the production and dissemination of knowledge.³⁵⁷ Electro-mechanical self-registering devices and systems of management appealed to Airy and others for their ability to remove the errors of human judgment and perception which were increasingly coming under the scrutiny of astronomers. As we will see, however, machines also had the ability to rhetorically communicate the personal

³⁵⁵ David Rooney, 'Maria and Ruth Belville: competition for Greenwich time supply', *Antiquarian Horology* 29 (2006), 614–28; The number of subscribers varies and is based only on the Belville's own accounts. According to Ruth, her father had as many as 200 subscribers and her mother 100 (Rooney, 615–17); J. L. Hunt, "Handlers of Time: The Belville Family and the Royal Observatory, 1811–1939," *Astronomy & Geophysics* 40, no. 1 (1999): 23–7. David Rooney, *Ruth Belville: The Greenwich Time Lady* (London: National Maritime Museum, 2008).

³⁵⁶ E. J. Dent, *A Description of the Dipleidoscope or Double-reflecting Meridian and Altitude Instrument; with plain instructions for the method of using it in the correction of time-keepers*, 8th edn. (London, 1867). Dent's device was patented in 1843 and marketed for decades. Thomas Warner, *How to keep the clock right by observations of the fixed stars with a small fixed telescope* (London, 1869).

³⁵⁷ Lorraine Daston and Peter Galison, "The Image of Objectivity," *Representations* 40, 'Seeing Science' (1992): 81–128; Simon Schaffer, "Astronomers Mark Time: Discipline and the Personal Equation," *Science in Context* 2 (1988): 115–145.

authority of select individuals. As Iwan Morus has mentioned of George Wilson's 1855 eulogium of electric clock coordination, "It is worth noting that the only human left in this picture was the 'distant astronomer.'" ³⁵⁸ This was no accident. Airy's efforts to bring galvanism into the production and distribution of GMT intentionally placed questions of trust and credibility solely upon his own character and reliability, rather than on the myriad observers, calculators, and go-betweens who took part in transforming the meridional observations taken on transit instruments at Greenwich into the time displayed on clocks in London and beyond.

No small part of the public appeal of galvanic time was precisely this ability to efface the role of humans in the dissemination of authoritative and accurate measures of time. ³⁵⁹ Newspapers and magazines stressed this point about electric time signals. The *Illustrated London News* emphasized that in this new arrangement humans were taken out of the act of distributing time. At Greenwich and the Strand "the observer... is replaced by an electro-magnet, which unerringly... causes the hour of one o'clock to be announced by the descent of the Balls." ³⁶⁰ The article informed readers that this system which promised automatic simultaneous action, accurate time, and clocks showing the same second was "the first step to the adoption of one time throughout the whole extent of this country." ³⁶¹ A report in the *Observer* similarly speculated that the Electric Telegraph Company intended to establish a uniform standard of time that could

³⁵⁸ Iwan Rhys Morus, "'The Nervous System of Britain': Space, Time, and the Electric Telegraph in the Victorian Age," *The British Journal for the History of Science* 33, no. 4 (2000), 469. "Wherever we choose to stretch the telegraph-wires throughout the length and breadth of the land, we could set up a clock and read on its face the evidence of the care which the far distant astronomer bestowed on his observatory clock." George Wilson, *Electricity and the Electric Telegraph* (London, 1855), 63-64. Quoted in Morus, "Nervous System," 469.

³⁵⁹ Discussing George Wilson's account, quoted above, Iwan Morus notes that "the only human left in this picture was the 'distant astronomer'." Iwan Rhys Morus, "'The Nervous System of Britain': Space, Time, and the Electric Telegraph in the Victorian Age," *The British Journal for the History of Science* 33, no. 4 (2000), 469.

³⁶⁰ "Electric Time Ball," *Illustrated London News*, September 11, 1852, 204-5.

³⁶¹ "Electric Time Ball," *Illustrated London News*, September 11, 1852, 204-5.

be relied upon wherever one travelled. More importantly, the article suggested that such a uniform standard would produce not only synchronized clocks, but synchronized people.

To workmen and mechanics, who sometimes walk considerable distances to their daily employment, it would be most valuable. Indeed it would be the means of inculcating the value of punctuality upon all.³⁶²

Authoritative standards, publicly displayed, would not only end confusion of which measure to trust, but impress the value of time itself on those who used the standard. At the zenith of the Victorian obsession with punctuality, electric time signals and coordinated clocks were a potential source of the very precondition of that value: a shared standard of time. Galvanic clocks regulated by signals from Greenwich were a potential solution to the problem of knowing whose time was correct and, therefore, who was on time.

The problem of disagreeing clocks plagued many mid nineteenth-century Londoners.³⁶³ Confusion about disagreeing clocks had a central role in discussions about the spread of electric clock networks and punctuality was an important part of this conversation. In 1856 the *Daily News* printed an extended editorial lamenting the state of timekeeping in London. Though every church and shop seemed to have a clock, each showed its own time, so that if a Londoner were to “look at a succession of them, they may lose any satisfaction obtained by looking at one; for no two ever, by any chance, agree.” The disagreeing clocks created a mistrust of any clock that a person did not personally know. Just as with trust in other people when faced with differing

³⁶² “Illuminated Clocks,” *The Observer*, August 22, 1852, 5.

³⁶³ “Pulpit Notices,” *Primitive Methodist Magazine* 8 (June 1838): 234-236. “What’s the time?” *Daily News*, 8 July 1856; Royal Greenwich Observatory Archives, Papers of George Airy, Cambridge University Library (hereafter RGO 6), Warren De La Rue, to George Biddell Airy, January 7, 1860, RGO 6/614; E.T. Hargraves, “Railway Time,” *The Times*, August 19, 1884, 10. David Rooney and James Nye, “‘Greenwich Observatory Time for the public benefit’: standard time and Victorian networks of regulation,” *British Journal for the History of Science* 42, no.1 (2009): 5–30.

accounts, trust in clocks was based on personal knowledge and judgements. The solution, according to the *Daily News*, was a system of electric clocks displaying “pure time.” Such a system would promote that “long-established, deeply-ingrained habit of punctuality, or value for time, characteristic of English people.” “Greenwich time,” the article argued, “will be before us whichever way we turn; and the last excuse for unpunctuality will be gone.”³⁶⁴ Only by holding the unpunctual accountable with a single, unified standard could punctuality become a reality.

Such reflections on the power of authoritative and electrically distributed time standards to impress the value of time upon society were by no means rare. Even *Punch*—though perhaps in jest—alluded to the potential benefits of electrically coordinated clocks.

A greater degree of regularity would be observed in our daily engagements, and a man who broke an appointment through unpunctuality, or kept a dinner-party waiting, or wasn't in time for a picnic, or a wedding, would be looked upon as an unsocial monster, who ought to have lived in the days of the slow coaches, and not in a period like the present, when, thanks to electricity, everything goes, or promises to go, exactly, “like clockwork.”³⁶⁵

For many in mid nineteenth-century London, disciplined clocks produced disciplined people. Two decades later, *Chamber's Journal* claimed that without accurate, and therefore authoritative, standards of time it was difficult to know which clock to trust. The ensuing unpunctuality caused untold disorder and waste.

We should probably be astonished could we ascertain how much time is in the aggregate wasted in the kingdom in a single day by want of punctuality, on account of the variation existing between the clocks and watches of different people owing to the want of authoritative standards to which to refer.³⁶⁶

³⁶⁴ “What's the time?” *Daily News*, 8 July 1856.

³⁶⁵ “Electrical Clocks,” *Punch*, 22 November 1851, 228.

³⁶⁶ “Time-signalling,” *Chamber's Journal*, no. 379 (1871), 196. In 1838 the *Primitive Methodist Magazine* suggested readers be at Church 10 minutes before services to account for the varying time of clocks. “Pulpit Notices”, *Primitive Methodist Magazine* 8 (June 1838): 234–6.

Disagreeing standards contributed to the problem of unpunctual people. Only authoritative—read: trustworthy—time standards, publicly displayed, created order, regularity and efficiency.



METROPOLITAN PRIZE PUZZLES. No. 7.

TO KNOW THE RIGHT TIME AT WATERLOO STATION.

Figure 2 To Know the Right Time at Waterloo Station³⁶⁷

The laments contained in the *Daily News*, *Chambers*, and *Punch*'s cartoon of 1883 (figure 2) which showed a cacophony of times on display illustrates that uniformity was by no means swiftly achieved after Airy's establishment of the Greenwich time signals in 1852. More importantly, they also reveal that differing time standards were a social problem for middle-class Britons. Airy himself also clearly understood his work at the Observatory as contributing to the

³⁶⁷ "Metropolitan Prize Puzzles. No. 7," *Punch*, 18 August 1883, 77 (© Punch Limited; © Cengage, Gale Primary Sources, <https://www.gale.com/primary-sources>).

moral imperative of time-thrift and punctuality. While disciplined clocks might produce disciplined people, at Airy's Greenwich, the latter produced the former. In seeking to inculcate punctuality through authoritative standards of time, Airy was in fact seeking to spread the very values upon which the Observatory itself operated and upon which its reputation—and that of its measures—depended.

4.3 Credit, Trust, and the Marketplace

By the mid-nineteenth century punctuality, doing something at the appointed time, appeared as a subject of concern in a wide range of texts and contexts from novels to sermons, pamphlets, magazines, and newspapers. Employers sought to improve the punctuality of workers, and as shown in chapter five passengers railed against the unpunctuality of trains, while moralists preached the importance of cultivating this virtue. Sermons, didactic texts, essays, magazine articles, and books of all genres promoted the importance of being on time and the grave consequences of wasting both one's own and another's most precious possession by being late. Participants in this discourse emphasized the need for punctuality and order for success in business, a proper family, and to guide one in matters of faith. Sermons and essays extolling the value of time continued to appeal to Christian piety and the regularity observed in God's creation. Moralists claimed that punctuality could be observed in nature, in the rising and setting of the sun, and in the regularity of the apparent motion of the stars. The *Evangelical Magazine* reminded those of its readers "who neglect punctuality either in their families, their business, or their devotions... that Jehovah is the God of order, and expects and commands all to be followers of him."³⁶⁸ Regularity and order were divine, and *the* virtuous ideal for the true Christian.

³⁶⁸ "On Punctuality," *Evangelical Magazine and Missionary Chronicle* 3 (September 1825), 371–2.

To be punctual is to do as would be done by; for who likes to be kept waiting?
Punctuality is the best of economy; for what have we that is so precious as time?
Punctuality is part of piety towards God; for of what gift shall we be called to give
so strict account as of those hours without which no other gift can be exercised at
all?³⁶⁹

Even in accounts meant to invoke Christian duty, allusions to time as a commodity narrated the importance of punctuality. Time was precious, a gift from God not unlike the gifts of charity which narrated indebtedness and social dependence.³⁷⁰ Accounting for one's use of this gift through economy, activity, and punctuality demonstrated one's character and piety.

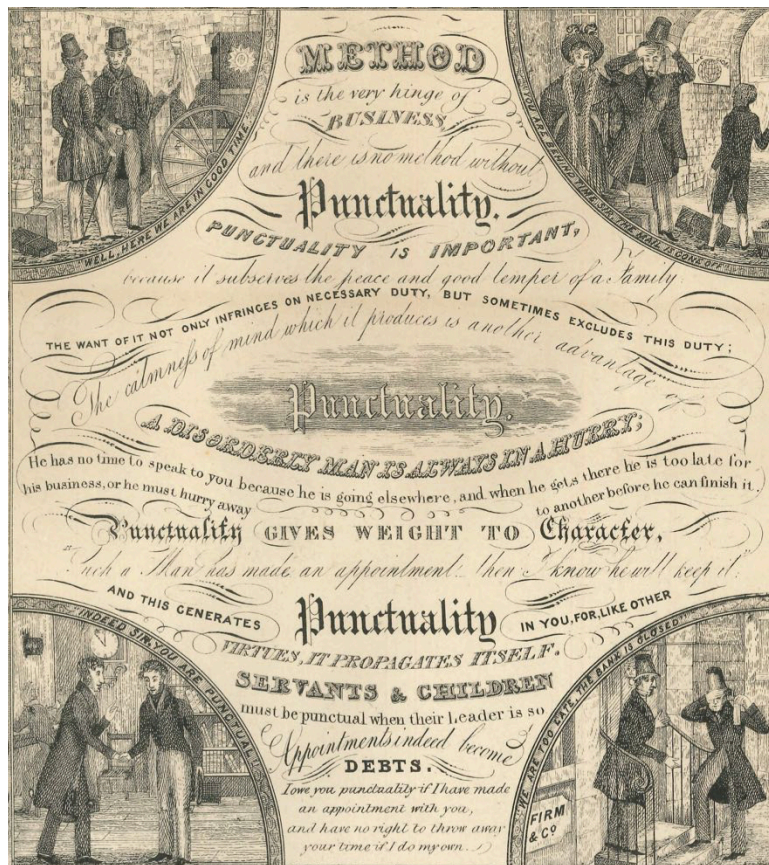


Figure 3 Importance of Punctuality.³⁷¹

³⁶⁹ "On Method and Punctuality," *The Primitive Methodist Magazine* 8 (May 1838), 188.

³⁷⁰ On gift-giving and social dependence see Margot Finn, *The Character of Credit: Personal Debt in English Culture, 1740–1914* (Cambridge: Cambridge University Press, 2003), 81–9.

³⁷¹ Charles Ingrey, *The Importance of Punctuality*, c. 1837 (this is a digital reproduction of an original copy owned by the author).

Punctuality continued to represent the creditworthy man of business. Journals and newspapers repeatedly extolled the maxim Richard Cecil had attributed to Hannah More, “Method is the very hinge of business, and there is no method without punctuality.” Magazines published for everyone from Anglicans and Methodists to bankers, mechanics, and labourers, printed and reprinted the tract in which Cecil argued that observing punctuality saved time, gave “weight to character,” and as with other virtues could be impressed upon others by example. Punctuality was something that one owed to another. “Appointments,” he claimed, “become debts: I owe you punctuality, if I have made an appointment with you; and have no right to throw away your time if I do my own.”³⁷² In matters of business especially, punctuality stood in as a mark of trust, reliability and character.³⁷³ In the 1830s the lithographer Charles Ingrey (*fl.* 1824–39) set Cecil’s words in print surrounded by images depicting the consequences of unpunctuality against the profits of punctuality (figure 3). Illustrations such as this were promoted in places of employment in order to inculcate the importance of punctuality in employees, whether they be clerks or artisans. Effingham Wilson advertised the lithograph as suitable “For Counting-houses, Warehouses, Shops” and “Heads of Families, Societies, Legal and Commercial Establishments.”³⁷⁴

³⁷² Josiah Pratt, *The Life, Character, and Remains of the Rev. Richard Cecil* (London, 1811), 344–5; “On Punctuality,” *Church of England Magazine* 7, no. 189 (19 October 1839), 262; “Punctuality,” *The Churchman’s Monthly Penny Magazine* 1 (1847), 217; “Punctuality,” *The London Journal* 5, no. 121 (June 1847), 255. Labourer’s Friend Society, *A second series of useful hints for labourers* (London, 1849), 118–119; James Montgomery, *Gleanings from Pious Authors* (London, 1854), 81; “On Method and Punctuality,” *The Primitive Methodist Magazine* 8 (May 1838), 188.

³⁷³ “A word to Young Men,” *Chambers Edinburgh Journal* (April 1836), 84.

³⁷⁴ *Morning Post*, 1 November 1837, 1; “The Importance of Punctuality Enforced,” *Athenaeum*, 8 October 1842, 880. The *Literary Gazette* reviewed Ingrey’s print as “Admirable as a moral lesson, if not very commendable as a work of art.” “Importance of Punctuality,” *Literary Gazette*, 21 October 1837, 676.

No better example of this nineteenth century culture of punctuality might be found than Sarah Jane Stansfield's extended meditation simply titled *Punctuality* (1859). Punctuality, she argued, was neglected "by the worthless, slothful, and careless; the street stroller, the intemperate man, the gambler; and many other characters too numerous to mention."³⁷⁵ According to Stansfield, punctuality was a moral imperative:

If Punctuality were more general, there would not be the poverty, sorrow, and distress, that is continually manifested. Regularity of occupation and pursuit is sure to produce plenty, peace, and prosperity. Punctuality and success are inseparable; sobriety, order, and regularity must have their reward.³⁷⁶

Punctuality, order, and regularity represented the proper management of oneself, family, business, and religion. Unpunctuality, disorder, and irregularity bred financial ruin, insobriety, irreligion, and an unhappy home. While punctuality symbolized the order, regularity, and system of the trustworthy man of business, this moral emphasis on management, self-regulation, and time-discipline in personal affairs could weigh on evaluations of the reliability and trustworthiness of knowledge.

Airy was renowned for his embodiment of these values. Order was, according to Airy's posthumously published *Autobiography*, "the ruling feature of his character."

In everything he was methodical and orderly, and he had the greatest dread of disorder creeping into the routine work of the Observatory, even in the smallest matters. As an example, he spent a whole afternoon in writing the word "Empty" on large cards, to be nailed upon a great number of empty packing boxes, because he noticed a little confusion arising from their getting mixed with other boxes containing different articles.³⁷⁷

³⁷⁵ Sarah Jane Stansfield, *Punctuality* (London: Thickbroom Brothers, 1859), 176.

³⁷⁶ Stansfield, 191.

³⁷⁷ George Airy, *The Autobiography of George Biddell Airy*, ed. Wilfrid Airy (Cambridge: Cambridge University Press, 1896), 2.

Though Airy's penchant for methodical account-keeping might seem extreme, the social and economic context of early nineteenth-century England and the events of his youth illuminate some reasons why order and method dominated his conduct. His father's training as an excise officer may have impressed the values of accuracy and exactness on a young George Airy, and his father's professional and financial misfortunes may have compounded these lessons. His *Autobiography* described his father, William Airy (1775–1827), as “a man of great activity and strength, and of prudent and steady character.”³⁷⁸ He had worked as a foreman on a farm in Lincolnshire, saving his wages to educate himself. Through this “self-improvement” William Airy eventually obtained a position as an excise officer Northumberland (1800), Hereford (1802), and then as the Collector of Excise in Essex (1810) at which point the family moved to Colchester. In 1813, however, when George Airy was just 12 years old, William suddenly lost his position in the excise, and as a result was “very much straightened in his circumstances.”³⁷⁹ Historian Allan Chapman who has similarly noted that the experience may have influenced Airy's “bureaucratic punctiliousness” surmises that William may have been the collector of taxes accused of stealing £600 in 1813.³⁸⁰

Although a brief report on the incident in the *Ipswich Journal* on 4 September 1813 did not mention Airy's father by name, he was certainly implicated in the affair. According to the paper a parishioner had spotted the collector of taxes on the London road the day half the year's tax payment was due to the Receiver General. When asked why he was not supervising the payment the collector replied, “Business in London” and noted that he had paid the Receiver

³⁷⁸ Airy, *Autobiography*, 14.

³⁷⁹ Airy, *Autobiography*, 15, 17.

³⁸⁰ Allan Chapman, *The Victorian Amateur Astronomer: Independent Research in Britain, 1820–1920* (New York: John Wiley and Sons, 1998), 15, 309, n. 14.

General's banker. Apparently, no receipt of the payment existed, the collector had vanished, and the parishioners would need to repay the £600. The affair, warned the article, should act as "a caution to other parishes in the appointment of Collectors of Taxes."³⁸¹ Airy's published *Autobiography* remains remarkably silent on the affair noting only that his father lost his position and it created financial hardship. However, in a manuscript of the "Family History of G. B. Airy," George Airy left a brief reference to the event which was omitted from the *Autobiography*. After "alluding to the great change in the fortunes of [his] family" Airy recorded the following:

When my father returned from the Round, there was, I (suppose), a large sum to be paid into the London Excise Office. And this was effected by the Senior Clerk of Alexander's Ipswich Bank, passing through Colchester (I suppose) by an interrupted course of coaches, and going to London by the night-mail. (The Clerk's surname was "Colchester", and he was known as "Old Ben Colchester".)³⁸²

Whether Airy sought to cast blame on Benjamin Colchester—who did not appear to lose his position at the bank—is unclear as several pages are missing from the manuscript immediately following the extract above.³⁸³ His father may not have "absconded" with the money as the *Ipswich Journal* supposed, nor might he have been under suspicion. The crime, grand larceny, would have carried the death penalty until 1823.³⁸⁴ Perhaps one of William Airy's subordinates

³⁸¹ "Friday's Post," *Ipswich Journal*, 4 September 1813. Airy's father was listed as the only collector of excise for Essex in 1813, and was replaced by Thomas Latten in 1814. See B. Capper, *The British Imperial Calendar and Civil Service List, 1813* (London: Winchester and Son, 1813), 184; *The Royal Kalendar, 1813* (London: J. Stockdale, 1813), 263; *The Royal Kalendar, 1814* (London: J. Stockdale, 1814), 263.

³⁸² "Family History of G. B. Airy," CUL, Ms Add. 9383/1/42/24, Family History Papers, George Biddell Airy. Airy earlier mentioned a clerk in his father's office, C. Mason, and four men calling on business. Unfortunately several pages of this manuscript are missing immediately following this quoted passage.

³⁸³ Ben Colchester appears to have remained in Ipswich at the bank: "Deaths," *Gentleman's Magazine*, 88 (November 1818), 467; *Names and Descriptions of the Proprietors of Unclaimed Dividends on Bank Stock, and on All Government Funds and Securities, Transferable at the Bank of England* (London: Teape and Jones, 1823), 482.

³⁸⁴ Judgment of Death Act, 1823, 4 Geo. 4, c. 48.

had not delivered the payment as directed, and presumably had his father produced a bill accounting for the deposit at the bank he would have been cleared of any wrongdoing. Whether the funds were recovered, or whether someone was held criminally responsible for the theft is unknown, but William, at the age of 63, had lost his job, and with reports of the theft having reached the London papers, his reputation and trustworthiness must have been materially damaged.³⁸⁵ While the *Ipswich Journal* interpreted the instance as a warning about the kinds of persons who could be trusted to collect—and, crucially, to submit—a parish's taxes, for young George Airy it likely stood as a reminder of the paramount importance of strict record keeping to defend oneself from accusations of wrongdoing.

The social world of Airy's youth was heavily steeped in the praise of industry, accountancy, and credit. His introduction to arithmetic, Francis Walkingame's *Tutor's Assistant*, taught mathematics through examples of profit and loss, debts, payments, discounts, interest, and the multiplication, addition, and subtraction of myriad commodities.³⁸⁶ Around the time that William Airy lost his position in the Excise, young George Airy began to form a close bond with his maternal uncle Arthur Biddell, the wealthy Suffolk farmer. Reflecting on his close relationship with Biddell, at whose home he would spend a third of the year from 1812 until he entered Cambridge in 1819, Airy noted the significant "influence... on my character and education." Biddell perhaps represented an example of good management to Airy; his copious and meticulously kept account books were the source of George Ewart Evans' history of Suffolk farming, *The Horse and the Furrow* (1960).³⁸⁷ Through Biddell's mentorship Airy became

³⁸⁵ *Times*, 6 September 1813, 3.

³⁸⁶ Francis Walkingame, *The Tutor's Assistant*, 33rd edn (London: C. Whittingham, 1806).

³⁸⁷ George Ewart Evans, *The Horse and the Furrow* (London: Faber and Faber, 1960).

acquainted with the abolitionist Thomas Clarkson and a community of Quaker businessmen to whom Biddell was related by marriage and who would have a formative influence on Airy. Airy would later hire the iron founders Robert and James Ransome to build a number of astronomical instruments of his own design for the Royal Observatory. He maintained a relationship with the Ransomes' chief engineer William Cubitt, who invented the prison treadmill, and travelled to Bury St. Edmunds in 1827 to see one installed at the Bury gaol. Clarkson, himself a Cantabrigien, examined Airy at the behest of Biddell, and ultimately determined that Airy should attend Trinity College.³⁸⁸

Frequent references in Airy's *Autobiography* to finances, debts, obligations, loans, and one mention of his "father's parsimonious habits" reveal a pattern of self-fashioning consistent with the importance of social and economic credit in nineteenth century Britain. As Margot Finn explains, creditworthiness was a fluctuating representation of the self that did not necessarily reflect a person's finances, but rather a person's character.³⁸⁹ Social status, spending habits, dress, and family life were all measures by which creditors judged a person's character and credit. Giving and receiving loans or financial gifts among family, friends, or neighbours entailed a social hierarchy of dependence, servility, and obligation.³⁹⁰ Maintaining a level of financial independence from charitable gifts and loans was a way to maintain social status. Airy entered Cambridge a sizar (a student who received some financial support, usually in exchange for work) which potentially placed him in a subordinate position, and he was quick to note that his intellectual abilities had earned him a "considerable reputation" which preceded his arrival at

³⁸⁸ Airy, *Autobiography*, 21.

³⁸⁹ Finn, *Character of Credit*, 21.

³⁹⁰ Finn, 84–5, 103.

Cambridge. Airy recorded that he was able to forgo his uncle Arthur Biddell's offer of a loan and noted the point at which he became self-sufficient in 1820 by taking on the work of tutoring others while still a student at Cambridge: "I felt that I was now completely earning my own living. I never received a penny from my friends after this time."³⁹¹ Establishing his independence was of paramount importance to constructing a respectable social identity. As John Tosh argues, independence was a "cardinal feature" of masculinity, which informed judgements about respectability and character for middle-class men. The ability to earn an independent, honest living, and to support dependents, in a world of fluctuating and risky markets was a central feature of how men understood themselves, and each other.³⁹² Independence also represented the ability to be one's own master, to be free from influence and beholden to others.

A further example illustrates how significantly the issues of creditworthiness and trustworthiness reigned in Airy's early life, and which surely reinforced his penchant for accurate record and account keeping. In his *Autobiography* Airy noted that his father had lent £500 to a Mr. Cropley. During the time Airy was working as an assistant mathematical tutor at Cambridge, 1826 he noted that Cropley's "affairs were in Chancery"—he was being sued for non-payment of debts. This "troublesome business" generated "a great deal of correspondence" for Airy just as he was in the midst of his pendulum experiments at the Dolcoath mines.³⁹³ Weeks of

³⁹¹ Airy, *Autobiography*, 23, 29.

³⁹² John Tosh, "Masculinities in an Industrializing Society: Britain, 1800–1914," *Journal of British Studies*, 44, no. 2 (2005), 335. John Tosh, *A Man's Place: Masculinity in the Middle-Class Home in Victorian England* (New Haven: Yale University Press, 1999), 109–111; For similar themes in the colonial context see John Tosh, *Manliness and Masculinities in Nineteenth-Century Britain* (Toronto: Pearson Longman, 2005), 181.

³⁹³ Airy, *Autobiography*, 69–71. George Biddell Airy, "Account of Pendulum Experiments undertaken in the Harton Colliery," *Philosophical Transaction of the Royal Society of London* 146 (1856), 298–99.

experiments unfortunately taught Airy a difficult lesson about supervision. As the instruments were raised from the mine for a final comparison, Airy watched as they surfaced on fire and his “labour was now rendered useless.”³⁹⁴ Airy surmised that the cause may have been a superstitious miner or improper packing; either way, the work had been unsupervised. Departing these failed experiments at the end of June he arrived in Bury, where he visited Cropley in prison on 3 July, no doubt seeing the prison treadmill installed there by Cubitt in 1819. Although much of William Airy’s loan had already been repaid through the sale of Cropley’s property, in February 1827, at the request of his mother, Airy went (after attending a meeting of the Board of Longitude) to visit Cropley in Fleet Prison where he was now imprisoned for contempt of the Chancery.³⁹⁵

The loan to Cropley had threatened the Airys’ financial security through Cropley’s inability to meet his obligations. This had consequences down the chain of credit, and as Airy may have meant to insinuate, his father’s health and mind were much affected by the “troublesome business.” Interestingly he instructed the family’s lawyer Philip Case that they “wished to give [Cropley] every accommodation” and that they “did not wish to press Mr. Cropley for payment of the money.”³⁹⁶ He also asked Case to comply with Cropley’s request to call off the officer, who was probably keeping Cropley prisoner, and to take up new securities in the matter if needed. Perhaps this move was due to Cropley’s social position coming from a family of Cambridge men, or as with Airy’s visits to prison, they may have been intended to

³⁹⁴ Airy, *Autobiography*, 67–9.

³⁹⁵ It was Cropley’s siblings who appear to have initiated the suit which led to his imprisonment, and eventual death, at Fleet Prison in December 1827. *Return of Persons confined for Contempt in Fleet Prison*, 1820–26, H.C. 143 (1826–7), 32; “Deaths,” *Chester Chronicle*, 28 December 1827, 3.

³⁹⁶ George Airy to Philip James Case, 28 February 1826, RGO 6/805/113.

reduce Cropley's burdens and increase the likelihood of repayment. His willingness to grant Cropley some reprieve likely reflected a wider understanding of the marketplace as inherently risky, and a dual interpretation of credit and debt through which one's indebtedness could be seen both as a moral failing or a result of prodigality, but equally as a result of the predatory character of some creditors.³⁹⁷

It may have been through these personal experiences that Airy learned the importance of record-keeping and strict surveillance. Each became a central aspect of Airy's management of the Greenwich Observatory: orders were frequently given in writing; he saved, organized, and archived an enormous amount of correspondence; and he surveilled his subordinates through a series of systems, machines, and human overseers. As Airy well knew, the early nineteenth-century marketplace was inherently risky. Complex webs of indebtedness meant that one could end up in debtor's prison despite one's best efforts. An unwise loan or an unpaid debt could lead to physical and financial hardship, an unwritten or verbal order could be denied or refuted, and unsupervised work could be ruined by an untrained or undisciplined subordinate. Without proper management—quite literally demonstrated by Airy's pendulum experiments—the product of one's labour could turn to ash. Vigilant surveillance, meticulous record-keeping, economy, and sound judgement of others defended against the potential threats to profit in business, but also, importantly, reliable knowledge in science.

4.4 The Science of Order: Dividing Labour and Ordering Accounts

The values of the prudent and profitable actor in the marketplace directly impinged upon the production of scientific knowledge in nineteenth century Britain. This was particularly the

³⁹⁷ Finn, 100–102.

case for astronomy, whose products—reliable star charts for global navigation—were absolutely fundamental to the safe global transportation of the British Empire’s commodities and the source of Britain’s, and its middle-class’s, wealth. As historian William Ashworth has shown, according to the group of reforming astronomers he termed the “business astronomers,” reliable knowledge required a fundamental transformation of how information should be obtained, compiled, and published. These astronomers and founding members of the Astronomical Society (1820) inhabited both the world of commerce and science, working to make financial profit and astronomical knowledge more ordered and efficient and less speculative and risky. They included merchants and actuaries, the stockbrokers Francis and Arthur Baily, James South—the son of a wealthy druggist—who had established a private observatory with his wife’s inherited fortune, and two Cambridge graduates Charles Babbage, the son of a wealthy banker, and John Herschel, son of the famous musician, instrument maker, and astronomer William Herschel.³⁹⁸ Airy epitomized the spirit of these business astronomers, and had joined their reforming ranks by the late 1820s. He had achieved the prestigious title of Senior Wrangler in the grueling Cambridge mathematics Tripos (1823)—as Herschel had done 10 years earlier—and in 1826 joined Herschel on the Board of Longitude at the young age of 26 when he became Lucasian Professor and afterwards Plumian Professor at Cambridge. He joined the Astronomical Society in 1828, and in 1831 became a member of the Greenwich Observatory’s recently reformed—at the suggestion of the newly minted Royal Astronomical Society—Board of Visitors.³⁹⁹

³⁹⁸ William J. Ashworth, “The Calculating Eye: Baily, Herschel, Babbage and the Business of Astronomy,” *British Journal for the History of Science* 27, no. 4 (1994): 434, 428.

³⁹⁹ He won the society’s Gold Medal in 1833 and 1846 and in 1835, the same year he took up the post of Astronomer Royal at Greenwich, became the Society’s 7th President.

Through the business astronomers' efforts the values of the factory or the bank became the same as the astronomical observatory: "vigilance, calculation, precision and accurate accounting."⁴⁰⁰ In seeking to rescue astronomy from inefficiency, speculation, irregularity, and poor management, the business astronomers took aim at the management of Royal Society and the Board of Longitude (1714–1828) which printed the *Nautical Almanac* since 1767.⁴⁰¹ The Almanac had been the subject of no small controversy since the late 1810s when some 50 errors were discovered in its figures. Airy recalled the 5 April 1827 meeting of the Board at which Herschel presented a paper on the *Nautical Almanac*, noting that he and Herschel "were in fact the leaders of the reforming party in the Board of Longitude: Dr Young the Secretary resisted change as much as possible."⁴⁰² In his paper Herschel claimed that the *Nautical Almanac* was "essentially defective" insofar as it was supposed to be an *Astronomical Ephemeris* as stated in its full title. It was missing much of the information astronomers needed and what information it did present "it does not give in that simple and direct manner which their calculations and uses demand."⁴⁰³ In closing his report, Herschel urged "the necessity of stating distinctly the tables and authorities depended on in every calculation,... and that not loosely, but with express notice of any equations omitted in their use, and the corrections made in them. Not to do this, is to deprive ourselves... of all the confidence which such unreserved publicity is calculated to inspire." Information should not be private, but public to permit "repetition and verification... by assiduous and investigating persons."⁴⁰⁴ Drawing out the very real consequences of defects in

⁴⁰⁰ Ashworth, "Calculating Eye," 410, 436.

⁴⁰¹ Ashworth, 411, 431–4.

⁴⁰² Airy, *Autobiography*, 74–5.

⁴⁰³ John Herschel, in *Memorials or Reports on Nautical Almanack or Board of Longitude*, H.C. 91 (1829), 3–6.

⁴⁰⁴ Herschel, 6.

nautical almanacs, Herschel would later write in defence of Babbage's calculating engine "An undetected error... is like a sunken rock at sea yet undiscovered, upon which it is impossible to say what wrecks may have taken place."⁴⁰⁵ Elsewhere Herschel charged that the *Nautical Almanac* was in a "loose, irregular, and troublesome state... from their practice of not having been systematized."⁴⁰⁶ Astronomical observations and business accounts alike had to be organized, standardized, monitored, and published so that they could be easily read, compared, and used to produce reliable conclusions.⁴⁰⁷

For the business astronomers, introducing standardized tables, mechanization, and the division of labour to banks, assurance companies, factories, and meridian astronomy was primarily about the effects of system and method. They offered efficiency, reduced errors, and increased control over the production process. The result was steady and predictable accumulation, but also importantly trust in one's accounts. As Ashworth notes "credit-worthiness in science as in business was based on a person's character, proven record and set of accounts."⁴⁰⁸ While an individual's character was important and could be judged by their "probity and punctuality," increasingly judgements about others' scientific claims rested on how their results were collected and analyzed.⁴⁰⁹ Systems and machinery produced transparent, reliable, and trustworthy accounts. Unsurprisingly the economy of time was also a crucial concern. According to Francis Bailey, reliable calculating tables not only prevented errors but

⁴⁰⁵ Sophie Waring, "The *Nautical Almanac*: instrument of Controversy," in A. Craciun, S. Schaffer (eds.), *The Material Cultures of Enlightenment Arts and Sciences* (London: Palgrave Macmillan, 2016), 105.

⁴⁰⁶ Herschel, quoted in Ashworth, "Calculating Eye," 433.

⁴⁰⁷ Ashworth, "Calculating Eye," 416, 437, 424–5.

⁴⁰⁸ Ashworth, 425.

⁴⁰⁹ William Ashworth, "John Herschel, George Airy, and the Roaming Eye of the State," *History of Science*, 36 (1998), 155.

saved time and labour.⁴¹⁰ Babbage, whose calculating engine was designed to remove the error of human computers and accelerate the calculating process, had claimed that all the benefits derived from introducing machinery in factories could be considered as economizing time. He wrote in his *On the Economy of Machinery and Manufactures* (1832) that “the whole history of invention has been a struggle against time.”⁴¹¹

Mechanization, the division of labour, and strict accounting epitomized the culture of punctuality inside the world of business and astronomy. For the factory owner and the astronomer alike, these methods entailed oversight, control and efficiency. Systems of management which employed these methods also “impressed the labour process with the employer’s authority.”⁴¹² System reduced errors and permitted greater oversight of mere observers and calculators by the manager-scientist. Nowhere was this more clear than at George Airy’s Greenwich where, beginning in 1835, he introduced the division of labour, skeleton forms, mechanized observation, rigid surveillance, routine publication of the Observatory’s activities and results, and the creation of a vast storehouse of accounts that could be—and were—published to defend his management, integrity of the Observatory, and the knowledge produced there.⁴¹³

⁴¹⁰ Ashworth, “Calculating Eye,” 415. In 1823 Babbage claimed that all the benefits derived from introducing machinery in factories could be considered as economizing time and he would later write that “the whole history of invention has been a struggle against time.”

⁴¹¹ Charles Babbage, *Economy of Machinery and Manufactures*, 6; Babbage in *Memoirs*, cited in Simon Schaffer, “Babbage’s Intelligence: Calculating Engines and the Factory System,” *Critical Inquiry* 21, no. 1 (1994), 209.

⁴¹² William Ashworth, “England and the Machinery of Reason 1780 to 1830,” *Canadian Journal of History* 35 (April 2000), 30.

⁴¹³ Robert Smith, “A National Observatory Transformed: Greenwich in the Nineteenth century,” *Journal for the History of Astronomy* 22, no. 1 (1991), 13–17. George Airy, *Report of the Astronomer Royal to the Board of Visitors*, 5 June 1852, 12, RGO 17/1/1, RGO 17/1/1.

Airy's management stood out when compared with that of John Pond, who came under scrutiny for errors in the Greenwich Observations and had admitted his own laxity as a manager.⁴¹⁴ Airy's contemporaries and historians alike have compared the Greenwich regime to either a factory or a Whitehall office.⁴¹⁵ The Scottish physicist James Forbes told Airy that he had "given to Greenwich Observatory such a Systematic Character, that, regarded merely as a system of work, it deserved to be generally known & appreciated."⁴¹⁶ Forbes told readers of the *Edinburgh Review* in his 1850 essay on the Greenwich Observatory that "the national astronomer is responsible for the character of his observatory."⁴¹⁷ The mathematician Augustus DeMorgan wrote in 1847 to William Whewell, master of Trinity College, who coined the term scientist:

You shall rank next to Airy for extreme method—Unto him you cannot come—
For I am satisfied that whenever he takes a lone bit of paper to try if his pen will
work, he presses it against another bit of paper in the copy machine, punches a
hole in it, passes a bit of string through it, and files it with a date—in case it
should be moved from in the house.⁴¹⁸

While perhaps intending to elicit some humour, DeMorgan's comment rings true. Airy's "extreme method" accounts for the massive archival collection he amassed during his tenure as Astronomer Royal. Using the copying press he purchased in 1836 after seeing its "utility... in merchant's offices," Airy made copies of his outgoing letters so that the record of his daily correspondence is—to use his own words—"exceedingly perfect."⁴¹⁹ He arranged this correspondence according to subject and date, placed incoming and outgoing letters alongside

⁴¹⁴ Eric Forbes, *Greenwich Observatory*, 3 vols (London: Taylor & Francis, 1975), vol. 1, *Origins and Early History (1675–1835)*, 166–171; Marie Boas Hall, *All Scientists Now: the Royal Society in the nineteenth century* (Cambridge: Cambridge University Press, 2002 (1984)), 30–1.

⁴¹⁵ See Smith, "A National Observatory Transformed."

⁴¹⁶ James Forbes to George Airy, 21 May 1849, RGO 6/371/9/56–7.

⁴¹⁷ James Forbes, "National Observatories: Greenwich," *The Edinburgh Review* 91 (1850), 341.

⁴¹⁸ De Morgan to Whewell, 18 March 1847, quoted in Ashworth, "Roaming Eye of the State," 163.

⁴¹⁹ Airy, *Autobiography*, 123.

one another, and had them bound into volumes. His penchant for record keeping led him to even save the handwritten orders to the binders which can be found at the front of volumes.⁴²⁰ The resulting collection constitutes twelve meters of shelf space and contains a detailed image of the Observatory's daily work. Airy's commitment to meticulous record-keeping and surveillance of those he managed reflect a superintendent who was working to uphold his reputation and that of the institution he served.

Airy embodied the values of punctuality, order, and method. At Greenwich, he enforced a system of work which reflected his character and made his name synonymous with the Observatory. He, himself, called astronomy "the science of order."⁴²¹ The proper functioning of the Observatory and trust in the measures it produced depended heavily on the system of management. Order, method, and punctuality informed a crucial part of the "rigid discipline" upon which "the efficiency of the Observatory unquestionably depended."⁴²² Notes and rules enforcing and establishing this disciplinary regime of the observatory punctuate Airy's carefully constructed records. As Airy wrote in an 1860 manuscript outlining the duties of the First, or Chief, Assistant "The Strictest personal subordination, and the most rigorous punctuality, are indispensable."⁴²³ Later Airy would spell out in more detail his strict policy on the management of time. Not only was the Assistant "liable to be called on at any time (Sundays as well as week-days)," but the position of the Chief Assistant demanded that all one's own time be forfeited to the Observatory. "His whole time is to be considered as belonging to the Observatory. No

⁴²⁰ See for example RGO 6/614, where the binding instructions were torn up, and glued back together on the back of an advertisement for theological books.

⁴²¹ Ashworth, "Roaming Eye of the State," 160.

⁴²² Airy, *Autobiography*, 2, 8.

⁴²³ George Airy, "Notes on the Duties of the First Assistant," 14 September 1860, RGO 6/4/18/422-3.

engagement whatever is to be made by him which can bind him in respect of time.”⁴²⁴ If this was the kind of discipline Airy expected from the person he deemed his “confidential Assistant and alter ego and complete representative,”⁴²⁵ one wonders at the kind of rigid rules for the rest of the Observatory staff.⁴²⁶ In describing the working hours of an open position at the Observatory, Airy stressed the importance of arriving on time, stating “the most punctual attendance is necessary. The daily attendance in the computing Room is from 9 (most punctually) to 2.”⁴²⁷ Writing to Robert Main about taking the position of chief assistant at Greenwich, Airy characterized the duties as “more like those of a head-clerk in a bank than any other that I can compare them with; and, as in a bank or a manufactory, punctuality and regularity in a routine of very dull business are quite indispensable.” He referred to the regular hours spent at the observatory as “confinement,” but noted that he might reasonably call for Main’s attendance at any other time: “your whole time must be at my command if I chuse to call for it.”⁴²⁸

Airy’s “rigid discipline arising out of his system of order,” as his son Wilfrid put it, has been preserved in the bound manuscript volumes which contain what Airy termed “Occasional Orders to Assistants.” The nature of these brief notes range from “irregularities” such as leaving doors open that should otherwise have been locked, to an assistant’s “troublesome” habit of whispering constantly while doing the computing work.⁴²⁹ Airy’s surveillance and management extended down to dictating the length of string used to tie up bundles of papers—a minimum of

⁴²⁴ George Airy, “Regulations for the Chief Assistant of the Royal Observatory, Greenwich,” 2 September 1870, RGO 6/43/5.

⁴²⁵ George Airy to William Hopkins, 5 April 1859, RGO 6/4/16/312–3.

⁴²⁶ Alan Chapman, “Porters, watchmen, and the crime of William Sayers: the non-scientific staff of the Royal Observatory, Greenwich, in Victorian times,” *Journal of Astronomical History and Heritage* 6, no. 1 (2003): 27–36.

⁴²⁷ George Airy to William Hopkins, 5 April 1869, RGO 6/4/16/312–3.

⁴²⁸ George Airy to Robert Main, 23 August 1835, RGO 6/1/15/321–2.

⁴²⁹ See RGO 6/38, Occasional Orders to Assistants, 1853–1854.

six inches should be used to form the loop.⁴³⁰ Unsurprisingly, among the notes are reprimands for arriving too late or leaving too early. In 1853 Airy instructed J. W. Breen to simply “Keep a character for punctuality.”⁴³¹ In the same year he told Mr. Criswick “always to be ten minutes too early.”⁴³² In at least one instance Airy fined an employee for arriving late, and fired one artisan for being “extremely unpunctual.”⁴³³ Even William Christie, a Cambridge wrangler, and chief assistant at Greenwich from 1870 until he replaced Airy as Astronomer Royal, was instructed by one of Airy’s notes to be early to the Observatory each morning.⁴³⁴

When it came to time even the most senior and respected subordinates were subject to what Airy deemed “a point of discipline.” In 1874, one of these “orders” crossed the line for the senior assistant James Glaisher, when Airy reminded him that he was not supposed to leave the Observatory before 2pm. Glaisher had first worked under Airy as an assistant at the Cambridge Observatory, and then followed Airy to Greenwich in 1835, where in 1838 he became the superintendent of the meteorological department. Glaisher was a recognized man of science in his own right, having joined the Royal Astronomical Society (1841), been elected a fellow of the Royal Society (1849), and founded the Meteorological Society (1850). During the 1860s Glaisher became something of a scientific celebrity when he made a series of daring high altitude balloon ascents to record meteorological data.⁴³⁵ Despite his public reputation, at Greenwich he

⁴³⁰ George Airy to Carpenter, 22 June 1863, RGO 6/40/234.

⁴³¹ George Airy to J. W. Breen, 22 March 1853, RGO 6/38/10.

⁴³² George Airy to Criswick, 30 August 1853, RGO 6/38/87.

⁴³³ Chapman, “Porters, Watchmen,” 31; William Thomas Ginn, “Philosophers and Artisans: The Relationship Between Men of Science and Instrument Makers in London 1820–1860” (PhD diss., University of Kent at Canterbury, 1991), 237.

⁴³⁴ George Airy to William Christie, 24 October 1870, RGO 6/41/36.

⁴³⁵ “James Glaisher,” *Monthly Notices of the Royal Astronomical Society*, 64 (1904), 280–7; *ODNB*. On one of these ascents in 1862 he set the world record for altitude, but lost consciousness, while his co-pilot who had lost the use of his limbs due to the altitude opened the release valve with his teeth which allowed them to descend safely.

remained a subordinate and subject to discipline. He learned this in September 1874 upon receiving the note from Airy reminding him not to leave the observatory before 2pm. Glaisher replied the same day tendering his resignation after nearly 40 years of service: “I feel I have been faithful in the discharge of my duties, from the first day I came to the Observatory, and at my age (66th year) I cannot bear to have find-fault notes which it seems I can alone avoid by resigning.”⁴³⁶ Airy wrote back to ask Glaisher to reconsider. He claimed that he had never questioned Glaisher’s “honor, or fidelity to the office, or efficiency in the conduct of it.”⁴³⁷ Rather, Airy maintained, “there was only a point of discipline in question.” “Every superintendent knows” he reminded Glaisher “how important it is to maintain these points.” Airy’s appeal did not move Glaisher, who took umbrage with his being under “the same form of discipline” as when he first arrived at Greenwich. Moreover, he deemed Airy’s handling of this discipline “uncompromising (to use a mild word).”⁴³⁸ While Airy hoped Glaisher would reconsider, he left his post at the end of December 1874.

It was for such “uncompromising” discipline that Airy was depicted in a sketch by Transit of Venus Observer G. E. Cooke as wielding an axe above an observer on a chopping block. The caption, “when the expedition starts the Model man might be useful if converted into a Magnet.”⁴³⁹ Subordinates were supposed to conform to Airy’s regime which he himself described as a factory or a bank. The very trust in the observatory and the measures it produced and distributed via telegraph depended on this disciplinary regime. As Airy wrote to an observer

⁴³⁶ George Airy to James Glaisher, 5 September 1874, RGO 6/7/9/240. James Glaisher to George Airy, 5 September 1874, RGO 6/7/9/241.

⁴³⁷ George Airy to James Glaisher, 5 September 1874, RGO 6/7/9/242.

⁴³⁸ James Glaisher to George Airy, 7 September 1874, RGO 6/7/9/243–4.

⁴³⁹ Chapman, “Porters, Watchmen,” 32. A copy of this image is reproduced in Chapman’s paper. The original, once missing, has recently resurfaced in the archive of the Royal Astronomical Society (RAS MS Add 96).

about the impropriety of altering records in his observation book, “the respectability of the Observatory, and your own character as a trustworthy observer, inexorably demand the severest attention to this rule.”⁴⁴⁰ Greenwich’s reputation was intimately connected with the reputation of its employees. Adherence to Airy’s system, and disciplinary regime, gave him more control over the Greenwich, and as we will see, made his own character and reputation representative of the Observatory. Communicating that character beyond the Observatory walls also involved the introduction of systems and machines to discipline and efface the personality of his assistants. The Observatory could only promote the value of time, order, and regularity if the means of producing GMT adhered to those same values.

4.5 Accuracy and Authority: The Results of Machinery

These aspects of Airy’s managerial discipline which spoke to the honesty and reliability of the observatory’s accounts were intimately connected also with efforts to increase the accuracy of those accounts. At Greenwich, these were astronomical observations, and perhaps the central problem affecting the accuracy of astronomical observations during the nineteenth century had to do with the peculiarities of individuals making the observations and their ability to act at the right time. Astronomers had noticed that each observer tended to predict or delay the actual moment when a star crossed the wires of a transit instrument. Beginning with Friedrich Bessel, who coined the term “personal equation”—by which the problem was henceforth known—ascertaining, and controlling, this value became a significant focus for astronomers.⁴⁴¹ The emergence of this problem, as Simon Schaffer has noted, “involved a loss of the observer’s

⁴⁴⁰ George Airy to Thackeray, 28 March 1876, RGO 6/41/215.

⁴⁴¹ Schaffer, “Astronomers Mark Time,” 116; Jimena Canales, *A Tenth of a Second: A History* (Chicago: Chicago University Press, 2009).

authority within the discipline of astronomy” and the reorganization of astronomical work.⁴⁴² Observers were reduced to the status of “mechanical drudges,” whose “eye[s] formed part of the instrument.”⁴⁴³ For his part, Airy considered observation “the lowest of all the employments” and suggested that “an idiot, with a few days practice, may observe very well.”⁴⁴⁴ He, himself, rarely made observations—the astronomer became a manager. For Airy, as Simon Schaffer writes, “‘Personality’ could be disciplined through the right moral conduct of the workplace and right moral habits of the workforce.”⁴⁴⁵ Immediately, upon taking charge of the Royal Observatory, he instituted a new system of making observations which he argued had the effect of not only correcting for the personal equation, but “making the responsibility to me more distinct.”⁴⁴⁶ Observations were scheduled weekly, their number increased, and they became more regular. Observers themselves became objects of investigation, and had their personal equation measured and compared to each other. The results of these investigations appeared annually in the printed *Greenwich Observations* so that they might be read alongside the observations of the stars themselves.⁴⁴⁷ This was precisely the kind of openness of accounts that Herschel had called for in 1827.

This movement to bring the personal equation under control led to a deconstruction of the very act of observation around the middle of the century. Previously an observer would count the

⁴⁴² Schaffer, “Astronomer’s Mark Time,” 125–6.

⁴⁴³ Maunder, quoted in A. J. Meadows, *Royal Observatory*, 3 vols (London: Taylor & Francis, 1975), vol. 2, *Recent History (1836–1975)*, 10; Warren de la Rue, in E. J. Stone, “On Personal Equation in Reading Microscopes,” *Monthly Notices of the Royal Astronomical Society*, 26 (1865), 51.

⁴⁴⁴ Airy, quoted, in Meadows, *Royal Observatory*, 3.

⁴⁴⁵ Schaffer, “Astronomer’s Mark Time,” 119.

⁴⁴⁶ George Airy to Charles Wood, Report to the Admiralty on the State of the Royal Observatory, 14 March 1836, RGO 6/1/11/244–50.

⁴⁴⁷ George Biddell Airy, *Astronomical and Magnetical and Meteorological Observations made at the Royal Observatory Greenwich in the year 1854* (London: Eyre and Spottiswoode, 1856), xxxiii–xlvi. Edwin Dunkin became the standard against which all other observers were measured (xxxiii).

beats of a nearby pendulum clock while the star being observed crossed the transit wires of a telescope. The observer aurally reckoned the time of transit and noted it in an observation book. Though initially doubtful about the utility of the systems for registering observations developed in the United States by Ormsby M. Mitchell and John Locke at the Cincinnati Observatory, in 1850 Airy designed an instrument—the barrel chronograph—of his own and contracted the clockmaker E. J. Dent to build it. In this new, or “American,” method, as the star crossed the transit wire the observer now pressed an electric key. Pressing the key actuated a needle which punctured a sheet of paper wrapped around a rotating barrel. The observer later read these punctures against another set which indicated the beats of the sidereal standard clock. The chronograph reorganized the act of observation so that the observer no longer had to count and record the time when the transit occurred against the beating of a clock. As Airy stated “He writes nothing, except perhaps the name of the object observed.”⁴⁴⁸ The result, according to Airy, though troublesome and time-consuming in preparing the apparatus, paper, and translating the punctures into values, increased accuracy and reduced the influence of the personal equation.⁴⁴⁹

This mechanization of observation was just one aspect of the introduction of machines, systems, and self-registering instruments in the nineteenth-century observatory. Automatically distributed time signals formed an important part of this movement to protect the measures the observatory produced against the errors and judgements of the individual observer. As Airy confessed, “I have so much greater confidence in the automatic operation of machinery than in the work to be done at the proper time by the hand of man, that I am desirous of making a change

⁴⁴⁸ George Airy, “On the method of observing and recording transits, lately introduced in America,” *Monthly Notices of the Royal Astronomical Society*, 10, no. 2 (1849), 27.

⁴⁴⁹ George Airy, Report of the Astronomer Royal to the Board of Visitors, 3 June 1854, 7, RGO 17/1/1.

from hand-work to mechanical movement.”⁴⁵⁰ This confidence in machines may be contrasted with Airy’s vehement opposition to Charles Babbage’s difference engine in the 1840s, which Airy had deemed “useless” for the tasks of calculating the Nautical Almanac. Airy believed that the work of the difference engine would not replace the “difficult” work of human calculators in the ongoing production of successive Almanacs. Rather their use was limited to tables which he argued rarely needed updating.⁴⁵¹ Mechanization ought to practically reduce human labour. In 1865, William Ellis, who was then in charge of the Greenwich time signal system, told the members of the British Horological Institute that Greenwich had succeeded in removing humans from the process of distributing GMT.

the whole of the system is automatic. The apparatus is itself distributed in various places but works together as one complete whole.... so far as concerns the mere distribution and reception of signals, including the necessary switchings of wires, &c., all goes on without any person at any place having occasion to touch any of the apparatus concerned.⁴⁵²

Just as the observer became a machine minder when making transit observations, ideally, he was to be entirely written out of the act of disseminating time. While the chronograph provided answers to the problem of the personality of the observer, electromechanical time signals, on the other hand, addressed the problem of the personality of clocks, their minders, and their users. Erasing the influence of the observer from GMT purportedly made the time signals free from personal error, and instead the product of Airy’s careful management and discipline.

Airy made this clear in his correspondence with John Hartnup, the Astronomer at the Liverpool Observatory in 1853. Hartnup had written to Airy about a new time ball under

⁴⁵⁰ George Airy to George Kittoe, 13 February 1856, RGO 6/620/5/68–9.

⁴⁵¹ Doron David Swade, “Calculation and Tabulation in the Nineteenth Century: Airy versus Babbage” (PhD diss., University College London, 2003), 203.

⁴⁵² William Ellis, “Lecture on the Greenwich System of Time Signals,” *Horological Journal* 7 (1865), 85–6.

construction above the Electric Telegraph Company's office in Liverpool. Having seen the ball emblazoned with the words "Greenwich Mean Time," Hartnup expressed his concern that the public should know who would be responsible for regulating a signal so far from Greenwich.⁴⁵³ Airy admitted that he knew none of the mechanical details about how the company would drop the ball in Liverpool. "[A]ll that was understood," he told Hartnup, "was that my supply of accurate time would be at their service."⁴⁵⁴ Here Airy carefully emphasized the reputation of GMT, not only claiming it as *his* time, but returning to the sentence to add and underline "accurate." Such editing reveals a conscious effort to stress the reliability of the time sent from *Airy's* Greenwich. "The time," he continued,

will be supplied from our Normal Clock: the same which gives time for our chronometers and drops our ball: and therefore as it comes from here it comes not on the responsibility of any one person but on that of the Observatory (that is of course of myself). But whether Time, entitled to this credit, will be furnished once a day, or several times a day, or at every second, I am not yet able to say.⁴⁵⁵

Mechanical apparatuses and systems of moral surveillance and discipline helped to reduce the "personality" of observatory personnel from creeping into the measures produced at Greenwich. In doing so, they permitted the personality of the manager to stand out and overwrite the traces of the myriad individuals who contributed to the process of observing and reducing observations. In short, Greenwich and its product became the metrological embodiment of Airy.

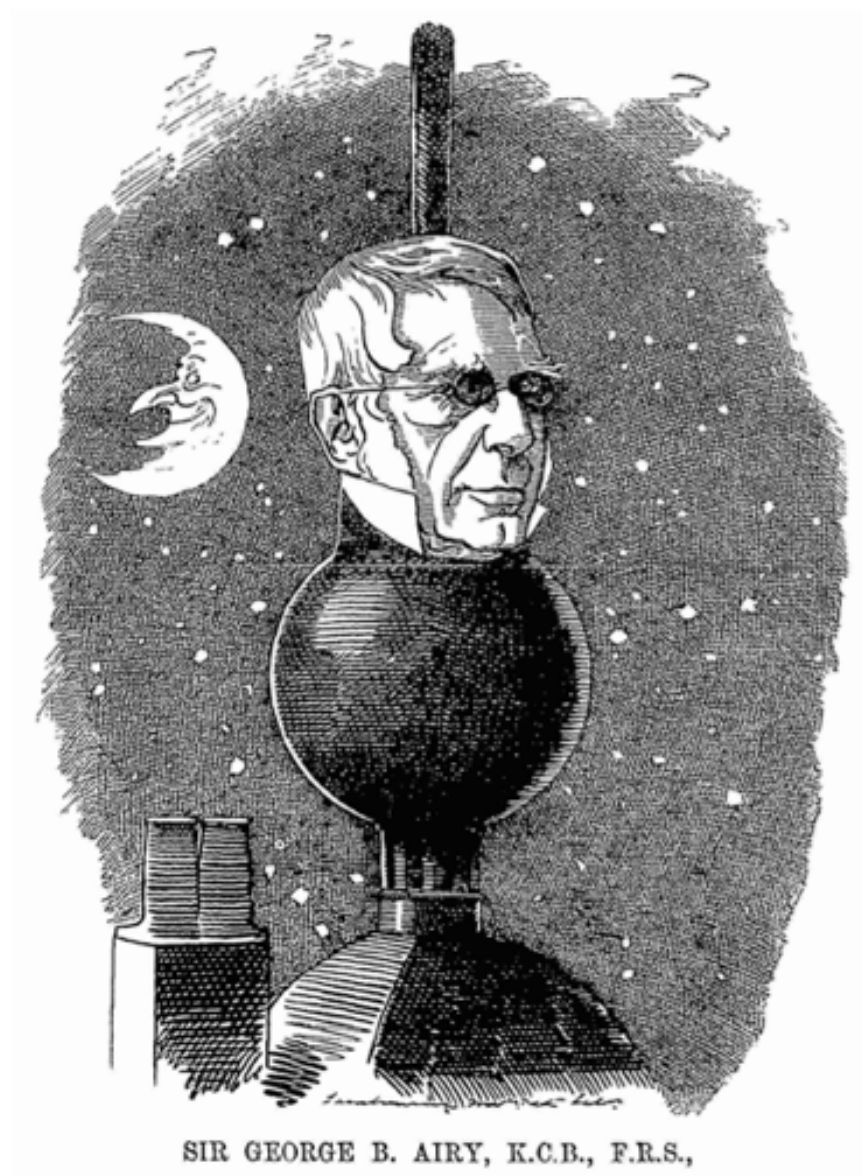
This gives new meaning to *Punch's* 1883 personification of the Greenwich time ball as Airy (figure 4). The time ball and the clocks, batteries, and electromagnets which dropped it, and the standards they communicated were all representative of Airy's character and the character he

⁴⁵³ John Hartnup to George Airy, 6 June 1853, RGO 6/612/5/38.

⁴⁵⁴ George Airy to John Hartnup, 7 June 1853, RGO 6/612/5/39–40. Airy's own emphasis.

⁴⁵⁵ George Airy to John Hartnup, 7 June 1853, RGO 6/612/5/39–40.

gave to the observatory under his management. These electromechanical apparatuses were at the heart of his ability to claim the time as his own, or to borrow his expression, “credit” GMT with his name. Introducing automatic electromechanical apparatuses in the production and dissemination of time aimed at the simultaneous erasure and ascription of human labour.



SIR GEORGE B. AIRY, K.C.B., F.R.S.,

Figure 4 Sir George B. Airy, K.C.B., F.R.S.⁴⁵⁶

⁴⁵⁶ “Punch’s Fancy Portraits.—No. 134,” *Punch*, 5 May 1883, 214 (© Punch Limited; © Cengage, Gale Primary Sources, <https://www.gale.com/primary-sources>).

Time was not galvanized and mechanized in order to make measures impersonal. Automation permitted a specific kind of personality (in this case, Airy's), and that personality alone, to be embedded in the signal. Airy's extreme method which underwrote the Observatory's discipline was therefore transmitted in the signals. He claimed the signals as his own, they came from no one and from him, and only him, all at once. GMT's supposed ability to inculcate punctuality rested heavily on this logic.

4.6 Factory Time

Individuals' time discipline and punctuality formed important aspects of Airy's management of Greenwich-factory and the production of reliable time signals and trustworthy clocks. The problem of accessing such trustworthy clocks appeared in the debates of the early 1830s about the exploitative conditions of factory labour. The nature of factory labour discipline became a topic of sustained debated and agitation from the early 1830s with the movement surrounding Michael Sadler's (1780–1835) Ten hours bill (1832). The issue of punctuality appeared in this debate as a problem facing working children under rigid and violent supervision. At the second reading of his bill Sadler told the Commons that “early and punctual attendance is enforced by fines... so that a child may lose a considerable part of its wages by being a few minutes too late.”⁴⁵⁷ What Sadler called “extreme punctuality” was, he claimed, “no slight aggravation of the sufferings of the child.” A key part of this aggravation had to do with access to standards that a child—or an adult for that matter—could use to help them know the time. Sadler, before the Commons, depicted children's exploitation as a result of the paucity of regulated time standards and the greed and dishonesty of employers:

⁴⁵⁷ H.C. Deb., 16 March 1832, vol. 11.

It is not one time in ten, perhaps, that the parent has a clock, and if not, as nature is not very wakeful in a short night's rest after a long day's labour, the child, to ensure punctuality, must be often roused much too early. Hence, whoever has lived in a manufacturing town must have heard, if he happened to be awake, many hours before light on a winter's morning, the patter of little pattens on the pavement, continuing, perhaps, for half an hour together, though the time of assembling was the same. And then, Sir, the child is not always safe, however punctual; for in some mills two descriptions of clocks are kept... by which, I am told, some mill-owners have boasted that they have made large sums annually.⁴⁵⁸

Time was the essence of Sadler's factory bill. It prohibited children under the age of nine from working in factories and limited the workday of those under eighteen to 10 hours, and 8 hours on Saturday. The bill also required factories to keep a record of the time that work began and ended on each day in a "Time Book," and to end the practice of using speed clocks, which measured the working day relative to the speed of a factory's engine.⁴⁵⁹ Instead, factory time was to be consistent with the nearest public clock, a development which would not be included in factory legislation again until 1844.⁴⁶⁰

The bill moved to committee in March, and from April to August what became known as Sadler's committee heard testimony from more than 80 witnesses who had experienced the factory system firsthand. When the published report appeared in newspapers, the reported violence, over-work, immorality, physical deformities, and premature death linked to factory production shocked and outraged much of the public. The *Morning Chronicle* told its readers that the reported conditions of factory work were "of a nature to make a man almost loathe his

⁴⁵⁸ HC Deb., 16 March 1832, vol. 11.

⁴⁵⁹ A Bill to restrain the Labour of Children and young Persons in the Mills and Factories of the United Kingdom, 1831–2, 2 Will. 4, c. 46.

⁴⁶⁰ An Act to Amend the Laws relating to Labour in Factories, 1844, 7 & 8 Vict., c. 15.

species.”⁴⁶¹ The economist John Ramsay McCulloch notably told Lord Ashley, who took up the cause of factory legislation after Sadler lost his seat in 1832, that “the facts disclosed in the late Report [were] most disgraceful to the nation; and I confess that, until I read it, I could not have conceived it possible that such enormities were committed.”⁴⁶² Opponents of the bill criticized the committee’s evidence as biased—and indeed the witnesses appear to have been representative of an organized working-class movement.⁴⁶³ Sadler’s bill did not pass before the new parliament and a commission was appointed in 1833 which refuted some of the claims of Sadler’s committee, defended the factory system, and at the same time sought out problems in need of regulation. The quickly drafted report became the basis of the 1833 Factory Act which, although omitting key measures included in Sadler’s 1832 bill, established a factory inspectorate, limited children’s labour, and introduced compulsory schooling.⁴⁶⁴

Despite the claims of biased witnesses, what remains illuminating about the testimony heard by Sadler’s committee the previous year is the extent to which exploitation and overwork were viewed as a result of the absence of trustworthy clocks inside and outside the factory. Issues of excessive working hours, exploitative timekeeping, and violent enforcement of punctuality were the foci around which the committee conducted its investigation of factory labour. The evidence heard by the committee exposed that children had been working as long as 18 hour days in some factories, and were being beaten to keep them at work and to make them

⁴⁶¹ *Morning Chronicle*, 4 January 1833. The *Poor Man’s Guardian* proclaimed that “‘christian’ civilized man treats the brutes in his kennel or stable better, infinitely better, than he does his fellow creatures!” “The Horrors of the Factory System,” *The Poor Man’s Guardian*, 26 January 1833.

⁴⁶² J. R. McCulloch to Lord Ashley, 28th March 1833, in Edwin Hodder, *The Life and Work of the Seventh Earl of Shaftesbury K.G.* (London, 1893), 85–6.

⁴⁶³ Robert Gray, *The Factory Question and Industrial England, 1830–1860* (Cambridge: Cambridge University Press, 1996), 66.

⁴⁶⁴ Gray, *Factory Question*, 59–60.

more attentive when they had become fatigued.⁴⁶⁵ While good management entailed systems and method, the factory system appeared to be managed cruelly, without compassion, and with regard only for profit. The minutes of the committee's report detailed the "extreme punctuality" Sadler had attributed to the factory system. Mill workers spoke of being fined, beaten, and turned away for arriving late.⁴⁶⁶ One father described the penalties for breaching factory time discipline:

Supposing they do not attend punctually in the morning, are they subject to fines or to beating? Partly to both: they are subject to beating if they be not there punctually at the time, if they are less than five minutes too late; and if they be five minutes too late, they have a quarter of a day to work for nothing.⁴⁶⁷

Matthew Crabtree who had worked in a mill between the age of 8 and 12 related to the committee his experience of the factory system: "Being cruelly beaten" ensured his "punctual attendance" and he doubted whether he would have been punctual otherwise.⁴⁶⁸ "I generally was beaten when I happened to be too late" he recalled, "and when I got up in the morning the apprehension of that was so great, that I used to run, and cry all the way as I went to the mill."⁴⁶⁹ Another witness, a clothier from West Yorkshire, similarly described the effect of factory discipline on children: "They are generally cruelly treated; so cruelly treated, that they dare not hardly for their lives be too late at their work in a morning."⁴⁷⁰ Testimony revealed how the factory system depended on punctuality. One member of the select committee claimed that punctuality "is one of the main objects of the manufacturers in this country, and which seems so

⁴⁶⁵ *Report from the committee on the "bill to regulate the labour of children in the mills and factories of the United Kingdom"* 1831–2 (706), (8 August 1832), 6, 389 (hereafter *Report of Sadler's Committee*).

⁴⁶⁶ *Report of Sadler's Committee*, 11, 197, 21, 96, 376–7.

⁴⁶⁷ *Report of Sadler's Committee*, 131.

⁴⁶⁸ *Report of Sadler's Committee*, 97.

⁴⁶⁹ *Report of Sadler's Committee*, 97.

⁴⁷⁰ *Report of Sadler's Committee*, 19.

essential to the complete prosperity of their works.”⁴⁷¹ The general opinion of witnesses appeared to be that this punctuality depended on the threat of violence.

The problem of facing factory hands who were urged to be punctual was also partly a problem of standards. As Sadler described it, children would have to wake early to ensure their arrival, then wait for the factory to open. Once inside they faced the possibility of being cheated out of their time by weighted factory clocks. When a family had no clock or watch in their home, arriving on time was all the more problematic.⁴⁷² Elizabeth Bentley related how, as they had no clock, her mother would wake up to the sound of colliers walking to the mines and would ask them for the time. Without a clock, children would arrive early out of fear and waited sometimes hours in the rain for the factory to open. Once inside they were strapped “perpetually.”⁴⁷³

Within the factory, overseers turned clocks against workers. Workers charged that employers frequently adjusted the clocks to shorten meal times and lengthen the work day.⁴⁷⁴ “If the clock is as it used to be,” claimed Stephen Binns, who had worked in factories since the age of 7, “the minute hand is at the weight, so that as soon as it passed the point of gravity, it drops three minutes all at once, so that it leaves them only twenty-seven minutes, instead of thirty.”⁴⁷⁵ “Every manufacturer,” he suggested, “wants to be a gentleman at once, and they want to nip every corner that they can.”⁴⁷⁶ The middle-class’s neglect of their value for hard, honest labour and honest profit were to be blamed for the excesses of factory-discipline. In some instances clocks were removed from the factory entirely “on purpose not to let the hands see what time

⁴⁷¹ *Report of Sadler’s Committee*, 261.

⁴⁷² *Report of Sadler’s Committee*, 19, 201.

⁴⁷³ *Report of Sadler’s Committee*, 197.

⁴⁷⁴ *Report of Sadler’s Committee*, 160.

⁴⁷⁵ *Report of Sadler’s Committee*, 178.

⁴⁷⁶ *Report of Sadler’s Committee*, 177.

they go on.”⁴⁷⁷ Knowledge of time was consistent with control over time, and in some cases labourers were not permitted to know the time, or possess a watch. Those who dared to bring a watch with them would risk a beating, and the loss of the watch if it were discovered by the manager.⁴⁷⁸ As Alexander Dean related “After the overlooker found I was possessed of a watch, I had lost the key, and he took the watch and broke it, and gave it back, and said, I had no use for a watch, and chastised me for letting the hands know the time of day... we were not allowed to reckon the time.”⁴⁷⁹ Sadler’s report depicted a factory system in need of good management and regulation. The absence of trustworthy and reliable timekeeping in the factory demonstrated its moral bankruptcy. In such a place where wages and time were not exchanged freely, there could be no just and honest labour.

The problem of making workers conform to the rhythm of factory work was, of course not limited to such extreme instances of violence and time-theft. Douglas Reid has examined how employers sought to root out the long-standing artisan tradition of Saint Monday, which appears to have vexed managers until the mid to late nineteenth century.⁴⁸⁰ Rigidly imposed fines were supposedly a common practice for ensuring punctual arrival.⁴⁸¹ But periodicals intended for working class audiences also promoted the value of punctuality as a moral good: “A man of christian principle,” claimed the *Bristol Job Nott* in 1832, “will strive to be punctual from a sense of duty.”⁴⁸² In 1850 Cassell’s *Working Man’s Friend* explored the “reciprocal duties of

⁴⁷⁷ *Report of Sadler’s Committee*, 378. See also 341, 388

⁴⁷⁸ *Report of Sadler’s Committee*, 372, 388.

⁴⁷⁹ *Report of Sadler’s Committee*, 372.

⁴⁸⁰ Douglas Reid, “The Decline of Saint Monday 1766–1876,” *Past & Present*, no. 71 (1976), 76–101; and Douglas Reid, “Weddings, Weekdays, Work and Leisure in Urban England 1791–1911: The Decline of Saint Monday Revisited,” *Past & Present*, no. 153 (1996), 135–163.

⁴⁸¹ “The Justice of Exposing Tyrannical Employers,” *Poor Man’s Advocate* (Manchester: J. Doherty, 1833), vi.

⁴⁸² N. “Punctuality,” *Bristol Job Nott*, no. 46 (1832), 183.

employers and workpeople” claiming that employers owed their employees “equitable wages” and “kind treatment.” The article suggested that “thieves, burglars, and highwaymen [were] prodigies of honour” compared to employers that “pick the pockets of their dependents.”⁴⁸³ Workpeople, on the other hand, owed their employers, first and foremost, “punctuality.” Selling one’s time to an employer, the magazine proclaimed, was a “transaction” and “as much a commercial one as the purchasing of sugar, corn, or tea.” The employee who left early or arrived late revealed himself to be a “dishonest man.” “Punctuality” was a matter of “order,” “honesty,” and “justice.” Want of punctuality, the article warned, would enter and upset one’s personal life, whereas “a punctual servant is almost sure to rise.” The labourer who practiced punctuality “cultivated in himself habits of integrity, order, and industry, and this lays a good foundation for his future pleasure, promotion, and leisure.”⁴⁸⁴ The improving power of punctuality appeared commonly in working class literature which emphasized the dignity of steady labour, and the advantages of being “strictly honest,” “industrious and punctual.” Accounts frequently contrasted the happy lives of those who practiced such values with those who sought to live on the labour of others and avoid hard work. Such “immoral” individuals could be easily spotted, their “very looks speak infamy, death, and destruction— ...[their] clothes are tattered and dirty.”⁴⁸⁵

Such narratives drew on Hogarth’s series of engravings “Industry and Idleness” (1747) which depicted the diverging lives of two weavers: one whose hard work elevated him to become Lord Mayor of London, and the other whose sloth lead him into sin and profligacy.⁴⁸⁶ One engraver echoed Hogarth, depicting a young clerk whose “faithful” service and

⁴⁸³ “Reciprocal duties of employers and workpeople: Part II,” *Working Man’s Friend* 2, no. 15 (1850), 33–6.

⁴⁸⁴ “Reciprocal duties of employers and workpeople: Part I” *Working Man’s Friend* 2, no. 14 (1850), 1–4.

⁴⁸⁵ “The Happy Tailor,” *Working Man’s Friend* 1, no. 19 (1850), 281–2.

⁴⁸⁶ See Sarah Jordan’s analysis of Hogarth in *Anxieties of Idleness*, 55–66.

“punctuality” are rewarded with a share of the firm in which he worked. Punctuality and industry had transformative characteristics for those who practiced them. Habituating oneself to such conduct could materially improve one’s life. But as factory labourers—and as we saw earlier mid-century Londoners—understood, exercising and judging punctuality required accurate and authoritative clocks.

4.7 The Money Value of True Time

From the perspective of at least one factory owner, solving issues of unpunctual workers was also a moral problem, but one that could be ameliorated by trustworthy standards. In his 1864 Presidential Address to the Royal Astronomical Society, Warren De La Rue, astronomer and owner of the De La Rue printing firm, condemned the lack of coordinated clocks in London when compared with Liverpool where he claimed, “the value of accurate time is fully appreciated.”⁴⁸⁷ De La Rue lamented to his fellow Astronomers:

notwithstanding the admitted truth of the adage, ‘Time is money,’ and the proximity of Greenwich, accurate time is not obtainable at any public establishment, whereas one would imagine that, in the City at least, controlled clocks would be placed in the various centres of commercial activity.⁴⁸⁸

By the time De La Rue gave his address, Airy had worked to establish time signals to various locations in London. The Shepherd motor clock sent time signals to Westminster Palace to check the timekeeping of Big Ben, dropped the Strand time ball, and corrected clocks at the Post Offices on Lombard Street and St. Martin’s Le Grand daily. None of these arrangements held up to De La Rue’s aspirations for clock synchrony.

⁴⁸⁷ For an informative discussion of timekeeping in Victorian Liverpool see: Yuto Ishibashi, “In pursuit of Accurate Timekeeping: Liverpool and Victorian Electrical Horology,” *Annals of Science* 71, no. 4 (2014): 474–97.

⁴⁸⁸ “The President’s Address,” *Memoirs of the Royal Astronomical Society* 25, no. 1 (11 November 1864), 14–15.

Rather than correct time in general, what De la Rue sought was to place his clock under the control of Greenwich. Working with Airy and telegraph engineer Charles Walker, De La Rue arranged to have the Shepherd clock at Greenwich regulate a clock in his Bunhill Row paper factory beat for beat. In what they deemed “a bold experiment” the clock pendulum at De La Rue & Co. had been fitted with a magnet and a coil was fixed to the clock case on one side of the pendulum. Alternate beats of the Shepherd clock at Greenwich would send a signal to Bunhill Row where the signal would charge the coil and act on the pendulum magnet.⁴⁸⁹ In this way a pendulum with a losing rate would be accelerated while a pendulum with a gaining rate would be retarded. De la Rue told his audience at the Astronomical Society that under this system his clock was “so perfectly under the control of the Greenwich clock, that, unless there is some derangement of the wires, it beats, for months consecutively, second for second with the clock at Greenwich.”⁴⁹⁰ While the time signals distributed throughout London offered what Airy deemed a “sensibly correct” account of GMT, this proved inadequate for De La Rue’s moral objectives.

Like many of his contemporaries, De La Rue hoped that authoritative, accurate clocks would produce punctual people. A few years earlier he had written to Airy explaining his motives: “Time-keeping by our workpeople is an important matter with us, and one very difficult to enforce, but one important step would be made in the right direction if we adopt a means of giving true time in the various departments of our manufactory.” Punctuality might improve by the display of an accurate and trustworthy clock. As with the authors who preached the

⁴⁸⁹ Charles Walker to George Airy, 2 May 1863, RGO 6/615/32/553–4. William Ellis, “Lecture on the Greenwich System of Time Signals,” *Horological Journal* 7 (1865):111–112; Warren de la Rue to George Airy, 2 July 1864, RGO 6/615/32/566; Charles Walker to George Airy, 2 May 1863, RGO 6/615/32/553–4. The clock system was based on the plan of R. L. Jones of Chester and adapted at Liverpool. For more on Jones and Liverpool timekeeping see: Ishibashi, “In pursuit of Accurate Timekeeping.”

⁴⁹⁰ “The President’s Address,” *Memoirs of the Royal Astronomical Society* 25, no. 1 (1864), 14–5.

transformative powers of punctuality to the working class, De La Rue claimed more was at stake than simply being on time. He confided in Airy his hope that his workpeople would take the time home with them “and bring about punctuality and consequently comfort in their domestic matters.”⁴⁹¹ True GMT, itself a product of rigid discipline, punctuality, and order, could promote those values in the people who used it. The kind of personal improvement and right moral conduct which punctuality and regularity produced ultimately rested on having access to and observing authoritative standards of time.

Yet, while having a single factory time standard on display was important, according to De La Rue the character of that standard was crucial. The factory clocks needed to show GMT “to the absolute and certain knowledge of our workpeople.”⁴⁹² The social reputation of the time needed to convince people who encountered the clock that it was indeed correct and worth trusting. Only a direct, uninterrupted connection to Greenwich could carry such authority; there could be no intermediaries. “[I]t would not answer our object if it were in any way dependent upon a clerk of either of the Railway Companies sending forward the signal.”⁴⁹³ If the signals were sent by hand rather than by the clock itself, or was retransmitted along the way, the measure could not have been said to come from Airy, and therefore the signal would lose its authority. The signal therefore had to pass uninterrupted and regulate the clock directly. Users of the clock needed to trust that the time on display was correct, and only a clock controlled directly by the Astronomer Royal could make such a claim.

⁴⁹¹ Warren de la Rue to George Airy, 24 March 1862, RGO 6/615/32/535.

⁴⁹² Warren de la Rue to Airy, February 6, 1863, RGO 6/615/32/536–7.

⁴⁹³ Warren de la Rue to Airy, February 11, 1863, RGO 6/615/32/540–1.

Of course, in keeping with the Victorian discourse of punctuality, De La Rue's experiment had economic objectives as well as moral ones. Once a preliminary time signal from Greenwich had been established he went so far as to credit the signal for "the agreement our men have cheerfully made with us" over new rules of attendance.⁴⁹⁴ These rules gradually increased the rigidity of attendance in exchange for shorter hours and earlier pay on Saturdays. Over the course of a month, grace for late attendance was reduced from 10 to 5, to 0 minutes when on 6 July a warning bell would ring at 7:50 and "the Gate closed at Eight o'clock precisely." Fifty-nine bells ringing throughout the day signaled to workers when they were expected to begin and stop working. In return for being on time, De La Rue paid his workers a half hour earlier on Saturday.⁴⁹⁵ A broadsheet informed employees that the Royal Observatory was the source of the "true Greenwich Time" on display in the factory, thereby lending the authority of the Observatory to the new rules.

Just as in the Observatory, so too in the factory, morality went hand in hand with efficiency. De La Rue calculated that by enforcing rules of attendance based on properly adjusted galvanic clocks, in one year the firm would save more than 300 pounds in wages and increase production by nearly 2 percent.⁴⁹⁶ These were exactly the kind of statistics contemporaries wondered at when considering the consequences of unpunctuality.⁴⁹⁷ In no uncertain terms De La Rue claimed that accurate and precise knowledge of time were to thank for this efficiency, or as he claimed "the money value of true time," and he offered these savings

⁴⁹⁴ Warren de la Rue to Airy, 16 May 1863, RGO 6/615/31/559.

⁴⁹⁵ Thos. de la Rue & Co., "Notice," 18 May 1863, RGO 6/616/24/422; "Progress of Telegraphy" *The Telegraphic Journal* 1, no. 26, (25 June 1864), 307.

⁴⁹⁶ Warren de la Rue to Airy, 16 May 1863, RGO 6/615/32/559.

⁴⁹⁷ "Time-signalling," *Chamber's Journal* no. 379 (1 April 1871), 196.

in reply to the gibes of one of Airy's daughters who had teased him for "wishing to know G.M.T. to half a second."⁴⁹⁸ Airy touted these calculations in a speech before the British Horological Society in 1865. "Think only of L300 per annum being thus saved in one establishment alone, and then consider what would be the saving in London, if all establishments, of similar magnitude, could save a like amount." According to Airy, De La Rue's savings resulted from "having exact time and enforcing strict attendance on his work-people."⁴⁹⁹ Compliance, however, hinged on the social reputation of the clock and the person(s) who controlled it. "The punctuality which these time-signals produce," Airy told a resident of Birmingham, "leaves much workmen's-time at the disposal of the firm." "To obtain these results," he argued, "it is absolutely necessary that time-signals proceed from indisputable authority."⁵⁰⁰ This authority was, of course, Airy himself and the values of order regularity and punctuality which he and, through his management, the Observatory embodied.

4.8 Conclusion

While the imperatives of navigation, global trade, and geodetic surveys motivated the production of GMT, the project of distributing this standard to London and beyond was underwritten by a pervasive discourse about the value and use of time, frequently discussed under the term "punctuality." Electric or galvanic clocks and time signals provided a model for proper human behaviour and a metric against which punctuality—and therefore honesty, creditworthiness, and morality—could be judged. Indeed, the authority of what Airy termed "galvanic time" itself depended upon the very values it ought to promote.

⁴⁹⁸ Warren de la Rue to Airy, 16 May 1863, RGO 6/615/32/559.

⁴⁹⁹ George Airy, in William Ellis, "Lecture on the Greenwich System of Time Signals," *Horological Journal* 7 (1865): 123.

⁵⁰⁰ Airy to Rev. Nash Stephenson, 16 September 1863, RGO 6/615/2/9–10.

At Airy's Greenwich, as elsewhere, producing accurate and trustworthy measures rested on the division of labour, surveillance, strict morality, and, increasingly, on mechanization. Inside the observatory, the social problem of who could be trusted to observe and measure was expressed in terms of time-thrift, discipline, and morality. For Airy, and others, systems of clocks, batteries, cables, and electromagnets offered a unique method of making measures travel beyond the Observatory walls and retain their character or personality. Essential to this was galvanism's rhetorical ability to present the time signals as simultaneously free from human intervention and stamped with the authority of the Astronomer Royal.

Within the Observatory, producing trustworthy measures depended on the same values they were supposed to promote. Observatory staff, therefore, needed to be disciplined and adhere to the system of management and uphold the mechanical virtues of punctuality, regularity, and order. The corollary of this emphasis on restraint and discipline was that mid-nineteenth century discussions of electric clocks and time signals tended to write subordinates out of the system and the standards on display. Doing so was precisely one of Airy's goals. Automatic, electromechanical time signals allowed measures to appear free from human intervention and therefore the individual errors of any human hand, discussed as personality. Galvanic time was in part deemed authoritative because it was automatic and supposedly removed humans from the distribution of time. However, rather than completely erasing the presence of humans in the distribution of time, automatic galvanic time signals imprinted Airy's moral discipline on GMT, thus lending the signal his reputation. The very standard itself carried the moral authority of the Astronomer Royal and his system of management; each were characterized by virtues of restraint and self-discipline. It was this same morality, communicated seamlessly by the galvanic current from Greenwich, that the promoters of unified time believed would inculcate punctuality in those

who used Greenwich time, for in the words of the Rev. Richard Cecil: “this generates punctuality in you, for like other virtues, it propagates itself.”⁵⁰¹

⁵⁰¹ Josiah Pratt (ed.), *The Life, Character, and Remains, of the Rev. Richard Cecil* (London, 1811), 344–5.

Chapter 5: Broken Promises and Limbs: Punctuality, Safety, and the Railway Journey

“A nation that gave birth to railways cannot be expected to condescend to such trifles as punctuality.”⁵⁰²

“What is the difference between the punctual arrival of a train, and a collision? The former is quite an accident; the latter isn’t!”⁵⁰³

5.1 Introduction

Drawing heavily on the reflections of nineteenth-century observers who witnessed the appearance of steam locomotion, historians have repeatedly extolled the railway’s ability to annihilate space and time.⁵⁰⁴ The increased speed of travel and the smoothness of the journey when compared with horse-drawn coaches and wagons prompted much reflection by contemporaries. After decades of investment in road and vehicle infrastructure road coaches had reached speeds of 10–12 miles per hour by the 1830s.⁵⁰⁵ These speeds had been easily—and tragically—eclipsed on the opening day of the Liverpool and Manchester Railway in 1830 as George Stephenson raced the *Northumbrian* in vain at a top speed of 36 miles per hour while attempting to save the life of MP William Huskisson who had been trampled by another locomotive after failing to judge its speed.⁵⁰⁶ This, on the inauguration of the first public steam

⁵⁰² A Hardy Annual, letter to the editor, *Times*, 1 August 1867, 7.

⁵⁰³ *Punch*, 29 July 1865, 34.

⁵⁰⁴ For example: Wolfgang Schivelbusch, “Railroad Space and Railroad Time,” *New German Critique*, 14 (1978), 31–4; Rebecca Solnit, “The annihilation of Space and Time,” *New England Review*, 24, no. 1 (2003), 5–13; Michael Freeman, *Railways and the Victorian Imagination* (New Haven: Yale University Press, 1999), 21, 78; Stephen Kern, *The Culture of Time and Space: 1880–1918*, 2nd edn (Cambridge: Harvard University Press, 2003), xiii; Peter Frank Peters, *Time, Innovation and Mobilities: Travels in Technological Cultures* (New York: Routledge, 2006), 55–8; Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 2000 [1964]), 194–6.

⁵⁰⁵ Jack Simmons, *The Victorian Railway* (London: Thames & Hudson, 1991), 310; J. G. Ransom, *The Victorian Railway and how it evolved* (London: Heinemann, 1990), 132.

⁵⁰⁶ Ransom, 55–6.

powered passenger railway, exemplified the destructive possibilities of the new motive power and the new pace of travel. In the 1830s trains were operating at average speeds of up to 25 miles per hour—three times the average coach speed—and in the 1840s average speeds of 40 miles per hour had been achieved with the gauge wars pushing competing companies to speeds of up to 60 miles an hour.⁵⁰⁷ As Wolfgang Schivelbusch has most notably commented, the effect of the increased speed of travel was two-fold: “space was both diminished and expanded.” The expansion of the railway network in miles and the growth of overland travel offers some evidence of the impact on what Schivelbusch called the “traditional space-time continuum” as the railway effected what David Harvey termed “time-space compression.”⁵⁰⁸ While higher speeds made the world seem smaller, the world appeared to expand also as rail travel opened up the possibilities of more travel over longer distances. Suburban living, though not initiated by the railway, expanded with the growth of local trains and stations, and vacationers took specially arranged excursion trains serviced by local trains which brought them out of the metropolis to the country and the coast.⁵⁰⁹

⁵⁰⁷ Ransom, 132, 181; Simmons, *Victorian Railway*, 310.

⁵⁰⁸ In 1838 the railway network in Britain measured 500 miles. That number had quadrupled by 1844, reached over 7,500 miles in 1852, and 9,800 in 1859 (Philip Bagwell, *The Transport Revolution 1770–1985* (London: Routledge, 1988), 80–3; Ransom, 110). As an example of the increased opportunities for travel afforded by the railway, in 1830 there were twenty coaches operating between Manchester and Liverpool with a capacity of 108,000 passengers annually, whereas in its first year the Liverpool and Manchester railway carried 460,000 passengers (Ransom, 56–7). Railway passenger journeys increased from 27.7 million in 1844, to 288 million in 1870 (Philip Bagwell and Peter Lyth, *Transport in Britain: From Canal Lock to Gridlock* (London: Hambledon and London, 2002), 54.); see also Jack Simmons’ estimates of coach, steamboat, and railway travel (Simmons, *Victorian Railway*, 316–17); Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the 19th Century* (Berkeley: University of California Press, 1986), 33–6; David Harvey, “Between Space and Times: Reflections on the Geographical Imagination,” *Annals of the Association of American Geographers*, 80, no. 3 (1990), 426.

⁵⁰⁹ F. M. L. Thompson, “Introduction,” in F. M. L. Thompson (ed.), *The Rise of Suburbia* (Leicester: Leicester University Press, 1982), 19–20; John R. Kellett, *The Impact of Railways on Victorian Cities* (London: Routledge, 2007[1969]), 337–83.

In addition to the power to annihilate traditional time-space continuums or usher in time-space compression, historians have also attributed the spread of GMT to the proliferation of rail travel as part of daily life. Railways required a uniform standard of time over their lines in order to manage the traffic which was scheduled and regulated by keeping intervals of time between successive trains. Mike Esbester has explored the railway's temporal regimes through a study of the timetable to show that they were a source of important temporal information and confusion.⁵¹⁰ Historians have also frequently attributed the importance of being on time to the time regime of the railway. Michael Freeman, for example, has argued that "punctuality and time-keeping were transplanted from railway operation directly into peoples' lives. The frenetic pressure to be 'on time' was born out of the early railway age."⁵¹¹ Jack Simmons has similarly written that "railways enforced a new observance of punctuality. Through them the clock came to guide—even rule—lives as it never had before."⁵¹² Echoing these sentiments, Philip Bagwell argues that "the spread of the railway network was accompanied by a greater promptitude in the conduct of business affairs."⁵¹³ While making such claims these historians have given the subject only the most cursory treatment, by briefly declaring the railway's impact on time-discipline as fact before moving on. Indicative of this attitude, Jack Simmons has written that Victorian passengers' complaints that trains were unpunctual, or were more punctual in the past, "are worth very little unless they rest on evidence... Otherwise they cannot be more than expressions

⁵¹⁰ Mike Esbester, "Designing Time: The Design and Use of Nineteenth-Century Transport Timetables," *Journal of Design History*, 22, no. 2 (2009), 91–113; Mike Esbester, "Nineteenth-Century Timetables and the History of Reading," *Book History*, 12 (2009), 156–85.

⁵¹¹ Freeman, *Railways and the Victorian Imagination*, 21. Although acknowledging Victorian passengers' desire for punctuality (78, 192), Freeman later contrasts the condition of British railways in the late 1990s with the Victorian railway, stating that "complaints of poor timekeeping and overcrowded trains have become commonplace..." 244.

⁵¹² Simmons, *Victorian Railway*, 347.

⁵¹³ He also argued that the railway was responsible for public "acceptance" of GMT as a national time standard. Bagwell, *Transport Revolution*, 112–13.

of opinion, which seldom deserve much attention.”⁵¹⁴ More recently, historian Oliver Zimmer has argued that passengers’ concerns over punctuality were a sign of “impatience” resulting from the increased density and speed of traffic. Complaints about late trains, he argues, were a symptom of this impatience, which appeared first in England, grew later in Germany from around the 1870s until both countries shared a similar impatience by 1900. Zimmer’s argument, and those of other historians noted above, overstate the railway’s causal importance in structuring the time-discipline of passengers. In addition, Zimmer’s treatment of passenger complaints as “impatient waiting” overlooks just what passengers were saying when they wrote to a newspaper describing the delays they experienced.⁵¹⁵ Such complaints, brief yet numerous, are valuable evidence of passengers’ beliefs about the experience of travel and the meaning of delays.

The histories which have heralded changes to the temporal consciousness of Britons have accorded the railway too much agency in remaking how its users thought about time. Moreover, suggesting that the importance of punctuality was a product of the increased pace of daily life caused by the railway is misleading. Previous chapters have shown an increasingly established value for punctuality decades before the appearance of railway in the 1830s. For the early railway promoters, the punctuality of business was a prime concern. In the 1824 prospectus of the Liverpool and Manchester Railway, the company’s committee argued that a railway was needed because “the present Canal establishments are inadequate to the great and indispensable object to be accomplished, namely, the regular and punctual conveyance of goods at all periods

⁵¹⁴ Jack Simmons, “Punctuality,” in Jack Simmons and Gordon Biddle (eds), *Oxford Companion to British Railway History* (Oxford: Oxford University Press, 1997), 406. Also see Simmons, *Victorian Railway*, 183.

⁵¹⁵ Oliver Zimmer, “Die Ungeduld mit der Zeit: Britische und deutsche Bahnpassagiere im Eisenbahnzeitalter,” *Historische Zeitschrift*, 308 (2019), 46–80. See “ungeduldigen Wartens” on 48.

and seasons.”⁵¹⁶ As this chapter will show, coach passengers had expressed demand for punctuality before the development of railways, and already in the 1830s railway passengers wrote letters to the editors of newspapers expressing their concerns over late trains. Whereas Zimmer has explained passenger complaints about delay as a function of the increased density and celerity of travel, and a consequence “impatience,” this chapter focuses on the explanations offered by passengers themselves. In brief but numerous letters to newspapers about unpunctual trains, passengers drew upon and rehearsed a consistent rhetoric to diagnose and expose the delays they experienced as passengers. In doing so, they drew upon pre-existing codes of trust, honesty, and good management developed in the eighteenth and early nineteenth centuries in reference to social and economic credit. Passengers saw unpunctuality as a breach of contract and deemed it important to warn others about their experience with a dishonest company. As passengers sought to combat delays, they also took to the courts to seek damages for breach of contract with some success. Passengers also quickly understood that delays entailed risks to life and limb. In public opinion, punctuality in trade supported public credit, trust and the marketplace, but punctuality in railway travelling guaranteed passenger safety. This assertion, well-established in the 1840s, reached a high-point in the 1870s following a highly publicized collision of two trains. Discussions of new systems of management and mechanical devices to help discipline the judgements of railway servants (drivers, signalmen, etc.) challenged the widely accepted idea that punctuality was a guarantor of safety. Experts challenged both popular

⁵¹⁶ Henry Booth, *An Account of the Liverpool and Manchester Railway* (Liverpool: Wales and Baines, 1830), 12; also cited in Bagwell, *Transport Revolution*, 79.

opinion and railway directors when they argued that systems organized around punctuality increased public danger.

As passengers, editors, railway directors, and legislators debated the problems of unpunctuality, they constructed its causes as matters of management, human fallibility, and dishonesty. Exactly how to remedy these causes similarly drew upon customary means of maintaining and judging credibility—publicize dishonesty and breach of contract while seeking redress in the courts.⁵¹⁷ Coach services were disappearing and in some cases there was no alternative carrier for the same route. In the eyes of many disgruntled passengers, competition—that impetus for probity and punctuality—had surrendered to the railway monopolies. In such a system of exchange where one had no choice but to do business with the dishonest, passengers strove to hold companies to account for their unpunctuality by exposing their conduct in letters to the editor of various newspapers, chief among them, the *Times*. Rather than the railway driving the pressure to be on time, the language of punctuality gave legislators, passengers and employers a set of well rehearsed discursive tools to debate and expose the trials of the railway journey. The railway, while admittedly increasing the speed and frequency of travel, presented a new context in which British passengers discussed and debated well-worn languages of timeliness, trust, management, and risk.

5.2 The Old Coaching Days

Before the appearance of steam powered railway travel in the 1830s, overland travel had undergone a significant transformation in Britain. Since the mid-eighteenth century the quality of

⁵¹⁷ For a study of early modern suits for non-payment of debts see Craig Muldrew, *The Economy of Obligation*, especially chapters 8 and 9.

roads had increased through the application of road building methods pioneered on military roads in Scotland earlier in the century. Building on these methods surveyors and civil engineers employed turnpike trusts and later parliament standardized the construction of roads to improve drainage and decrease friction.⁵¹⁸ Both the speed of coaches and the number of travellers on the roads increased steadily. In the 1750s the trip from London to Brighton took two days, but by 1834 coaches completed the journey in under four hours.⁵¹⁹ Government operated mail coaches established in 1784–5 ran by timetables and competed with private stagecoaches.⁵²⁰ From 1770 to 1830 travel times between most major cities were reduced by roughly half, and as many as 15 times more people were travelling by coach in 1830 as had in 1790.⁵²¹ The practice of publicizing departure and arrival times of coach services had already begun in the late eighteenth century. In contrast, the less expensive wagon services were only listed by the day of arrival and departure rather than the hour.⁵²² Road transportation, though improved, affected people differently as those who could afford it opted for the speedy and safe interiors of coaches while others travelled on slower wagons or walked on the footpaths of the redesigned roads. Speed served to differentiate those who travelled by coach and foot, the former sometimes posing a threat to pedestrians. Attempts to impose speed limits on coaches in the 1830s were met with a swift rebuke. As Jo Guldi notes, “for middling travellers, speed was becoming a commodity to be bought with cash.”⁵²³

⁵¹⁸ Jo Guldi, *Roads to Power: Britain Invents the Infrastructure State* (Cambridge: Harvard University Press, 2012), esp. chapter one, 25–78; see also Bagwell, *Transport Revolution*, 23–48.

⁵¹⁹ Bagwell, *Transport Revolution*, 30–1.

⁵²⁰ Nigel Thrift, “The Making of a Capitalist Time Consciousness,” in *The Sociology of Time*, ed. John Hassard (New York: St. Martin’s Press, 1990), 120. Guldi, 179

⁵²¹ Bagwell, *Transport Revolution*, 29–33.

⁵²² Glennie and Thrift, *Shaping the Day*, 106.

⁵²³ Guldi, 180–1.

Before the age of railways supposedly created the pressure to be on time, coach proprietors had begun to promise in their advertisements ever increasing speeds and regularity and dubbed their coaches with names evoking the promise. In England, postal coaches had advertised departure and arrival times already by the 1770s. The Reading Flying Machine was advertised to set out at five and return at twelve “precisely.” The Reading post coach had promised parcels would be “immediately and punctually delivered.”⁵²⁴ In 1794 proprietors advertised a new coach between Holborn and Norwich to arrive “punctually” at 8.⁵²⁵ Owners gave their coaches names like “Expedition,” “Mercury,” “Phenomena,” “Regulator,” and “Imperial” and advertised that they arrived “punctually” and operated with “regularity.”⁵²⁶ So regular had coach traffic apparently become that one observer, writing of the discrepancies of the clocks in Bath, suggested that inhabitants might set their watches instead by the arrival of the Regulator and Character coaches.⁵²⁷ Enticing passengers, proprietors employed language which blended the virtues of human and machine to evoke precision. Advertisements and letters to the editor show that coach passengers had indeed developed expectations of scheduled and observed departure and arrival times.⁵²⁸ Travellers by road keenly valued speed and regularity before the dawn of the railway age.

⁵²⁴ *Reading Mercury and Oxford Gazette*, 17 July 1775, 1.

⁵²⁵ *Morning Advertiser*, 5 September 1794, 1.

⁵²⁶ See for example: *Lincoln, Rutland, and Stamford Mercury*, 31 March 1826, 1; *Lincoln, Rutland, and Stamford Mercury*, 30 May 1823, 1; *Norfolk Chronicle*, 17 October 1818, 1; *Norfolk Chronicle*, 11 April 1818, 1.

⁵²⁷ Cavis, “To the Editor,” *Bath Chronicle*, 8 January 1824, 3.

⁵²⁸ W. H., letter to the editor, *Times*, 18 October 1828, 2; John Gamble, *Sketches of History, Politics, and Manners in Dublin, and the North of Ireland in 1810* (London: Baldwin, Cradock and Joy, 1826), 91; The “Extract of a Letter from Edinburgh,” *London Chronicle*, 85 (28–30 May 1799), 518; “Early Rising,” *Mirror*, 17:471 (15 January 1831), 37; N.T.H., “To the Editor of the Monthly Magazine,” *Monthly Magazine, or British Register*, 42, no. 291 (1 December 1816), .p. 415; “Dining, as it is practised about Bedford Square,” *Monthly Magazine, or British Register*, 15, no. 87 (March 1833), 329. The sixth edition of the *Encyclopedia Britannica* defined mail coaches as “punctual as to their time of arrival and departure” *Encyclopedia Britannica*, 6th edn, 20 vols (Edinburgh: Archibald Constable and co., 1823), vol. 6, 218.

William Kitchener's *Traveller's Oracle* (1827) reveals some of the attitudes towards temporal precision that preceded the moment of industrialized travel. In a chapter on the subject Kitchener recommended that "punctuality in a coachman is indispensable."⁵²⁹ He should be instructed to arrive five minutes early so that the traveller is not kept waiting: "one minute of your time is often worth an hour of his." The coachman who arrived early, according to Kitchener, shows "respect for his employers and a laudable anxiety to obey orders." In contrast, those who arrived just on time shows "that he is disposed to do no more work than he is obliged to do."⁵³⁰ To correct the unpunctual behaviour of a coach driver, Kitchener recommended deducting the cost of alternate transportation from his wages. Importantly, though, the social demands of punctuality applied to all, as "Punctual masters make punctual servants."⁵³¹ When planning a journey to a country home for dinner one should leave 15 minutes early to ensure one would arrive on time. The timing of meals was important as well and hosts should account for the distances that guests had to travel.

The appearance of railways and the growth of passenger traffic built upon these expectations and as passengers began to experience railway travel they lamented the loss of the coach and its regularity. Despite contemporaries' celebration of the railway's celerity, already during the 1830s passengers began to complain of the delays they experienced while railway travelling. Passengers discussed their temporal expectations of the railway journey as a matter of contract that impinged upon business and reflected the honesty of the railway company and its proprietors. In 1838 a passenger G. L. Yarnold who had "business to transact in the city"

⁵²⁹ William Kitchener, *The Traveller's Oracle; or, Maxims for Locomotion*, 2 vols (London: Henry Colburn, 1827), vol. 2, 151. For the chapter "Punctuality" see vol. 2, 151–9.

⁵³⁰ Kitchener, 151–2.

⁵³¹ Kitchener, 156.

complained of yet “another instance of the irregularity of the Southampton Railway.” Following “the most approved practice” they had been at the station early to meet the train, which had arrived 25 minutes late. This delay was compounded on the trip to London and the train arrived at its destination an hour and a half late. Yarnold was then forced to “hurry” in order to conduct business in London and meet the return train, which was itself nearly as slow returning him home an hour late. The effect, complained Yarnold, was that “my day was nearly thrown away; and no doubt many others.” Writing that there should be some way to remedy such delays as they had experienced, Yarnold feared that “when all the coaches are driven off the road” there would be no recourse. Railways would be able to charge what they wished and perform “as badly as it may suit their convenience.”⁵³² Concerns about the power of railways and the limited choices of passengers in the face of “monopolies” would be echoed throughout the nineteenth century. Unlike the coaches which travelled the same roads and competed with one another for passengers—supposedly leading to regularity and safety—a railway company controlled the way and was protected from competition until a new line was approved by Parliament.

Already passengers had come to integrate the railway network into their daily routines and to schedule their day around the timing of the train. When railways failed to live up to their promised advantages, passengers were quick to compare the train to coaches. An 1839 editorial in the *Times* asked, “How many events in life admit not even the delay of waiting for another train.” Although steam might have had advantages over animal power, keeping the system orderly and regular could be a challenge. “Engineers and engine drivers” the paper claimed were “as unmanageable as horses.” Furthermore, the *Times* noted that competition meant delays

⁵³² G. L. Yarnold, “Railway Travelling,” *Bell's Life in London*, 21 October 1838, 4.

occurred less often on a turnpike and were usually shorter than a railway delay. Meanwhile the taxes levied on coaches were driving this alternative to steam off the road to “benefit the greatest monopoly ever established.” Without this important alternative to the railway, “all must submit without hope of remedy.”⁵³³

Passengers who experienced such delays wrote to newspapers and especially the *Times*. They characterized delays as instances of “gross mismanagement” and as threats to the very survival of railways. “Expedition and punctuality,” argued J. Smith, “are the only recommendations in favour of their present monopoly.”⁵³⁴ Others lamented that their railway journeys took just as long as a coach due to the incessant delays and breakdowns.⁵³⁵ The isolation of the track from roads meant that one was virtually stranded should a train break down. Frustrated by “vexatious disappointments,” passengers questioned whether it was “honest” to allow delay to become so common and accused the railway directors of “selfish economy.” As one traveller wrote to the *Times* in 1839 “the body to whom I have paid my money upon certain conditions as to time and speed is utterly careless about making good their bargain.” Appealing to the principle that such dishonesty would affect the company’s reputation and consequently their business, they noted “conduct like this will go far to lower them in general estimation.”⁵³⁶

In contrast to the well-worn statements of the psychic shock of their smoothness and speed, the railway did not entirely reorient the space-time perception and time-discipline of travellers. In fact, passengers appear to have acclimatized quickly to the new pace of travel and noted their dissatisfaction when the pace failed to meet the promise. Precision, regularity, and

⁵³³ Editorial, *Times*, 26 June 1839, 6.

⁵³⁴ J. Smith, letter to the editor, *Times*, 4 September 1839, 3.

⁵³⁵ John Bull, letter to the editor, *Manchester Courier*, 1 September 1838, 4.

⁵³⁶ J. H. G., letter to the editor, *Times*, 6 November 1839, 5.

punctuality had been a part of the conceptual framework of coach passengers before the age of railways. Coach proprietors had appealed to these concerns in advertising their services as punctual and regular, bestowing coaches with matching names. Passengers brought these concerns with punctual and regular travel with them from the coach inn to the railway station. When railways failed to meet these expectations, passengers declared the ticket a contract and lamented the railway monopolies' replacement of the coach which had offered freedom of choice and competition. Establishing a pattern of discourse that would remain through the century, passengers sought to publicly tarnish the reputation of companies with letters to the editors of newspapers. As they quickly realized, the consequence of delays extended beyond disappointments and deranged business engagements.

5.3 The Problems of Delay

On Saturday October 17, 1840 a London-bound train on the South Western Railway, scheduled to leave Southampton at 1:30 had stopped just outside Vauxhall station at 5:50 before moving into the station. The train, which had been scheduled to arrive at 5:15 was some 35 minutes late. Just as the train was about to move off the switch into the station, the 3:00 fast train—running 5–10 minutes early—slammed into the rear carriage killing one passenger instantly and leaving others severely injured with lacerations and concussions. At the inquest held on October 20th the coroner and jurors heard from witnesses, mostly employees of the railway company, about the events leading up to the collision. These witnesses claimed that the accident could have been avoided had the warning signal been lit by John Turner, one of the

company's employees. The jury ordered a deodand of £300 on the South Western Railway Company but argued that the blame rested on Turner for not putting up the signal.⁵³⁷

Passengers who had witnessed the collision had other ideas. In numerous letters to the *Times* they charged the railway "monopolies" with "frauds" and gave first-hand accounts of trains frequently arriving late at Vauxhall and being overtaken by faster trains along the way. One victim of the collision claimed that "the main feature of railway travelling is precision of time in the departure and arrival of trains," but saw no reason why railways could not avert collision when delays occurred. Spare engines and servants stationed along the way could assist engines running behind time and signal to oncoming traffic what lay ahead.⁵³⁸ Another survivor charged that the fault lay with the "cupidity" of railway managers in making the safety of hundreds "depend on the vigilance of one man's making a signal and of another's observing it."⁵³⁹ Another claimed that "the greatest evil appears to be the disregard of the printed regulations as to time."⁵⁴⁰ Poor management and unpunctuality constituted serious threats to public safety.

The *Times*' own editorial on the collision charged "willful misconduct" through "almost every department" of the South Western Railway. It noted that the train had been started with insufficient engine power—a "fraudulent practice" the *Times* had previously denounced:

the directors entering into an engagement with the public to perform the journey within a given time, and deliberately and systematically violating that engagement by despatching with a single engine trains which they are perfectly well aware a single engine cannot punctually convey.⁵⁴¹

⁵³⁷ "Fatal Accident on the Southampton Railway," *Times*, 21 October 1840, 6; "Fatal Accident on the South-Western Railway," *Times*, 19 October 1840, 6.

⁵³⁸ H. M., letter to the editor, *Times*, 20 October 1840, 6; W. B., letter to the editor, *Times*, 20 October 1840, 6.

⁵³⁹ A Constant Readers, letter to the editor, *Times*, 22 October 1840, 7.

⁵⁴⁰ W. D., letter to the editor, *Times*, 22 October 1840, 7.

⁵⁴¹ Editorial, *Times*, 24 October 1840, 3.

As passengers knew quite well this practice created the danger of a collision, as train traffic was scheduled and operated “upon the presumption of punctuality” of other trains. To make matters worse the *Times* claimed that no one had warned the driver of the express train that they were following just a few minutes behind the 1:30. The *Times*’ furor and public charge of fraud and “wanton tampering with human life” may have in part been directed at John Easthope, chairman of the South Western Railway, Member of Parliament, and owner of the *Morning Chronicle* which had been given exclusive access to the railway company’s internal review of the accident on Sunday, days before the coroner’s inquest.⁵⁴² The *Times*’ allusion no doubt suggested that the *Chronicle*’s coverage sought to absolve the South Western and Easthope against the facts of the accident. Emphasizing the overarching cause of danger, the *Times*’ editorial restated a belief already entrenched in public opinion by the 1840s and which narrated debates about railway safety through the 1870s: “in every case of very considerable delay a collision must happen.”⁵⁴³ Unpunctuality led to accidents, and punctuality prevented them.

Wolfgang Schivelbusch has claimed that fear of and anxiety about the speed and danger of the railway had vanished by mid-century as passengers became accustomed to the new rhythms of travel.⁵⁴⁴ However, unpunctuality and sudden stops which evoked fear and anxiety already in the 1830s and 1840s continued to distress passengers well into the 1870s. Passengers riding in trains were keenly aware of the dangers of unpunctuality as they waited to arrive at

⁵⁴² Editorial, *Times*, 24 October 1840, 3.

⁵⁴³ *Ibid.* “in every case of very considerable delay a collision must happen, unless arrangements are made for the later train to pass the earlier on the road (to the further detention of passengers already too long retarded), or unless both trains are kept back together.”

⁵⁴⁴ Schivelbusch, 129–30.

their destinations. Testis wrote to the *Times* about their experience on the 1:30 train on the day of the accident: “I was fully aware of the danger of every moment’s delay, knowing that a fast train had left Southampton at 3 o’clock.” They charged the railway company of “culpable negligence and avarice” for delaying the departure of the slow train thirty minutes to secure the business of passengers from a ship which had docked at Southampton. The delay, claimed Testis, was “a direct violation of [the company’s] engagement with the public to start punctually at the hour specified.”⁵⁴⁵ Beta, another passenger, claimed from experience that the 1:30 train was “never in time” and had arrived at 6:50 on his latest journey having been passed by the express. They charged that the delay on the day of the collision was no accident: “Delay is the rule; punctuality if it ever occur, is the exception.”⁵⁴⁶ As one correspondent claimed in a letter to the *Times* five years later, “in railway travelling the great safeguard to the public is regularity and punctuality.”⁵⁴⁷

This encounter between the *Times*, the South Western Railway Company, and the travelling public highlights a pattern of analysing the railway accident which remained relatively consistent throughout much of the nineteenth century. Drawing on the language of management, negligence, system, and greed, passengers sought to account for the incessantly unpunctual train and the accidents these trains supposedly caused. Public discourse drew upon the codes of trust- and creditworthy business practices, evoked by the language of “engagement,” “fraud,” “contract,” “avarice,” etc., to problematize the occurrence of late trains and place blame on the management of the company. Public opinion as expressed in nineteenth century periodicals

⁵⁴⁵ Testis, letter to the editor, *Times*, 22 October 1840, 7.

⁵⁴⁶ Beta, letter to the editor, *Times*, 24 October 1840, 3.

⁵⁴⁷ Viator, letter to the editor, *Times*, 13 November 1845, 6.

concluded that railway directors were dishonest for managing a system which could not accomplish what it promised and risking the customers safety in the process.

Passengers had developed a consistent rhetoric for discussing and exposing unpunctuality and the accidents it occasioned. This rhetoric hinged on the expectation of regularity and accuracy in the arrival of trains, but the language passengers employed was no product of the railway age. Instead passengers rehearsed the discourse of the trustworthy man of business and the well-managed middle-class home. Aside from the accident, “mismanagement,” “selfishness,” and “dishonesty” narrated the ire of passengers who had paid to arrive at a specific place by a certain time. The purchase of a ticket was no different than any other contract and an honest trustworthy manager should fulfil their obligation and perform what they have promised in the time agreed upon. This language remained into the 1870s as a central feature of the way Victorians discussed the time-regime of the railway.

Central to these issues was the trust that passengers placed in the claims made by railway companies’ timetables and whether unpunctuality was a form of dishonesty. Their arguments ran something like this: railway directors knew—or could easily know if they cared to record the actual departure and arrival of trains—how much the timetable differed from the real operation of trains. With this knowledge directors could change the timetables to what was actually possible on the line. As one passenger put it, timetables were “false representations, deliberately persevered in with a knowledge of their falsehood.”⁵⁴⁸ Such behaviour, according to those who aired their grievances in the *Times*, was a result of their desire for profit at any cost. Just as with the management of any other business, or the home, punctuality in railway travel was evidence

⁵⁴⁸ Time, letter to the editor, *Times*, 13 October 1858, 12.

of good (both moral and economic) management. Publicly exposing poor management and the character of a railway company would cause them to change their behaviour, so correspondents believed. Recalling one letter to the *Times* in 1839, J. H. G. had made travel plans based on “confidence” in the train arriving on time, only to arrive three hours late and miss their boat. The correspondent warned that “faith is not to be deliberately broken” and that such “conduct” would “lower them in general estimation.”⁵⁴⁹ Correspondents to the *Times* understood that whatever the causes of unpunctuality might be—overcrowding, undisciplined servants, insufficient engines—the ultimate cause was the “bad management” or “mismanagement” of the company by its directors.⁵⁵⁰ They charged railway directors with “dishonesty” and regarded their unpunctuality “deliberate.”⁵⁵¹ Irregularity and poor management damaged a company’s “reputation” and “character.”⁵⁵² Passengers debated the problem of railway unpunctuality and delay, as they wrote to newspapers in order to warn other passengers and in the hopes that a tarnished reputation would prompt a railway company to reform its behaviour. Seeking that “injustices” of railways be exposed and passengers would be warned through “publicity,” passengers wrote to the *Times*, as the public redresser of wrongs.

Such highly formulaic letters to the editor represented something more than mere complaints of an increasingly impatient travelling public. The language passengers used to

⁵⁴⁹ J. H. G., letter to the editor, *Times*, 6 November 1839, 5.

⁵⁵⁰ A subscriber, letter to the editor, *Times*, 25 October 1844, 7; Q. letter to the editor, *Times*, 20 August 1850, 5; Norvicensis, letter to the editor, *Times*, 20 August 1850, 5; A railway traveller, letter to the editor, *Times*, 22 August 1850, 3; A professional man, letter to the editor, *Times*, 6 October 1866, 6; Vox Clamantis, letter to the editor, *Times*, 18 August 1868, 10; A Traveller, letter to the editor, *Times*, 7 August 1856, 5; A Constant Traveller, letter to the editor, *Times*, 26 October 1852, 5.

⁵⁵¹ Banburiensis, letter to the editor, *Times*, 12 October 1852, 7; A Man of Business, letter to the editor, *Times*, 30 November 1865, 7; Time, letter to the editor, *Times*, 13 October 1858, 12.

⁵⁵² A Subscriber, letter to the editor, *Times*, 25 October 1844, 7; J. W. M., letter to the editor, *Times*, 19 September 1850, 5; C. A. E., letter to the editor, *Times*, 29 December 1865, 10.

describe railway unpunctuality located their concerns within the moral codes of the marketplace. Purchasing a ticket was a business transaction, and to the passenger the times of arrival and departure constituted a central aspect of a contract.⁵⁵³ In issuing tickets and timetables, they believed railway companies to be making promises. When a train consistently arrived late and timetables were not adjusted, passengers saw this as an intentional deceit. Taking to the newspapers, then, performed an important social function of warning others about the dishonesty of a railway company and its timetables just as one might warn a community about a deceitful merchant. Appealing to publicity was a particularly important method of recourse for nineteenth-century railway passengers given that there was little competition over local routes.⁵⁵⁴ This practice of writing to the *Times* to air one's grievances about railway unpunctuality, entrenched in the 1840s, continued well into the twentieth century, and in the twenty-first century inspired one commuter between Oxford and London to take to the internet to expose the egregious delays he experienced.⁵⁵⁵ While passengers did lament the waste of their time and derangement of their plans caused by railway delays, they described such consequences around codes of honesty, credibility, and contract. Complaints about unpunctuality, then, represented complaints about the kind of dishonesty and deceit which posed a threat to the social fabric.

⁵⁵³ S., letter to the editor, *Times*, 31 October 1840, 5; A. B., letter to the editor, *Times*, 18 October 1844, 3; J. R., letter to the editor, *Times*, 4 June 1846, 7; F. T., letter to the editor, *Times*, 2 November 1850, 2; A constant Traveller, letter to the editor, *Times*, 26 October 1852, 5; A Man of Business, letter to the editor, *Times*, 30 November 1865, 7; J. W. R., letter to the editor, *Times*, 3 January 1866, 7.

⁵⁵⁴ Mark Casson, *The World's First Railway System: Enterprise Competition, and Regulation on the Railway Network in Victorian Britain* (Oxford: Oxford University Press, 2009), 317.

⁵⁵⁵ Dominic Utton, *Martin Harbottle's Appreciation of Time* (London: Oneworld Publications, 2014). For twentieth-century examples see: A. E. Gardiner, "Punctuality on the Southern," *Times*, 9 January 1931, 8; "Unpunctual trains," *Times*, 10 January 1927, 9; "Punctuality and Dispatch," *Times*, 22 August 1941, 5; "G. A. Rink, "Trains in War-Time to the editor of the times," *Times*, 16 January 1940, 4; Pottersbarbarian, letter to the editor, *Times*, 3 March 1927, 15; Berkhamstedian, letter to the editor, *Times*, 8 January 1927, 11; Lincoln's Inn, letter to the editor, *Times*, 7 January 1927, 13; Monkswell, letter to the editor, *Times*, 8 March 1926, 10.

5.4 Broken Contracts

One important feature of the temporality of railway travel which modeled passengers' expectations for punctuality was the timetable. The basic tabular style had appeared in the 1830s and was well established in the 1840s as the main format for conveying arrival and departure times. The time was displayed so that as one read the table, time could be seen to progress as a train moved from station to station. Tables would also denote the standard of time being used, often differentiating between local or London time until about the 1860s.⁵⁵⁶ Mike Esbester argued that the timetable's ordered though crowded presentation of the system and the listing of times down to the minute did much to "persuade people of the ordered nature of railway travel: controlled, dependable, knowable in advance."⁵⁵⁷ Timetable use was also frequently constructed as a distinctly masculine, rational skill, out of the reach of women who had little aptitude for punctuality.⁵⁵⁸ Timetables established expectations of departure and arrival times. An anecdote of George Bradshaw's effort to produce his first railway timetables related how one company's director declined to provide arrival times on the grounds that "it would tend to make punctuality a sort of obligation."⁵⁵⁹ The director's choice of language was telling, as passengers did indeed see punctuality as an obligation or duty. For passengers, timetables were the substance of promises made by the railway company. Companies, on the other hand, sought to resist such efforts by printing disclaimers announcing that they did not guarantee arrival times, nor would

⁵⁵⁶ Esbester, "Designing Time," 97–9.

⁵⁵⁷ Esbester, "Designing Time," 103

⁵⁵⁸ Esbester, "Designing Time," 106–7.

⁵⁵⁹ Lawrence Wright, *Clockwork Man: The Story of Time its Origins, its Uses, its Tyranny* (New York: Horizon Press, 1968), 143.

they be held liable for delay. In 1851 “A constant reader” questioned whether companies could be held liable for the “monthly mass of fiction” known as timetables.⁵⁶⁰

Around the mid-century some ambitious passengers, perhaps seeing no resolution for the dishonest conduct of railway companies through assaults on their reputations, sought to bring their complaints before the courts seeking damages for breach of contract.⁵⁶¹ In court, passengers had to contend with legal disclaimers that railway companies appended to their timetables intended to insulate them from liability. A common example of these notices asserted that “every exertion will be used to attain punctual observance of the times so appointed,” but made clear that the companies “do not guarantee punctuality.”⁵⁶² Passengers who sought damages to reimburse them for alternate transportation, lodgings, loss of time, and loss of business had to contend with these carefully constructed disclaimers. In one early case the York and North Midland Railway sought to use its disclaimers to avoid responsibility for the delay and suggest that no contract existed between the passenger and company. In his ruling deputy-judge Thompson argued that the timetable and the company’s disclaimer did amount to a contract not to guarantee punctuality, but “that they will use their best endeavours to carry out what they have advertised.” Breach of this contract depended on whether the delay had been the result of “negligence or mismanagement” of the company. The jury, which the *Times* report noted “was composed chiefly of merchants and shipowners” quickly returned a verdict for Raikes, a banker, whose “important business” had been deranged by railway unpunctuality.⁵⁶³

⁵⁶⁰ A constant reader, letter to the editor, *Times*, 22 August 1851, 8; quoted in Esbester, “Designing Time,” 108.

⁵⁶¹ For a discussion of the relationship between railways, the law, and lawyers in nineteenth-century Britain see R. W. Kostal, *Law and English Railway Capitalism 1825–1875* (Oxford: Oxford University Press, 1998).

⁵⁶² Great Northern Timetable, February 1858, 2, National Railway Museum, ALS4/132/E/4 (for another example see ALS4/132/G/7).

⁵⁶³ “Responsibility of Railway Companies,” *Times*, 23 October 1852, 7.

A few other suits brought in the 1850s appear to have resulted in damages for passengers. Building on the themes of dishonesty and credit expressed in letters to the editor, legal suits rested on the specific nature of the contract between the passenger and the railway company. In *Denton v. the Great Northern Railway Company* Lord Campbell noted in his judgement that “railways would not be that benefit to the public which they ought to be, if the representations made in their timetables are to be treated as so much waste paper and not to be considered as the foundation for a contract.” Timetables amounted to a “conditional promise” which became “absolute” once the condition—the purchase of a ticket—had been fulfilled.⁵⁶⁴ While Denton’s suit was successful, and he was awarded £5 10s for the “false representation” of his train not stopping as advertised, during the 1860s passengers seeking redress had more difficulty enforcing timetables as contracts. Railway companies continued to defend themselves through carefully constructed disclaimers that they appeared to revise whenever a passenger had won damages.

Timetables took on significant meaning as physical contracts between passengers and railway companies. In 1865 the Great Western Railway successfully appealed a ruling in favour of Mr. Hurst who had been awarded £5 5s for “loss of time.” The company had the judgement overturned on the grounds that the timetable had never been entered into evidence and so no contract could be proven. Furthermore, the company asserted that had the timetable been entered the disclaimer would have limited them from responsibility.⁵⁶⁵ Railway companies used these disclaimers to their advantage in the courts to evade damages as judges and juries decided that

⁵⁶⁴ *Denton v. the Great Northern Railway Company*, *Law Times* 26 (1856), 217.

⁵⁶⁵ *Hurst v. the Great Western Railway Company*, *Law Times Reports* 12 (1865), 634–5.

the test for breach of contract was “negligence” and that the burden of proof rested on plaintiffs. Through skillful use of disclaimers companies were able to limit their “duty” “to use due and proper care with the view of insuring punctuality,” or simply to avoid “unreasonable delay.”⁵⁶⁶ The *Law Times* published an editorial in 1865 reporting that in cases involving luggage and the carriage of goods companies were using disclaimer notices “so as utterly to take away from passengers their rights of action, even for gross negligence.” But in cases involving passengers, courts were more hesitant to give companies freedom from liability.⁵⁶⁷ As the *Law Times* proclaimed despite the legal disclaimers appended in timetables, passengers who purchased tickets had no intention of forfeiting their rights of redress.

A few years after the *Law Times* editorial another passenger’s suit for damages turned the disclaimer against the railway company and mobilized the language intended to limit liability to form another contract altogether. Judge Wheeler ruled that disclaimers could not sustain “entire impunity for the consequences of delay,” but that their language amounted to a contract to “use all reasonable care and diligence to insure punctuality.” Examining the causes of four separate delays which had resulted in a train arriving twenty minutes late Wheeler found that there were “avoidable delays” and that the railway company had not fulfilled their “duty” to use “care and diligence” or “every attention (adopting their own phrase),... to start punctually and... to avoid delays.”⁵⁶⁸ Into the 1870s further suits over unpunctual trains turned around the interpretation of timetable disclaimers, what counted as a “reasonable delay” and whether a company had used

⁵⁶⁶ *Prevost v. the Great Eastern Railway Company*, *Law Times Reports* 13 (1865), 20–1; *James v. the London and South Western Railway Company*, *Law Times* 41 (1865), 108–9.

⁵⁶⁷ Editorial, *Law Times* 40 (1865), 563–4.

⁵⁶⁸ Editorial, *Law Times* 48 (1869), 125; *Sanderson v. the Lancashire and Yorkshire Railway Company*, *Law Times* 48 (1869), 134.

“every exertion to ensure punctuality” as stated in their timetables.⁵⁶⁹ Despite carefully worded notices constructed to evade liability, passengers had repeated—though not always certain—success winning damages for unpunctuality.

Suits against companies appear to have been encouraged by an 1873 ruling in favour of William Forsyth, Q.C., a lawyer and Member of Parliament. As the *Law Times* noted, Forsyth’s successful case against the Great Western Railway Company prompted a “crop” of actions in 1873–4 over railway unpunctuality in which judges had to decide how to interpret the nature of contracts between the passenger and company as contained in the timetable and the purchased ticket. Forsyth proclaimed that he had brought his case “on public grounds, to endeavour to stop the system of unpunctuality... whereby it was utterly impossible to make an engagement with confidence and safety.” In his ruling Judge Stonor noted that the language of the disclaimer—“every attention will be paid to insure punctuality”—represented a “guarantee” and placed the burden of proving there had been no neglect back onto the railway company.⁵⁷⁰

Passenger litigation over railway unpunctuality reveals important dimensions of the temporality of railway travel but also the classed nature of travel. Railways had become a part of the system of commerce conducted by “men of business.” In most of the cases surveyed the plaintiff-passenger was a “man of business” or some decidedly middle, or upper-middle-class profession: banker, clothier, or barrister, for example. These passengers missed market or an appointment, had their business generally deranged, lost money, caused distress to those who

⁵⁶⁹ Jubb v. the Yorkshire and Lancashire Railway Company, *Law Times* 54 (1872), 156; Michael v. the London and North Western Railway Company, *Law Times* 54 (1873), 350–1; Freeman v. the Great Western Railway Company, *Law Times* 55 (1873), 260; Forsyth v. the Great Western Railway Company, *Law Times* 56 (1873), 23–4; Arthur v. the Bristol and Exeter Railway Company, *Law Times* 56 (1874), 20.

⁵⁷⁰ Forsyth v. the Great Western Railway Company, *Law Times* 56 (1873), 23–4.

waited for them, or had to hire alternate transportation in order to meet their business and social obligations. In *Parkinson v. the Lancashire and Yorkshire Railway Company* the company's lawyer argued that "the public are not justified in making business arrangements dependent upon the times mention in the time bills." However, Justice Daniel noted in his ruling "business appointments" were in fact being made "upon the faith" in the times listed in timetables.⁵⁷¹ "Time" he claimed, "is to the passenger of the essence of the contract." The concerns which passengers had articulated in letters to the editor had become a matter of legal precedent.

For some railway passengers, the issue of punctuality was a matter of contract, a promise, and a duty. Just as punctual payment and delivery of goods had stood towards the good reputation and credit of a merchant, so too would punctual conveyance of passengers be a matter of the reliability, creditworthiness, and safety of a railway company. The danger, as many a letter to the *Times* had noted, was that the power and "monopoly" of railways over their routes left passengers with no choice or redress but to make public their bad reputation. This concern about the power imbalances in business dealings was reaffirmed by Daniel in his ruling when he expressed the hope that "his decision may operate as a protection to individuals against evils which are inherent in every system of monopoly, and arise out of the power of the monopolist to prefer his own interest in disregard of the interest of those who are compelled to have dealings with him."⁵⁷²

Suits over unpunctuality revolved around reimbursement for damages suffered and breach of contract. The rhetorical importance represented much more than the value of this or

⁵⁷¹ "Railway Unpunctuality," *Law Journal* 9 (1874), 287–9.

⁵⁷² "Railway Unpunctuality," 289.

that passenger's time, money, or patience. The experience of delay occasioned not only concerns about potentially missed engagements but fears of an impending collision. As Forsyth opined in 1873, both "confidence" and "safety" were threatened by the unpunctuality of railway companies. Railway delays potentially occasioned damages to one's reputation, but also increasingly to life and limb.

5.5 Time and the Accident

While concepts of contract, reputation, and management—which represented important pillars of social order and trust—helped to diagnose a general cause of a company's delays and irregularity (i.e. unscrupulousness, greed, etc.), unpunctuality itself became a focal point in debates about the causes of railway accidents. The relationship between train delays and accidents had to do with the organization of traffic by the time interval system in which trains were scheduled to run with intervals of time between each other to avoid collisions. From the 1830s through the 1880s much of the railway traffic in Britain was managed on this principle. When leaving a station or crossing a point a train might be stopped until the requisite time had elapsed since the previous train had passed. If a train lost time on a section of track and no signal could be communicated to oncoming trains collisions could and did occur. Passengers were fully cognizant of this danger.

One passenger's 1845 letter to the *Times* which related a series of delays concluded with the declaration that "there can be no safety in railway travelling if the fixed time at the different stations is not strictly observed."⁵⁷³ Another correspondent observed several weeks later "in

⁵⁷³ An admirer of railway travelling, letter to the editor, *Times*, 22 September 1845, 6.

railway travelling the great safeguard to the public is regularity and punctuality.”⁵⁷⁴ Delay on the other hand led to “the tragedy of wholesale slaughter.”⁵⁷⁵ Letters to the editor included vivid descriptions of collisions and near misses that undoubtedly caused readers fear and anxiety while they themselves were seated in a railway carriage. One account described the events that transpired after a train lost power mid-journey and came to an unscheduled stop between stations:

After some delay, the engine proceeded at about four miles per hour, when we arrived at Ashchurch at nearly 9 o’clock, and, from what passed between the guard and policeman, it was evident that the express train, which leaves at half past 7 o’clock, was close upon us at full speed, and that we could not get on the up-rail; the mail being nearly due to pass. The rain was falling in torrents, and the passengers expecting the express to run into their train every minute. After the engine had dragged us along a short distance a down side-rail was perceived, on which we were backed, the guard exclaiming “Thank God, we are out of danger.” In a few minutes the express passed us as at a rapid rate.⁵⁷⁶

Through experiences as passengers, or through the consumption of accounts of collisions and near-misses caused by unpunctuality, public opinion had consolidated around punctuality as the guarantor of safety. This connection between punctuality and safety—and unpunctuality and collisions—was already entrenched by the 1840s and remained so through the 1870s.⁵⁷⁷

Reports of accidents grew more vivid in description and in such papers as the *Illustrated London News*, the *Illustrated Times*, and the *Penny Illustrated Paper* news about accidents were accompanied by graphic depictions of the wreckage (see figure 5 and 6).⁵⁷⁸ Such papers may

⁵⁷⁴ Viator, letter to the editor, *Times*, 13 November 1845, 6.

⁵⁷⁵ Viator, letter to the editor, *Times*, 13 November 1845, 6.

⁵⁷⁶ One of the passengers, letter to the editor, *Times*, 24 September 1845, 7.

⁵⁷⁷ The connection between unpunctuality and accidents was also made in the twentieth century: “The Railways Criticized,” *Times*, 19 January 1929, 7.

⁵⁷⁸ For example: “Deplorable Railway Collision at Blackburn Station,” *Penny Illustrated Paper*, 20 August 1881, 120–1; “Charles Dickens relieving the sufferers at the fatal railway Accident, near Staplehurst,” *Penny Illustrated Paper*, 24 June 1865, 49; “The Lamentable collision near Norwich: searching for the dead and wounded,” *Penny*

have succeeded commercially in part because they included sensationalized accounts of all kinds of accidents.⁵⁷⁹ Reports of accidents, coroners' inquests, and calls to increase railway safety litter the pages of daily and weekly newspapers throughout the nineteenth century. Passengers consumed images and written accounts as they sat in a railway carriage or waited at the station. One survivor of the much publicized Staplehurst railway disaster in 1865 had been reading about another accident when their own train derailed.

Just as the train arrived at Staplehurst, and while I was reading the severe comments made in one of the morning papers on the railway accident at Shrewsbury, I and my fellow-passengers were startled by a deep and heavy sounding noise; then followed two terrible jolts or bumps, and in an instant afterwards, from bright sunshine all became total darkness, and to me chaos. In a second or two I found myself enveloped in moisture, and then in the terrible din I became conscious that an accident had happened to the train in which I was a passenger.⁵⁸⁰

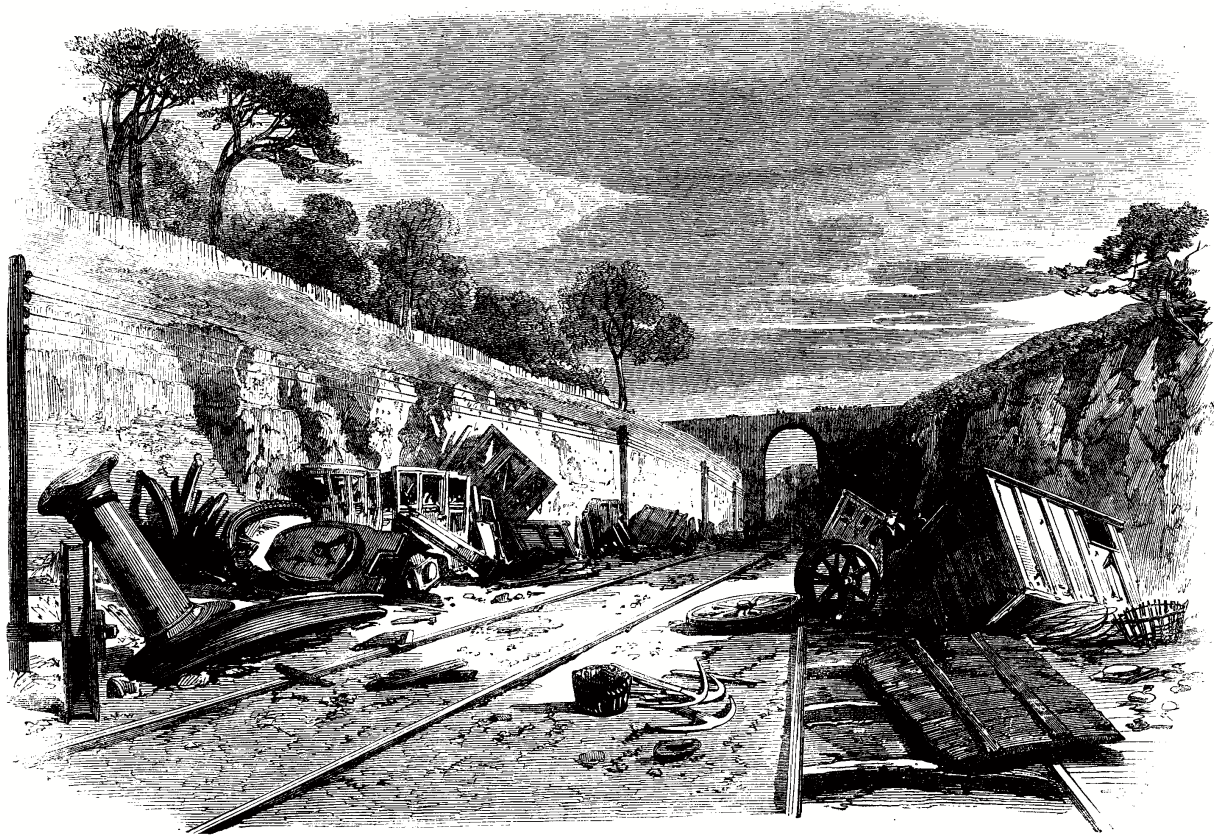
The circulation of such accounts of accidents and of late trains was an important part of the formation of public opinion about railways, their perils, and how government should intervene in the regulation and operation of railway business.⁵⁸¹ Throughout the century public opinion of railway management was fueled and shaped by newspaper accounts of accidents, Royal Commissions, Select Committees, and importantly the reports of the Board of Trade's railway inspectors.

Illustrated Paper, 19 September 1874, 177; "Hexthorpe Railway Disaster, near Doncaster: Marvellous rescue of an infant, unhurt," *Penny Illustrated Paper*, 24 September 1887, 193.

⁵⁷⁹ Peter Sinnema, "Representing the Railway: Train Accidents and Trauma in the 'Illustrated London News,'" *Victorian Periodicals Review*, 31, no. 2 (1998), 146; Paul Fyfe, "Illustrating the Accident: Railways and the Catastrophic Picturesque in 'The Illustrated London News,'" *Victorian Periodicals Review*, 46, no. 1 (2013), 61–91. Sinnema marks a shift around 1850, before which there were no close-up images of railway accidents despite extensive and detailed written accounts of accidents and their aftermaths. Paul Fyfe examines the tension between picturesque settings and industrial danger in *Illustrated London News* images, arguing that picturesque settings made accidents more pleasant to view while also sensationalizing the dangers of rail travel.

⁵⁸⁰ "The Staplehurst Accident," *The Birmingham Daily Post*, 13 June 1865,

⁵⁸¹ Sarah Dry, "Chapter of Accidents: Science, Safety and Government in Mid-Victorian Britain" (PhD diss., University of Cambridge, 2006), 18.



SCENE OF THE RECENT RAILWAY ACCIDENT AT WINCHBURGH, ON THE EDINBURGH AND GLASGOW RAILWAY.—SEE SUPPLEMENT, PAGE 491.

Figure 5 Scene of the Recent Accident at Winchburgh⁵⁸²

The Railway Department of the Board of Trade, founded in 1840, played a special role in the government regulation of railways by informing public opinion through the regular publication of reports and statistics on the causes of accidents.⁵⁸³ In contrast to the extensive public opinion on railways, the Railway Department of the Board of Trade, which oversaw railways, was relatively small with only three railway inspectors from 1841 until 1867 when it increased to four. Dry shows that in the face of concerns over the interference of government in

⁵⁸² “The Fatal Accident on the Edinburgh and Glasgow Railway,” *Illustrated London News*, 25 October 1862, 451 (© Illustrated London News Ltd.; © Cengage, Gale Primary Sources, <https://www.gale.com/primary-sources>).

⁵⁸³ Dry, 18, 42–5, 67–8.

the market and the movement of capital the railway department produced statistics which it published to inform public opinion. Concern over government interference in the free market manifested in the constrained authority of the railway department and its inspectors who had the authority to examine accidents and make safety recommendations. From 1842 inspectors had the power to delay the opening of new lines if they found its construction or plan of management would be a “Danger to the Public.”⁵⁸⁴ Once the line had opened, however, inspectors had no authority to enforce the system it had recommended or require new apparatuses or systems of management. As Dry notes, “the department... existed in a legal twilight.”⁵⁸⁵ Its inspectors generated statistics, produced reports, but had little power to intervene. They attended inquests, investigated accidents, identified and tabulated their causes, suggested means of prevention, and forwarded all these results to Parliament for publication.⁵⁸⁶

This limited action of the government prompted the 1848 publication of an editorial in the weekly newspaper *John Bull*, aptly or hyperbolically, titled “Railways versus Human Life.” So great had the danger of collisions become, that the paper urged “measures should be taken for preventing these monopolies from becoming absolute lotteries of human life.” The editorial argued from recent accounts disclosed in coroners’ inquests that “more method and regularity” and additional servants would reduce the number of accidents caused by “the frequency of delay, the unpunctuality of trains and the excessive speed resorted to for the purpose of making up lost time.” The editorial asked for more government control, more oversight, regulation, and more “legislative interference.” The practice of civil action for compensation to the injured or the

⁵⁸⁴ Railway Regulation Act, 1842, 5 & 6 Vict., c. 55. These powers were only extended in 1871 to extensions or new additions to existing lines (see Regulation of Railways Act, 1871, 34 & 35 Vict., c. 78).

⁵⁸⁵ Dry, 43.

⁵⁸⁶ Dry, 38–43, 58–9.

families of the dead, or charges of manslaughter against a driver or signalman were “an insufficient protection.” Instead the paper called for a “distinct penalty” levied on companies for “every violation of the rules.” Only then, when a company was faced with financial loss for every breach—whether it led to an accident or not—would the public see “that punctuality and attention to details which are indispensable where thousands are daily handed over to the monster power of steam locomotion.”⁵⁸⁷ Railways had grown too large and powerful, becoming monopolistic monstrosities that exceeded the traditional market’s ability to constrain them. Only government intervention could discipline the vast bodies to the sober and safe values of the marketplace.

The reports of the railway inspectors show that public emphasis on punctuality, while undoubtedly tending towards hyperbole, was no mere fiction of an impatient public. From the 1840s the expert railway department inspectors and the members of various select committees and royal commissions which investigated the causes of accidents repeatedly cited unpunctuality as a central factor in the cause of accidents. They also identified punctuality as a means of promoting safety.⁵⁸⁸ For example, between 1854 and 1858 the Railway Department’s annual *Report to the Committee of Privy Council for Trade* included tables reducing railway accidents down to their causes and listed unpunctuality among them. In 1855 the inspectors had investigated ninety-four accidents, forty-nine of which they attributed to issues of management. Of those forty-nine accidents, fourteen had been caused by unpunctuality.⁵⁸⁹ During the 1870s,

⁵⁸⁷ “Railroads vs human life,” *John Bull*, 18 September 1848, 597–8.

⁵⁸⁸ See for example: *Report of Officers of Railway Department to Committee of Privy Council for Trade*, C. 287 (1841), 6–9 [25 January 1841]; *Report of Officers of Railway Department to Committee of Privy Council for Trade*, 1842, C. 440 (1843), vii; *Select Committee on Prevention of Accidents on Railways: Minutes of Evidence*, H.C. 354 (1841), 14, 48, 161.

⁵⁸⁹ *Report to Committee of Privy Council for Trade on Accidents on Railways*, 1855, H.C. 0.7 (1856), 6.

as discussions of railway unpunctuality and collisions reached a high-point in print, railway inspectors increasingly turned away from unpunctuality as a cause of accidents to be resolved and instead saw delays as a symptom of the railway to be accounted for in safe operation.

5.6 Mechanism, Management, and Responsibility

During the 1870s, the discourse of railway accidents and punctuality reached a high point as legislators, railway inspectors, and the travelling public debated the best solution to the growing number of increasingly deadly railway collisions. Legislation proposed to make the block system mandatory; a select committee, and a royal commission accompanied by a series of increasingly publicized accidents thrust the question of railway safety before the public daily. Railway directors, inspectors, Members of Parliament, Lords, newspaper editors, and passengers all debated whether and how the government should intervene in railway management to improve safety. Discussions about how to intervene turned around two related questions. The first was the question of what kind of problem exactly late trains posed to railway safety. The second question was whether “mechanical appliances” such as the block system and telegraph signals improved safety or increased danger. In debates about these questions participants argued over the impact of mechanisms, systems, and punctuality on human fallibility.

Systems like block working, warned opponents, had their own perils. Reliance on machines supposedly led to inattentive and undisciplined railway servants and ultimately collisions. At the heart of these debates over the causes of accidents lay the problem of personal responsibility: whether systems—mechanical and managerial—improved or impaired human reliability; whether they created or averted mistakes; and whether they encouraged or discouraged responsibility. Debates over the causes of railway accidents and systems of working

and signaling became questions about human behaviour and whether the actions of railway servants should or should not be restrained and the impact of restraint on an individual's attention to detail. These issues became important because they reflected beliefs about personal responsibility, competition, and an individual's actions in a free market.⁵⁹⁰

Debates about railway safety during the 1860s and 1870s increasingly focused on the introduction of block working, or the "block system," in railway traffic management. The idea of maintaining intervals of space, rather than time, between trains had been suggested already in the 1840s. In promoting the potential use of the electric telegraph he had invented with Charles Wheatstone, William Fothergill Cooke proposed that the telegraph could be used to assist "punctuality and vigilance" in making railways safer by giving a "bird's-eye view of the road" and controlling the movement of trains over single sections of track.⁵⁹¹ Looking back in 1873 over the decades since block working had been introduced on single and double lines and surveying repeated calls of the Board of Trade to adopt the system, Reginald Sackville, Lord Buckhurst (1817–96), lamented that less than a third of the country's railway were operated on the block system. To remedy this state of affairs he introduced a bill in the House of Lords to enforce the block and the interlocking systems. Rising to defend the bill in the House of Lords he told how in 1871, ninety-three collisions had occurred on Britain's railways. Thirty-two of these were caused by insufficient intervals of time between trains, and fifty-three the result of inadequate signals and switch arrangements—the block and interlocking systems he claimed were "almost perfect" at preventing such accidents. The Board of Trade had called on railways to

⁵⁹⁰ See for example: J. Perry, "Liberalism and Liberty," in Peter Mandler (ed.), *Liberty and Authority in Victorian Britain* (New York: Oxford University Press, 2006), 71–100; Paul Johnson, "Market Disciplines," in Mandler, *Liberty and Authority*, 203–23.

⁵⁹¹ W. F. Cooke, *Telegraphic Railways or the Single Line* (London: Simpkin, Marshall, & Co., 1842), 2.

adopt them in 1854, 1868, and 1869. “But what had been the result of all these inquiries and Reports?” Buckhurst asked; “Nothing at all.” The problem as Buckhurst put it was that “The Board of Trade could make suggestions, the Inspectors could advise the adoption of certain appliances to insure public safety; but beyond that they could not go.”⁵⁹² If railway companies would not willingly adopt measures that were widely agreed to increase safety, Parliament should make them mandatory.

The debate which followed Buckhurst’s speech turned over the principles of liberalism. Earl Cowper, though he agreed that the interlocking and block systems should be used more extensively, objected that the bill would impose on companies. “Parliamentary interference” he warned “not only with railways but with all other matters ought to be jealously watched.” Lord Houghton, a director of the Lancashire and Yorkshire Railway, protested that the bill would enforce systems of “working” or management on railway companies and that the block and interlocking systems would slow the speed and frequency of traffic. “English people,” he claimed, “were well satisfied to run a small risk of accident for the great convenience of frequency and celerity.” More importantly, Houghton condemned the systems for constraining railway servants, claiming that “responsibility” would not be improved by “strictly tying them down to the observance of strict mechanical rules.” Rather, he argued that good management “must permit a certain freedom of action to railway officials—you must raise them above the level of machines, and make them responsible for a judicious exercise of their powers.”⁵⁹³ Houghton argued that the most safe system of railways would be organized and regulated by

⁵⁹² H.L. Deb., 18 February 1873, vol 214 cc582-94.

⁵⁹³ Houghton went on to say that “the railway directors of this country were a wonderful body of men. For a small amount of remuneration they discharged with superior intelligence duties not less onerous than those performed by any other men in England. He objected to this Bill both as to its principle and its details...”

railway directors and executed by servants with freedom of action. Earl Grey objected, claiming that directors exposed travellers to risk and “obstinately” ignored Board of Trade recommendations in favour of a “very dangerous system of management” that increased profits. He accused directors of “habitually” setting up “excellent regulations and then wink[ing] at their being set aside.” All of this, argued Grey, was “perfectly notorious.” These debates about railway accidents in the House of Lords mirrored the language of public opinion. On one side railway directors championed the unrestrained movement of labour and capital and argued that liability, responsibility, and public choice best regulated their work. Opponents argued that railway directors were endangering public safety in the lust for profit. Their poor management, dishonesty, and greed led directly to railway accidents.

The select committee which reviewed Buckhurst’s bill concluded that the block and interlocking system improved safety and that some lines of railway could not be safe without them. However, the committee’s report recommended that the bill be abandoned on the grounds that the work was expensive and that “improvements” should be introduced by those who would manage them.⁵⁹⁴ With the exception of Buckhurst, the committee recommended that the Board of Trade should collect information on the use of the block and interlocking systems.⁵⁹⁵ The editors of the *Railway News and Joint Stock Journal*, for one, were pleased at the outcome, calling the committee “men of common sense” for deciding “that the railway companies were

⁵⁹⁴ *Report from the select Committee of the House of Lords on the Regulation of Railways (Prevention of Accidents) Bill*, H.C. 148 (1873), iii–iv. In part the committee feared that the government or the Board of Trade might be held liable for accidents and expressed concern that companies after being forced to adopt the block and interlocking systems would be less likely to adopt Board of Trade recommendations.

⁵⁹⁵ *Report on the Regulation of Railways (Prevention of Accidents) Bill*. In July Chichester Fortescue, President of the Board of Trade, and Arthur Peel, introduced a bill fulfilling the committee recommendations. Swiftly passed, the law called on all railway companies to submit an annual analysis of the use of block and interlocking systems on their lines (Railway Regulation Act (Returns of Signals Arrangements, Working, &c.), 1873, 36 & 37 Vict., c. 76).

themselves the best judges.” The “moral” of the committee’s report according to the paper was “Let well enough alone.”⁵⁹⁶ Editorials in the *Times* and the *Pall Mall Gazette* on the other hand lamented the decision and championed “interference” after the failure of companies to act of their own volition.⁵⁹⁷ The question of regulation or interference turned around a problem of trust and reliability. Directors claimed that the government could not be trusted because they were not capable of understanding all that went into good management. Those in favour of government intervention argued that railway companies—for whom private profits were the first priority—could not be trusted to do what was in the public interest.

This tension between railway directors and the Board of Trade spawned a public debate in the winter 1873–4 after Chichester Fortescue, President of the Board of Trade, sent a copy of the Railway Department’s 1872 railway accident report to the chairs of railway companies. In a circular he appended to the report by the department’s Chief Inspector Captain Henry Tyler, Fortescue condemned the railway companies for their inaction. He argued that the report—which the *Examiner* deemed “a catalogue *raisonnée* of the slain, maimed, and bruised”—showed that through the companies’ neglect railways had only grown more dangerous. Fortescue placed “frequent unpunctuality” alongside the issue of safety—it resulted in “inconvenience, vexation, and loss” and represented a “breach of the conditions” on which passengers travel. “But,” he noted,

the evil arising from unpunctuality does not end here. The service of the line is disarranged; the chances of accident are multiplied; and trains are forced, in order to make up for lost time, to travel at excessive speed through complicated

⁵⁹⁶ “Prevention of Railway Accidents,” *Railway Times*, 24 May 1873, 719.

⁵⁹⁷ Editorial, *Times*, 25 April 1873, 9; “Prevention of Railway Accidents,” *Pall Mall Gazette*, 10 May 1873, 10.

stations, or under other circumstances where such travelling may be equally dangerous.⁵⁹⁸

The *Examiner* described Fortescue's circular as a "parental lecture," a "grim joke," and doubted—based on companies' tendency to prefer dividends over safety—that it would "provoke more than a smile."⁵⁹⁹ Fortescue had issued a public challenge to the railway companies, but as the *Examiner* also noted, he risked spoiling the small measure of goodwill that prompted companies to accept the recommendations of railway inspectors. Fully exercising the Board of Trade's mandate to investigate and report entailed risks—a public shaming intended to elicit public outrage might spoil any moral influence on the railway companies.

By February the Board of Trade had received nineteen replies from various chairmen offering a defense of their companies' conduct. The Board's synthesis of these replies noted that the chairmen contradicted themselves, defending their own efforts to implement Board of Trade recommendations while at the same time warning that "reliance upon mechanical appliances as substitutes for manual labour" could lead to "grave and serious dangers."⁶⁰⁰ Chairmen maligned the influence of "mechanical contrivances" claiming that they reduced vigilance, and created "false security" which they deemed an even greater source of danger. In the matter of unpunctuality, the chairmen offered a simple defense: "they cannot help it."⁶⁰¹ The Great Western Railway disputed the charge of unpunctuality altogether and offered their own statistics, which claimed that seventy-three percent of their trains arrived on time. The Board of Trade had

⁵⁹⁸ *Board of Trade Circular to Railway Companies, November 1873, and Correspondence relative to Accidents*, H.C. 64 (1874), 2.

⁵⁹⁹ C. "Mr. Fortescue's Circular," *Examiner*, 29 November 1873, 1183–4.

⁶⁰⁰ *Board of Trade Circular to Railway Companies*, 53–4.

⁶⁰¹ *Board of Trade Circular to Railway Companies*, 53.

no access to the actual running times of trains and lacked the evidence needed to make judgements about unpunctuality. However, in the Board of Trade's judgement unpunctuality was "a matter upon which the public at large are competent to form an opinion, and the fact remains that, among the public, there is a conviction that unpunctuality prevails."⁶⁰² The travelling public was the audience and the ultimate arbiter of such debates about safety and punctuality between the Board of Trade and boards of directors.

Public debate about railway safety had not waned by April 1874 when Lord Buckhurst, now sporting the title Earl De La Warr, moved in the House of Lords for a Royal Commission on the causes and prevention of railway accidents. De La Warr revived his disagreement with the decision to leave the adoption of the block and interlocking systems up to railway companies themselves. In return, Houghton blamed Fortescue's circular for the public obsession with accidents, claiming that "there was nothing else for the public eyes to rest upon." The extent of accidents had been exaggerated and the public refused to accept their own role in causing accidents—the English desire for speed. Fortescue's circular had caused a public panic and was interfering with railway business, while the block system would cause railway servants to become reliant on machines. The solution to the problem of accidents was the vigilance and decision of *men* of "great temperance, great caution, and great self-command."⁶⁰³

Defending the Board of Trade and Fortescue, the Duke of Richmond referred to the chairmen's denial of unpunctuality as "absurd"—public opinion concurred with the Board of Trade. Quoting a previous commission's report, he blamed accidents on unpunctuality and

⁶⁰² *Board of Trade Circular to Railway Companies*, 53.

⁶⁰³ H.L. Deb., 27 April 1874 vol 218 cc1150–7.

repeated the call for streamlining passenger compensation for delay as a remedy to accidents. The Duke of Somerset similarly emphasized the problem of unpunctuality and the narrow intervals of time between successive trains, while the Marquess of Salisbury denounced the “mischief” caused by delays and argued that “to unpunctuality may be traced nine-tenths of the accidents that occur.” Public opinion, established in letters to the editor by the 1840s had made its way into the House of Lords’ debate on the causes of accidents. Once depicted as only a virtue of the middling-sort and eschewed by aristocrats, in 1874 punctuality was now hailed in the House of Lords as a matter of public safety.

Debate on De La Warr’s address concluded, and a Royal Commission on the causes of railway accidents was ordered on 8 June. Over the next two years the commissioners interviewed 336 witnesses, and amassed 1,100 pages of testimony, finally publishing their report in February 1877.⁶⁰⁴ Public debate on accidents, fueled by a series of collisions, only intensified during the commission’s investigation. Punctuality, discipline, systems of managing traffic, and the question of responsibility appeared daily in newspapers, consumed by the travelling public. Government interference in business and the issue of liability and responsibility for accidents formed a central part of the commission’s proceedings, and ultimately led to a divided report and government inaction. On the subject of how to practically improve management and safety, public debate focused on whether machines and systems improved reliability, or gave false confidence to railway servants, whether they be engine drivers or signalmen. In public debates the status of unpunctuality as a cause of accidents reached a high point, but at the same time in the testimony given to the commission government inspectors questioned this decades-old truth.

⁶⁰⁴ *Royal Commission on Railway Accidents, Report of the Commissioners*, C. 1637 (1877), 170.

It was in the context of these debates and two months into the hearings of the Royal Commission when two trains collided head-on in what the *Illustrated London News* called “one of the most appalling accidents that ever happened in English railway history.”⁶⁰⁵

5.7 The Railway Disaster at Norwich

On the evening of 10 September 1874, the Great Eastern Railway company’s express train from London to Yarmouth was running late. It had been scheduled to stop at Norwich and depart again at 9:10 for Yarmouth, but on this night it had not arrived at Norwich until 9:23. Another train, the 8:40 mail train from Yarmouth, had stopped east of Norwich at Brundall waiting for the overdue express to pass over a five mile section of single track between Norwich and Brundall. Having stopped at Brundall for one minute, the Yarmouth mail train received the order to proceed. Just minutes later the express departed Norwich and also entered the single track. The two trains collided head-on just over a mile and a half from Norwich killing twenty-five and seriously injuring seventy-five others.⁶⁰⁶

⁶⁰⁵ “Great Railway Disaster at Norwich,” *Illustrated London News*, 14 September 1874, 280.

⁶⁰⁶ *Reports of Courts of Inquiry into Circumstances attending Collisions on Great Eastern Railway, Norwich, September 1874*, C. 1147 (1875).

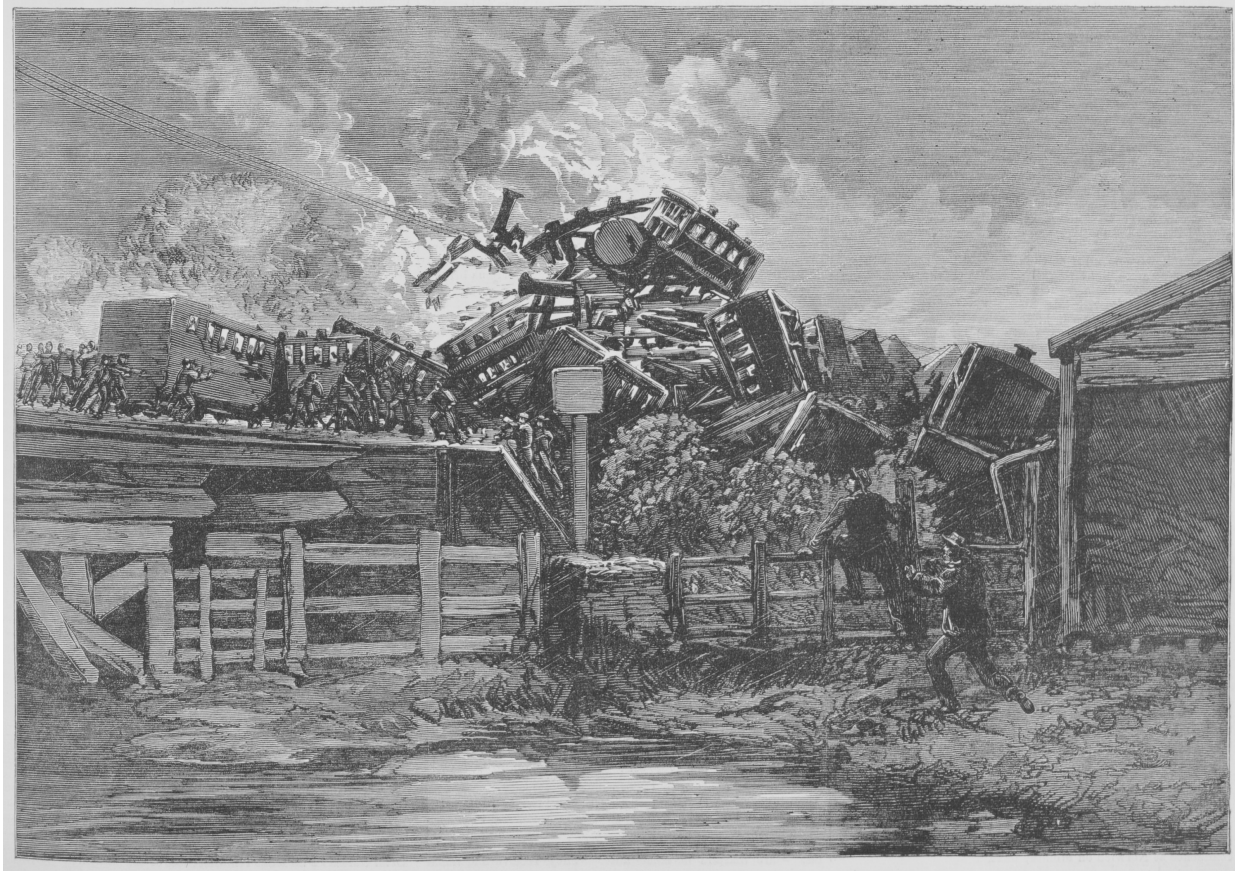


Figure 6 Wreck of the Trains After the Collision⁶⁰⁷

In the following days and weeks newspapers across Britain began to publish images (figure 6) and accounts describing the series of events which had led to the collision and giving shocking details of the scene of destruction.

The engines when they met must have reared up into an almost perpendicular position, and the carriages mounted one on top of another, and gradually sank down into an altogether inconceivable mass of rubbish and ruins. The noise was terrific... and the cries of agony and the shrieks and tears of distress made too manifest what had happened. ...beneath, above, and around both engines were mangled bodies, some killed outright, some dying, others marvellously escaping harm, and others, again, living, but buried in the debris.⁶⁰⁸

⁶⁰⁷ "Great Railway Disaster at Norwich," *Illustrated London News*, 19 September 1874, 281 (© Illustrated London News Ltd.; © Cengage, Gale Primary Sources, <https://www.gale.com/primary-sources>).

⁶⁰⁸ "Dreadful Accident on the Great Eastern Railway, at Thorpe," *Ipswich Journal*, 12 September 1874, 10.

The day after the collision Joseph Hadfield, the secretary of the Great Eastern Railway company, wrote to the *Times* blaming Cooper, the night inspector, for the accident and ignited a public debate about the true cause of the accident.⁶⁰⁹ Newspaper accounts told that the fatal confusion arose when Cooper gave a verbal order for the Yarmouth mail train to proceed to the telegraph clerk, Robson, who wrote it down in the message book and transmitted it. Company rules stated that Robson should only send the message once Cooper had signed it. However, as the inquiry would hear, this regulation was loosely enforced. In the meantime, the express train had arrived at Norwich and been sent on its way by Cooper, who realized only too late the conflicting orders he had given and rushed in vain to call back the train.⁶¹⁰

While no commentators denied that Cooper and Robson's actions led to the collision, public opinion quickly turned away from their culpability and focused on a less immediate but well-known set of dangers encompassing the system of railway management as a whole. The unpunctuality of the express train created a question for Cooper: which train should proceed through the single track first? Even Cooper's mistake could be traced back to the delay itself as the ultimate cause. Reports of the accident and the inquests created a narrative consistent with travellers' daily experiences, stressing the "evil" of irregularity and "vice of unpunctuality." Newspapers repeated the coroner's instructions to the jury that "the whole subject of want of punctuality in railway management will come up, and probably the Legislature will be led to

⁶⁰⁹ "The Thorpe Collision," *Times*, 12 September 1874, 8.

⁶¹⁰ *Reports of Courts of Inquiry into Circumstances attending Collisions on Great Eastern Railway, Norwich, September 1874*, C. 1147 (1875).

consider how punctuality can be better observed.”⁶¹¹ Reports detailed how at the opening of the inquest Edward Press, the Norfolk County coroner, refused to use the word “accident” to describe the event, telling the jury that the victims were “killed... not by a railway ‘accident’—for I must not use that word—but by a railway collision.”⁶¹² He instructed the jury to ignore Hadfield’s letter which placed blame on Cooper. Press instead directed the jury to examine the company’s “system of management” which had given one individual “absolute powers.” Discipline and good management ought to have restricted this kind of “discretionary power.”⁶¹³ The telegraph ledger regulations went unenforced and the staff system—the Board of Trade’s recommended way of managing single—was not in use over the single line.⁶¹⁴ The Great Eastern working timetables showed that had the trains been running to time they would never have competed for the use of the single track, and according to the *Examiner* “the grossest unpunctuality habitually prevailed.”⁶¹⁵ As the evidence entered in Captain Tyler’s investigation would illuminate, in August the express had been on average fifteen minutes late, it had not once arrived on time, and only seven of the twenty-six days it ran did it arrive within ten minutes. July was worse with trains arriving on average eighteen minutes late.⁶¹⁶ Unpunctuality, lack of

⁶¹¹ “The Thorpe Accident,” *Pall Mall Gazette*, 12 September 1874, 2; “The Collision on the Great Eastern Railway,” *Daily Gazette*, 14 September 1874, 3; “The Dreadful Accident on the Great Eastern Railway,” *Huddersfield Daily Chronicle*, 14 September 1874, 3; “The Great Railway Disaster,” *York Herald*, 14 September 1874, 3; “The Railway Disaster at Thorpe,” *Morning Chronicle*, 14 September 1874, 7; “Terrible Railway Accident,” *Nottinghamshire Gazette*, 18 September 1874, 4; Editorial, *Birmingham Daily Post*, 16 September 1874, 5; “Railway Disasters for September,” *Pall Mall Gazette*, 3 October 1874, 10–11; Editorial, *Morning Post*, 16 September 1874, 4.

⁶¹² “The Thorpe Collision,” *Times*, 14 September 1874, 8.

⁶¹³ “The Thorpe Collision,” *Times*, 18 September 1874, 6.

⁶¹⁴ The staff system consisted of a single token, rod, or staff, that symbolized a train’s authorization to proceed over a section of track. Only when the driver had possession of the staff would they be permitted to take their train onto the section, this way removing the danger of two trains being given the permission to run on the same track at once.

⁶¹⁵ “The Casualty at Thorpe,” *Examiner*, 19 September 1874, 1012.

⁶¹⁶ *Reports of Courts of Inquiry into Circumstances attending Collisions on Great Eastern Railway, Norwich, September 1874*, C. 1147 (1875), Appendix H.

discipline, and want of system were all cited as underlying causes of the collision and each were evidence of poor management.

Public opinion quickly formed around the collision. Letters to the *Times* confirmed what everyone already knew: unpunctuality had caused the accident, and despite the danger proven by this most recent collision, unpunctuality continued on the Great Eastern and on other railways.⁶¹⁷ Editorials and leaders helped to solidify public opinion around the issue of unpunctuality and the cause of the collision. The *Times* claimed that the collision was “an illustration of the remote consequences of want of punctuality.”⁶¹⁸ The *Sporting Gazette*, noting that the express train was often twenty minutes late, cast blame upon the Great Eastern’s management, declaring that “it must have been evident that strict punctuality was the only real safeguard against accidents. Yet punctuality was persistently disregarded.”⁶¹⁹ Appealing to public sentiment and the shared experience of railway delay, the paper exposed the Great Eastern’s timetables as falsehoods. “what a mere farce it was professing to keep to the hour advertised! The public, we may be sure, would far rather have the time specified on the bills altered to suit the actual exigencies than have a sham hour fixed which is never adhered to. The indifference with which unpunctuality has come to be regarded on many lines is notorious, and the consequence is that the advertised time bills are often little else than deliberate deceptions... Laxity in the matter of punctuality is at the root of a very large percentage of the many railway accidents which happen in the course of the year, and it was certainly at the root of this last terrible accident at Thorpe.”⁶²⁰

⁶¹⁷ See for example: W. J. Stracey, letter to the editor, *Times*, 15 September 1874, 6; A Norwich Parson, letter to the editor, *Times*, 18 September 1874, 6; W. V. letter to the editor, *Times*, 2 October 1874, 11; A Traveller, letter to the editor, *Times*, 10 October 1874, 7; W. J. S., letter to the editor, *Times*, 15 October 1874, 6.

⁶¹⁸ Editorial, *Times*, 12 September 1874, 9.

⁶¹⁹ “Perils by Rail,” *Sporting Gazette*, 19 September 1874, 865.

⁶²⁰ “Perils by Rail,” 865.

The *Examiner* defended Cooper and joined in the public outrage at the poor system of management that passengers recognized in the company's record of habitual unpunctuality.⁶²¹ Furthermore, the collision was evidence in the dispute between railway directors and the Board of Trade: "Captain Tyler and his colleagues have all along been in the right, and Sir Edward Watkin and his brother directors in the wrong." The editorial concluded by questioning why such a poor record of punctuality was maintained, so that which train would proceed on the single track was "a matter of chance."⁶²²

While trials against Robson and Cooper proceeded, railway directors were being tried in the court of public opinion, which had mobilized to focus blame for accidents on the management of railways, embodied in the boards of directors. Though it was evident that the two employees had erred, their error would never have caused a collision had the line been well managed. In one of *Punch*'s several commentaries following the Thorpe collision, Mr. Punch chastised a railway director while standing in front of the mangled remains of a train and a track switch perhaps drawing attention to debates about interlocking points and signals (figure 7). Defending the railway servants congregated behind him, Mr. Punch corrected the railway director "No, No, Mr. Director, They're not so much to blame. It's your precious false economy, unpunctuality, and general want of system that does all the mischief."⁶²³ Each collision would have its own specific causes that might be traced to the action of a signaller or engine driver,

⁶²¹ "The 'casualty' at Thorpe," *Examiner*, 19 September 1874, 1014.

⁶²² "The 'casualty' at Thorpe," *Examiner*, 19 September 1874, 1014. Tyler and Watkin had been in an open dispute the previous year over the Board of Trade's interference in railway business.

⁶²³ "Railway Responsibility," *Punch*, 26 September 1874, 128.

but public opinion held the railway directors responsible for allowing unpunctuality and for their resistance to Board of Trade recommendations.



RAILWAY RESPONSIBILITY.

MR. PUNCH. "NO, NO, MR. DIRECTOR, *THEY'RE* NOT SO MUCH TO BLAME. IT'S *YOUR* PRECIOUS FALSE ECONOMY, UNPUNCTUALITY, AND GENERAL WANT OF SYSTEM THAT DOES ALL THE MISCHIEF."

Figure 7 Railway Responsibility⁶²⁴

⁶²⁴ "Railway Responsibility," *Punch*, 26 September 1874, 128 (© Punch Limited; © Cengage, Gale Primary Sources, <https://www.gale.com/primary-sources>).

In concluding his investigation of the Thorpe collision for the Board of Trade, Captain Tyler placed responsibility for the accident with Cooper and Robson. He echoed the public opinion of the accident when he also stated that “so long as the trains were running punctually, according to properly-arranged working time-tables, there could of course, in no case, be any risk of such a collision.”⁶²⁵ His report included a table of the two trains’ arrival times at Norwich over the preceding year which showed that the express was regularly more than ten minutes and often more than twenty minutes late. Throughout the previous year the train had arrived on time on only seven occasions.⁶²⁶ Despite this evidence Tyler stopped short of identifying unpunctuality as the cause of the accident. His conclusions emphasized the need for block working and the staff system, but he also stressed the importance of discipline when working with humans. Humans were susceptible to make mistakes, to become too comfortable with the system they were using and to forget the consequences of observing the rules. His recommendation for preventing this kind of “laxity” was to impose “the maintenance of rigid discipline, by constant, efficient, and irregular supervision.”⁶²⁷ One person’s errors should never be allowed to cause danger, and so systems should be in place that would permit danger only when multiple people neglected their duties. Punctuality, discipline, and mechanical and managerial systems checked the influence, or discretion, of an individual servant from deranging the whole system by themselves. Above all, a system of working traffic was only safe so long as its rules were obeyed.

⁶²⁵ *Reports of Courts of Inquiry into Circumstances attending Collisions on Great Eastern Railway, Norwich, September 1874*, C. 1147 (1875), 13.

⁶²⁶ *Ibid.*, Appendix H, 22.

⁶²⁷ *Ibid.*, 15. “an inferior system, under good discipline, leads to better results than a superior system without good discipline.”

Following the inquiry, Charles Adderley, the new president of the Board of Trade, distributed Tyler's report to each of the railway companies along with a circular which reaffirmed his conclusions. All single lines should be operated by a combination of block working and the staff system and the Board of Trade would only approve new singles lines worked by these methods. Adderley emphasized the role of delay in the collision, arguing that it "would not have occurred had the express train been punctual." He reminded the chairmen of their duty to keep the traffic on time:

nothing can justify directors in continuing to advertise trains at a rate of travelling which cannot be punctually observed. ...where experience has shown that a train has repeatedly failed to keep its advertised time, the time should be altered so as to make the promise agree with the probable performance.⁶²⁸

For passengers who had experienced railway unpunctuality, such declarations from the Board of Trade probably came both as a moral vindication but also as a source of further anxiety while seated in a train that was behind its time.

The Thorpe accident and the debates around its various causes show how public opinion in the press and official expert opinion interacted. Tyler's report placed blame both on the individuals and on the mechanical and managerial systems used to discipline and constrain those individuals. Although he collected evidence about the habitual unpunctuality of the two trains, he remained remarkably silent on the role of unpunctuality in the accident, ultimately declining to label it a cause. Still, Tyler's report confirmed public opinion that unpunctuality had been at the heart of the Thorpe collision. Despite this agreement, there was an underlying tension between

⁶²⁸ C. B. Adderley, Board of Trade, to Chairman of the Railway Company, 18 November 1874, in *Royal Commission, Report*, 130.

public opinion and the expert opinion of railway inspectors. While the public saw punctuality as a means of improving railway safety, inspectors deemed this truism a further source of danger.

5.8 How Do You Solve a Problem Like Railway Safety

After more than two years and 336 witnesses, the Royal Commission on Railway accidents finished its report in February 1877. Unpunctuality, the commission acknowledged, was a problem, but the kind of problem unpunctuality posed and how to go about solving it were less clear. Solutions offered by witnesses and the commissioners themselves reflected ideological differences about government interference in business and how to assign liability and responsibility for accidents. While the commissioners concluded that timetables should be altered when trains were consistently behind time, they declined to make any legislative recommendations to alter timetables or impose fines for unpunctuality. The commissioners did however recommend that passenger compensation for delays be increased and simplified. Increased means for redress would, they argued, lead to companies' revision of the timetables to match the actual time in which a journey could be completed. Here still, the commissioners could not agree. In a separate report Thomas Harrison (1808–88), one of the commissioners and also the chief engineer of the North Eastern Railway, and President of the Institution of Civil Engineers (1873–5), described the recommendation as “most injudicious” and claimed it would promote accidents rather than prevent them by forcing drivers to make up lost time with increased speed. He saw no need to change the current system in which passengers brought their claims to the county courts. De La Warr acknowledged unpunctuality as a possible cause of accidents and called upon companies to alter their timetables to the actual times of arrival and

departure.⁶²⁹ Another commissioner, William Galt, who had been a long-time proponent of railway nationalization, argued that the best remedy would be to allow the Board of Trade to force companies to alter their timetables to show the time it actually took to complete the journey. Unpunctuality was a problem, but the commissioners disagreed on just what kind of problem and how it should be resolved.

These disagreements among the commissioners reflected differences among the Board of Trade officials. Thomas Henry Farrer (1819–99), the secretary of the Board of Trade, and Frederick Rich (1824–1904), one of the Board’s inspectors, suggested that the Board of Trade should receive returns of arrival times and require timetables to be changed when trains were frequently late. They also supported making it easier for passengers to be compensated for delays.⁶³⁰ During his testimony, Farrer submitted a report on the current legal liability of railway companies for delays, citing recent cases and the disclaimers companies were using to avoid liability. His analysis of the case law noted that the courts were divided, some judges upheld the disclaimers as essential parts of the contract while others deemed the disclaimers entirely unreasonable. The current state of case law, according to Farrer, prompted the question of whether it was “just” for a “monopoly” to make it so difficult for the public to know when their journey begins and ends. He argued that increasing passenger compensation for delay helped address the injustice of broken contracts while at the same time improving safety.⁶³¹ For Farrer,

⁶²⁹ *Royal Commission, Report*, 81.

⁶³⁰ *Royal Commission on Railway Accidents, Minutes of Evidence taken before the Commissioners*, C. 1637–I (1877), 78–9, 746. Rich, noting that his fellow inspectors disagreed with him, also recommended that companies should be required to repay passengers for delay beyond five minutes. *Ibid.* 78–80, 747–8

⁶³¹ See *Royal Commission, Report*, Appendix M, No. iii–iv, 164–8. “In enforcing punctuality [through passenger compensation] two objects are at once attained, viz., the observance of fair conditions between the companies and the public, and increased security for public safety” (166).

as with much of public opinion expressed in the preceding decade, punctuality was a matter of duty and contract in the business between company and passenger; making good this contract had a dual purpose of restoring social trust while at the same time improving safety.

Captain Henry Tyler disagreed. He objected to the principle of “interfering with the management of railway companies,” claiming that “anything like duplicate management will break down.”⁶³² He argued that attempts to enforce punctuality would lead to increased risks. He argued that the threat of penalty or a change to the timetable would cause companies to run at higher speeds to make up lost time. Companies subject to fines would in turn fine drivers and create a situation where trains ran at unsafe speeds to avoid delays.⁶³³ Drawing on the belief in moral regulation of debt, credit and reputation, Tyler argued that the best recourse for unpunctuality was publicity. Passengers should submit complaints to the Board of Trade, which the Board would investigate and publish. Publication, argued Tyler, would assert “a moral pressure” on the company, “they would not like to see themselves continually paraded before the public as being unpunctual.”⁶³⁴ “Publicity” he claimed, “is the best thing.”⁶³⁵

In their final report, commissioners concluded that unpunctuality was a safety problem, though they disagreed with Lord Cardwell’s 1853 report which deemed unpunctuality the “chief” cause of accidents. Instead, unpunctuality acted as an aggravating influence on “human fallibility” by making the work of railway servants more difficult.⁶³⁶ When the delays of one train required alteration of the flow of traffic from the timetable railway servants had extra work

⁶³² *Royal Commission, Evidence*, 110.

⁶³³ *Royal Commission, Evidence*, 110.

⁶³⁴ *Royal Commission, Evidence*, 110–11.

⁶³⁵ Farrer agreed with Tyler (*Royal Commission, Evidence*, 751).

⁶³⁶ *Royal Commission, Report*, 15; “unpunctuality of trains increases the difficulty of a signalman’s duties in proportion to the extent it prevails.”

to do. This “special exercise of thought” the commission concluded “cannot fail to render them exceptionally liable to err.”⁶³⁷ They equated unpunctuality to the absence of interlocking signals and switches; both made working the traffic more difficult and increased the likelihood of errors.⁶³⁸ This position reconciled for them the differences among Farrer and the Board of Trade inspecting officers. Although previous commissions and reports had positioned unpunctuality as a, if not the, central cause of accidents, and public opinion affirmed an inextricable link between railway safety and punctuality, opinion at the Board of Trade was divided. Farrer, for one, viewed unpunctuality as a cause of accidents, arguing “that great regularity must prevent danger.” Identifying Tyler’s report on the Thorpe collision as a case in point, Farrer told the commissioners that the inspecting officers “do not attach sufficient importance to punctuality.” He argued that the same claims inspecting officers made about “mechanical appliances” restraining the “discretion” of railway servants and therefore human fallibility applied equally to punctuality. “Punctuality and regularity in the conduct of the service must, as it seems to me, be one of the greatest safeguards against accidents.” According to Farrer, railway directors opposed “appliances which eliminate human discretion.” In their view, he claimed, they “prevent a man from using his wits, ...deaden his faculties of observation and discretion, and he will come to rely upon mechanical appliances instead of his observation.”⁶³⁹ The opinion of the inspecting officers on the other hand was that eliminating such discretion reduced the opportunities to “distract attention.” The more business went on “perfectly regularly” so that an individual’s intervention was minimal “the more likely he will be able to exercise that discretion properly in

⁶³⁷ *Royal Commission, Report*, 15.

⁶³⁸ *Royal Commission, Report*, 15–16.

⁶³⁹ *Royal Commission, Evidence*, 745, 746.

the exceptional cases.”⁶⁴⁰ Farrer urged that the same held with respect to punctuality and regularity—they prevented the habitual necessity of employees making judgements and reduced the opportunities for “human fallibility.” Punctuality was as much a safety appliance as interlocked signals and block working.

For the expert railway inspectors, however, punctuality was not a solution to the problem of railway safety as it was for Farrer and the travelling public. Viewing punctuality as a way to prevent accidents, and unpunctuality as a cause of accidents, was a symptom of an inherently unsafe system of management. William Yolland argued that while delays were currently associated with accidents if the traffic was managed properly—by the block system—unpunctuality would not lead to accidents.⁶⁴¹ Charles Hutchinson agreed with the popular belief in the connection between punctuality and safety but noted that “you cannot attain it on railways.” Rather, he claimed that “unpunctuality must be an admitted state of things.”⁶⁴² Here, Tyler was clearest in articulating why he opposed the belief that punctuality could secure safety. Perhaps explaining his relative silence in the Thorpe accident, he carefully articulated what problem unpunctuality posed for railways. “Occasional” instances were unavoidable, but “habitual unpunctuality” he admitted was “inexcusable.” Although he acknowledged that unpunctuality had been a “question” in many accidents, he refused to label it a “cause.”⁶⁴³

if you attempt to work railways with perfect regularity, and to trust to that regularity to prevent accidents, a railway will then never be safe... If you attempt to trust to punctuality you will fall into a trap; that is if you trust to punctuality for safety in cases of thick fogs, or heavy snow storms... when it becomes unsafe to run at full speed. Unless you make your railway safe for unpunctual trains it will not be safely worked at all. Whatever amount of unpunctuality may be in

⁶⁴⁰ *Royal Commission, Evidence*, 745.

⁶⁴¹ *Royal Commission, Evidence*, 11.

⁶⁴² *Royal Commission, Evidence*, 54–5.

⁶⁴³ *Royal Commission, Evidence*, 108.

existence, still your railway ought to be safe in spite of that, or will not be safe at all.⁶⁴⁴

For Tyler, punctuality might decrease confusion, but it could never guarantee safety. Rather, like human fallibility, unpunctuality was a condition of railway working and something that systems of management ought to account for. The problem of linking punctuality to safety was that it applied to a system of management which relied on time intervals, or lacked adequate signals, or effective discipline. Unpunctuality was a staple of railway travel, and while it should not be habitual, it would occur, nonetheless.

The Royal Commission's final report was marred by division and disagreement. Three of the commissioners did not sign the report, one of whom, De La Warr, issued his own conclusions which were attached to the report. Two others, Galt and Harrison, signed but appended their own dissenting opinions in separate papers published with the report. This division, and a desire in the House of Lord's to maintain the undivided responsibility of railway companies, prompted the Lord's decision to do nothing.⁶⁴⁵ Debating the report in the House of Lords in 1877, Lord Bury presented a resolution to quash the commission's recommendations and to preserve the undivided responsibility of railway companies from the interference of government legislation. Benjamin Disraeli, then Prime Minister, and recently made Earl of Beaconsfield asked for more time to consider the report. The *Times* questioned just how long this delay would be and *Punch* predicted that nothing would come of the commission, mocking that in the midst of the Eastern Question, "a Government that won't join in coercing Turks has no *locus standi* for coercing Directors."⁶⁴⁶ But Disraeli's address in the House of Lords revealed the extent to which long held

⁶⁴⁴ Ibid., 108.

⁶⁴⁵ H.L. Deb., 13 February 1877, vol. 232, col. 255–7; H.L. Deb., 27 April 1877, vol. 234, col. 4–29

⁶⁴⁶ Editorial, *Times* 28 April 1877, 11; "Punch's Essence of Parliament," 5 May 1877, 194.

beliefs about punctuality and railway safety were sustained in public opinion. In the face of testimony from the government railway inspectors against punctuality as a source of safety and the hedged claims of the commissioners, Disraeli repeated the chorus of railway passengers:

Now, there is not the slightest doubt but that a great virtue—perhaps, I might say the greatest virtue—in railway management is punctuality. There is nothing, evidently, that contributes so much to the convenience and to the safety of passengers as punctuality.⁶⁴⁷

Despite railway inspector's assertions about the problems of connecting railway safety to punctuality, passengers maintained the association.⁶⁴⁸

The immediate results of the Royal Commission were limited to an increase in public discussion of railway accidents. It was not until 1889 after the Armagh rail disaster—which killed seventy-eight people by the time the Railway Department completed its report—that Parliament was finally pressured into mandating the use of the block system and interlocking points and signals on all railway conveying passengers.⁶⁴⁹ At the very time that Parliament was debating this legislation, the House of Commons also ordered a return of the arrival of passenger trains, fulfilling in some way Captain Tyler's recommendation that companies' unpunctuality should be paraded before public. In debates about the publication of these returns the issue of safety had largely been divested of the subject of punctuality. One correspondent to the *Times* writing in 1890 following the first publication of the punctuality returns decried the "shamefully unpunctual" South Eastern Railway and challenged Edward Watkin's earlier defense of his company. Watkin had claimed in response to the charges of unpunctuality that the South Eastern

⁶⁴⁷ H.L. Deb., 27 April 1877, vol. 234, col. 20.

⁶⁴⁸ Warder, letter to the editor, *Sunday Times*, 22 April 1877, 2; Alpha, letter to the editor, *Times*, 4 January 1879, 11; An Anxious Traveller, letter to the editor, *Times*, 9 August 1880, 8.

⁶⁴⁹ Regulation of Railways Act, 1889, 52 & 53 Vict., c. 57. The accident occurred on 12 June.

was safe and cheap. Condemning these excuses, Walter Arnold wrote that “it will hardly be said that the unpunctuality has any connexion either with the creditable freedom from accidents or with the price of tickets.”⁶⁵⁰ Another passenger writing in 1894 went so far as to claim that punctuality was leading to accidents: “in demanding high speed and strict punctuality in all weathers [the public] are endangering themselves.”⁶⁵¹ By the 1890s passengers writing to the *Times* were more likely to attribute delays to accidents than to attribute accidents to delays.⁶⁵² But still passengers continued to complain of delays, unpunctuality and the deceit and mismanagement of companies which caused inconvenience.⁶⁵³ “Publicity in The Times,” wrote David Chattell “appears to be the only available remedy.”⁶⁵⁴

5.9 Conclusion

Historians have placed significant emphasis on the railway’s impact on time standardization, the pace of life, and time-discipline. Histories have given the steam locomotive running on rails the status of a driver of norms about time. Examining discussions of railway punctuality reveals some of the expectations of timeliness, speed, and regularity that passengers brought with them

⁶⁵⁰ Walter Arnold, letter to the editor, *Times*, 27 January 1890, 11.

⁶⁵¹ P. B., letter to the editor, *Times*, 16 October 1894, 4.

⁶⁵² W. B. Gibbs, letter to the editor, *Times*, 20 December 1890, 6; Alex. Jacks., letter to the editor, *Times*, 20 December 1890, 6; Verax, letter to the editor, *Times*, 4 September 1895, 13; Viator, letter to the editor, *Times*, 10 March 1896, 11; Henry C. Jones, letter to the editor, *Times*, 3 January 1898, 6; Another G.N.R. Season Ticket-Holder, letter to the editor, *Times*, 3 January 1898, 6; Robert Cecil, letter to the editor, *Times*, 16 August 1899, 10; T. Bailey Saunders, letter to the editor, *Times*, 1 January 1900, 6. Exceptions include W. A. Bonney, letter to the editor, *Times*, 18 August 1899, 8 (who described unpunctuality as “dangerous”, but mainly called attention to the waste of his time and demanded the resignation of two-thirds of the London and South-Western’s board of Directors); A Country Parson of West Somerset, letter to the editor, *Times*, 13 November 1890, 6; System, letter to the editor, *Times*, 28 September 1895, 11.

⁶⁵³ A Season ticket holder, letter to the editor, *Times*, 18 August 1899, 8; A., letter to the editor, *Times*, 18 August 1899, 8; R., letter to the editor, *Times*, 4 September 1895, 13; Season-Ticket, letter to the editor, *Times*, 6 September 1895, 5; Traveller, letter to the editor, *Times*, 16 August 1899, 10; T. F. B., letter to the editor, *Times*, 16 August 1899, 10; System, letter to the editor, *Times*, 28 September 1895, 11; Hugh Cecil, letter to the editor, *Times*, 23 January 1896, 11; R. J. Turner, “letter to the editor, *Times*, 22 December 1897, 10; Ferrovia, letter to the editor, *Times*, 7 March 1898, 16

⁶⁵⁴ David J. Chattell, letter to the editor, *Times*, 16 August 1899, 10.

to the station and the carriage. Developed already in relation to coach travel, punctual arrival times were an expectation brought by passengers to the railway journey against the wishes of railway companies. In looking to passenger experiences of the railway journey, what is striking is not how the system disciplined users into conceiving of the journey as regular, swift, and orderly. Rather, passengers struggled for decades to make their travel so. Employing the well-trodden language of punctually paid debts, social and economic credit, and reputation, passengers publicly maligned the performance of railway companies that failed to keep the promises stated in their timetables. Fighting to establish the timetable as a contract in court and to gain financial compensation for delays, they described their actions as an attempt to make railway directors honest.

Also representing a guarantor of passenger safety, punctuality was a sign of honesty and the efficient operation of the system. Good management, by good managers, promoted discipline, economy, and safety: punctuality was the result and an outward sign that no one was in danger. While successive commissions, committees, and railway accident reports described punctuality as a guarantor of safety, by the 1870s expert opinion of the Board of Trade's railway inspectors had begun to argue that unpunctuality was an accepted state of affairs on railways. As a result, they argued, seeking to manage traffic by punctuality was inherently dangerous. Before the end of the nineteenth century passenger opinions about punctuality appear to have followed expert opinion as complaints about delay were largely divorced from concerns about safety. However, in debates about the role of mechanical and managerial systems in preventing accidents, punctuality was equated with mechanical systems like block working, interlocking points, and the staff system. In each case their absence made the work of managing a railway

more difficult and more likely to lead to human mistakes and collisions. Punctuality, though not a guarantor of safety, helped to limit human error.

Paying attention to passenger complaints over late trains and the language they used to air their grievances in newspapers and in the courts changes our understanding of the kinds of problems delay represented to the Victorian railway passenger. Time spent waiting for late trains certainly prompted complaints about lost and wasted time that could not be regained. Missed appointments and dinners, and lost business, formed a part of the complaints passengers articulated in letters to the editor, particularly of the *Times*. But passengers also articulated the problem of unpunctuality as an issue of honesty and good management. If trains were so habitually behind time on certain lines, a simple adjustment of the timetables could resolve the inconsistency, the frequent disappointment, and the danger.

At the beginning of the twentieth century the noted railway economist and frequent contributor to the *Times*, William Acworth, suggested that “unpunctuality of passenger service is in England a wrong without a remedy.”⁶⁵⁵ Legal disclaimers hidden inside railway timetables continued to block passengers from compensation, “a passenger can only obtain a ticket on condition that he contracts himself out of his legal rights to damages for unpunctuality.”⁶⁵⁶ While such reflections reveal something of the business practices of railway companies and the trials of passengers, it also reveals that in England during the nineteenth century railway punctuality was aspirational and never achieved to the satisfaction of many passengers.

⁶⁵⁵ William Acworth, “The rights of railway passengers in respect of unpunctuality,” *Journal of the Society of Comparative Legislation*, 3, no. 1 (1901), 31.

⁶⁵⁶ Acworth, 32.

Chapter 6: Conclusion

“Lord Henry had not yet come in. He was always late on principle, his principle being that punctuality is the thief of time.”⁶⁵⁷

In 1893 Alfred Douglas published a satirical essay in his magazine *The Spirit Lamp* titled “Some reflections on the Beauty of Unpunctuality.” Referring to the line above from Oscar Wilde’s *The Picture of Dorian Gray*, Douglas—who was then romantically involved with Wilde—agreed and argued that “nothing is more fatal to time than punctuality.”⁶⁵⁸ He deemed the punctual “philistines” and was alarmed by their “seriousness and solid common-sense.” Those committed to punctuality had no time to spare as they were constantly planning to turn every minute to profit. As a result they would inevitably lose time to others’ delays. The unpunctual on the other hand had all their time at their disposal and could easily add to this store any time their “Procrastination steals from the punctual.” Punctuality caused “frightful evils” including rising early, method, and regularity. Douglas advised to never trust one who always arrived on time for meals and asked “how many people have escaped terrible deaths by being late for trains?” This lampoon of the discourse of punctuality reflected the broader cultural critique of objective space and time around the fin de siècle.⁶⁵⁹ But such criticisms, though rare, could also be found in the 1850s. What were the results of stressing punctuality and timekeeping? Did it really offer the freedom from worry, waste, and disorder its proponents had claimed? Or valuing punctuality merely increase one’s worries? A mid nineteenth-century satire in Charles Dickens’ *Household Words* weighed in from the perspective of one who proclaimed

⁶⁵⁷ Oscar Wilde, *The Picture of Dorian Gray* (London: Ward, Lock, and Co., 1891), 65.

⁶⁵⁸ Alfred Douglas, “Some Reflections on the Beauty of Unpunctuality,” *Spirit Lamp* 3 (1893), 74.

⁶⁵⁹ Stephen Kern, *The Culture of Time and Space, 1880–1918* (Cambridge: Harvard University Press, 2003).

themselves to be “a punctual man; nervously, fretfully, painfully punctual.”⁶⁶⁰ The essay critiqued the “morbidly regular” as constantly obsessing over the negative consequences of delay: “I drill myself in the virtue of punctuality, by indulging my imagination in the opposite vice.” They arrive everywhere too early, fret over being late to catch the train, and worry “that the clocks in the house are not strictly regulated by the most approved standard of time.” While many deemed punctuality a virtue, there were others who found it could carry one into viciousness.⁶⁶¹

This project has focused almost entirely on those who promoted punctuality as a virtuous form of behaviour. From the eighteenth century these voices which interpreted the value positively as an important character trait were the overwhelming majority of those who discussed punctuality. These voices consistently repeated that punctuality *ought* to be valued and practiced the way they viewed it. Importantly, they tend to show that many others did not value and practice punctuality. Evidence discussed in these chapters has focused on problems of trust, duty, and honesty and how punctuality offered a solution to a number of questions. Could a person be trusted to pay a debt on time? Was a person fulfilling their socially prescribed obligations? What did a properly managed business and home look like? How could one know whether to trust in measures produced at a secluded observatory? Was there a way to tell if a railway was safe for passengers? In all of these cases the method adopted to do work instilled confidence in people, knowledge, and systems. Punctuality was simultaneously the result of methodical work and a

⁶⁶⁰ John Hollingshead, “Too Late,” *Household Words* 17 (1858), 464–7.

⁶⁶¹ See also: “Mr. Method,” *Chambers’s Edinburgh Journal* 3 (1845), 379–81; Quiz, “The Punctual Man,” *British Miscellany* 1 (1841), 49–52.

means to making that work easier, more orderly, and consequently more profitable and trustworthy.

Much of this discourse around punctuality was also primarily concerned with risks and how to mitigate them. The risks facing people in early-modern England centered around whether they could trust others enough to extend them credit. Conversely they also had to work to uphold their own credit by showing they too were trustworthy. A loan given to a vapouring tradesman, or another family who might default, would in turn impact a person's ability to pay their own debts. The consequences would be damaged reputation and injured credit. Having a reputation for punctuality was a positive mark of creditworthiness in the world of commerce. Punctuality could be equated with honesty or as a sign of who could be trusted to repay their debts and who could not. Here punctuality reflected not just whether one was deceitful but whether one's habits were such that they were able to repay debts if they wanted to. Extravagant spending contrasted with economy and idleness with industry. Speculation was contrary to sound judgement and disordered records were the antithesis of accurately kept account books. In each case the latter were the fruits of self-discipline, restraint, order, method, and punctuality. This meaning of the word punctuality was steeped in the commercial context where it originated. The association remained entrenched in the word throughout the nineteenth century.

The meaning of punctuality as paying debts or fulfilling obligations at the time agreed became generalized to a variety of contexts in the eighteenth century. By the time that Johnson wrote in *The Rambler* of the robbery of time, punctuality had begun to mean not just repaying debts but also keeping appointments. Making an appointment in business or in leisure was a promise and arriving late or not arriving at all wasted others' time. Want of punctuality connected to a longer history of seeing time as a prized possession which could not be regained

if lost or wasted. Arriving late, or not at all, showed disrespect for others and reflected a person's selfishness. Punctuality, on the other hand, was ideally exercised out of a concern for others. It showed respect for others' time, and that one was compelled by a sense of duty, justice, or obligation to do what they had promised to do.

While texts discussing punctuality initially made little explicit mention of women's time, by the late eighteenth century punctuality appeared as part of the domestic ideal in the concept of separate spheres. The very language which described business etiquette and good credit was used to moralize women as good household managers. Importantly, this conception of punctuality was a part of the language of female domesticity already in the late eighteenth century through its articulation by Hannah More and Thomas Gisborne, both evangelical Anglicans and members of the reforming Clapham sect. In the ideal middle-class home punctuality characterized the work and leisure of all members and instilling this virtue into the home became the work of the manager. Punctuality was one of her domestic duties. Children also had this value preached to them in didactic literature aimed to teach them the value of time and the dangers of neglecting their duties, scheduling their time, and keeping their word. Punctuality was an instance of moral conduct that showed respect to others and earned respect in turn. Teaching punctuality to children built on the same patterns applied to adults: one should be punctual because the consequences of unpunctuality could be disastrous.

As various texts discussed throughout this project made clear, many people had difficulty being on time. The very possibility of being punctual necessitated a consistent and shared

standard of time, and clocks frequently told widely varying times.⁶⁶² Electrically distributing GMT to distant clocks and timeballs was in part an intended solution to the challenge disagreeing clocks posed to punctuality. Astronomer Royal George Biddell Airy who established the Greenwich time signals believed that distributing GMT would promote punctuality in those who used clocks supplied with the standard from *his* observatory. Producing GMT rested on the very values the standard was intended to promote. Order, discipline, accurate and open accounts were the foundation on which both scientific knowledge and business profits should be built.⁶⁶³ Under Airy's management, Greenwich adhered to these principles and reflected his own personal insistence on punctuality. As a manager he impressed his character on the work done at the observatory and GMT became a metrical representation of Airy and his system. The very ability of GMT to promote punctuality rested on this highly moralized and personal conception of its production.

The important role of punctuality in the proliferation of GMT has often been overwritten by the influence of railways. The advent of rail travel in early nineteenth century Britain has similarly been viewed as the cause of the Victorian preoccupation with timekeeping and punctuality. However, as this project has shown, the value long predated the appearance of steam powered railways. Railway passengers who decried the lateness of trains throughout the nineteenth century in fact rehearsed expectations about the celerity and reliability of

⁶⁶² "Pulpit Notices", *Primitive Methodist Magazine* 8 (June 1838): 234-236. "What's the time?" *Daily News*, 8 July 1856; Royal Greenwich Observatory Archives, Papers of George Airy, Cambridge University Library (hereafter RGO 6), Warren De La Rue, to George Biddell Airy, January 7, 1860, RGO 6/614; E.T. Hargraves, "Railway Time," *The Times*, 19 August 1884, 10. Francis Grose, *A Provincial Glossary; with a Collections of Local Proverbs*, 2nd edn (London: S. Hooper, 1790), "They agree like the clocks of London. That is, not at all."; "All night on the Monument," *Household Words* 17 (1858), 146-7.

⁶⁶³ Ashworth, "Calculating Eye," 411, 431-4.

transportation promoted to coach passengers in the eighteenth century. Railway passengers translated this concern for speed and the commercial rhetoric of punctuality to their experience of the railway journey. They problematized delays as breach of contract, deceit, and dishonesty. They deemed the directors of unpunctual railways bad managers, dishonest, and untrustworthy. This understanding of railway unpunctuality was only heightened when passengers began to connect delays to the imminent danger of collisions. In this context, punctuality became a measure of safety. Well-managed railways produced punctual trains and punctual trains were safe and free from collisions. Passengers, legislators, and government railway inspectors established punctuality as a guarantor of railway safety already in the 1840s. By the 1860s and into the 1870s government inspectors began to question this belief and even problematized it as a further cause of danger. Unpunctuality would occur despite the best intentions and the best laid plans. Rather than punctuality, railways needed systems of management and mechanical devices that restrained the freedom of individuals to deviate from the rules. Unpunctuality was a part of railway operation and while it should be reduced as much as possible, good management needed to account for delays rather than counting on punctuality.

Punctuality was a middle-class value. It was generated among the nascent middle class in the context of a credit economy. It was promoted by middle-class writers and businessmen, advocated inside the middle-class home, impressed upon children, and diffused by middle-class railway passengers. Punctuality was of course also impressed upon the working class in literature and at work. While the value may have been upheld as peculiar to the middle-class, or not

achievable by all,⁶⁶⁴ didactic texts for working class families also promoted the value as a means for self-transformation. While integrity, honesty, and obligation were among the values associated with punctuality in working-class texts, future studies might examine how the language of punctuality was directed differently at working- and middle-class Victorians. Warren De La Rue, for one, argued that punctuality might lead to a moral transformation of his workers.⁶⁶⁵ Of course, De La Rue's objectives were not entirely altruistic and were aimed at reducing costs and increasing his company's profits. Was the language of trust and credit pervasive in the working-class discourse of punctuality or was this rhetoric more focused on obedience and duty to one's employer? Examining working-class texts and voices from the labour movements of the nineteenth century which fought for twelve, ten, and eight-hour work days might shed light on further interpretations of punctuality and how it narrated class difference.

Looking at the deployment of punctuality beyond Britain's shores in the imperial context may further reveal on how time narrated racial and national differences. Giordano Nanni has demonstrated how missionaries and settlers discussed the timekeeping habits of indigenous peoples in Australia and South Africa. Nanni illustrates the racialized conceptions of indigenous peoples poor timekeeping and how Europeans interpreted non-western, non-clock-oriented time use as primitive. Nanni also points to the continued purchase of these ideas and how they have been internalized to an extent despite a history of anti-colonial resistance to European time

⁶⁶⁴ A review of Sarah Jane Stansfield's *Punctuality* (1859), put it thus: "A score of folio volumes on the subject would be useless for the purpose of preaching an unpunctual man into punctuality. Punctuality may rank as a virtue, but it is a constitutional virtue, not an acquired one, and can no more be engrafted on a character than the Scot can exchange his shrewdness for the impulsiveness of the Celt." "Review of Punctuality, by Sara Jane Stansfield," *Athenaeum*, 17 December 1859, 812.

⁶⁶⁵ See chapter 4.

discipline.⁶⁶⁶ Indigenous timekeeping, and resistance to settler-colonialism, was judged against European values about industrious labour and its regulation by clocks and schedules. Similarly, Michael Adas has shown how Europeans deemed non-Europeans incapable of keeping time.⁶⁶⁷ In both of these histories, punctuality simply referred to being on time and was rooted in clock time and reflected industry and idleness. Future studies in the global history of time and timekeeping should consider how the English middle-class discourse of punctuality as trust pervaded global imperial efforts to colonize time and how the relationship between punctuality and credit played a role in marking racial difference.

Historians have looked to factory production, the proliferation of clocks and watches, protestant theology, capitalism, and transportation systems as the source of new modes of thinking about time as objective to be saved, bought, sold, and spent wisely as a commodity. The history of punctuality shows that one major expression of modern time discipline was its orientation towards others. Punctuality was a virtuous form of behaviour and was lauded not simply for its ability to save time. Industry and early rising were values that focused on the use of one's own time. Punctuality, on the other hand, explicitly emphasized how one's actions affected others, and how one's outward behaviour would lead to a good or a bad reputation which in turn had personal consequences. Paying debts, attending appointments, arriving for dinner, doing one's household chores and giving or carrying out orders all influenced others' time and had potential personal consequences beyond the immediate loss of time.

⁶⁶⁶ Nanni, *Colonisation of Time* 113, 234–5

⁶⁶⁷ Michael Adas, *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance* (Ithaca: Cornell University Press, 1989), 241–55.

This project has examined what some historians have called “modern” time disciplines by following one of its central features. Following the use of the word punctuality, this project has traced a number of meanings and concepts that the word evoked. In each of the contexts explored in this project, punctuality had a significance beyond simply being “on time.” For many of the authors surveyed in this work, being on time was not an end in itself. Timeliness served other purposes that were more important and consequential. It was an instance of duty, a symbol of trustworthiness, and a component of piety. It was a crucial part of managing all manner of work whether it be in the home, factory, railway or observatory. Punctuality the word contained and unified each of these concepts. Quentin Skinner has argued that concepts, not words, should be the proper focus of study for understanding how people and cultures view the world. But Skinner still notes that vocabulary matters, and that developing terminology is a sign that a society possesses a concept.⁶⁶⁸ Max Engammare’s study of punctuality explored the concept, without the word, which resulted in a study not of *ponctualité* but of schedules, clocks, and being on time.⁶⁶⁹ Punctuality for Engammare was not an actor’s category. As I have argued, tracing the word punctuality reveals a rich set of interpretations which gave it meaning and importance. These interpretations had powerful and lasting impacts on how Britons understood the use of their own, and more importantly, others’ time. Punctuality contained multitudes.

⁶⁶⁸ Quentin Skinner, *Visions of Politics: Volume I, Regarding Method* (Cambridge: Cambridge University Press, 2002), 159–60

⁶⁶⁹ Engammare, *On Time*.

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