Introduction

This book is about the human fascination with sudden events. With unexpected changes and turning points; with insights that arrive in a flash; with things that come in a moment: shocks, surprises, love, gods, ghosts, accidents, explosions, and revelations.

The moment is a primary temporal unit and a central artistic conceit of industrial culture. In the chapters that follow, I pursue a line of thinking that questions the importance that modernity attaches to momentary events. But I do so with lingering enchantment and respect. Moments that emerge from an undifferentiated flow of time, moments that break routines and habits: almost universally, such events are hallowed for their power. They bring insight, a concentration of meaning, ecstasy. They are linked to the event, which in contemporary thought bears the responsibility for change. That sudden, remarkable changes are qualified temporally, as moments or instants, alerts us to something so obvious as to be ignored. The moment is a punctualist form; it is over in a flash, though its effects may linger. What we are approaching is a family of experiences predicated on the condition of brevity.

This much seems clear: moments become more precise, more punctualist, in societies that measure time with analog and digital clocks. Moments become smaller, insofar as in colloquial usage – certainly by the late nineteenth century – they are interchangeable with the instant. But the smaller the moment gets, the more its cultural significance seems to increase. Thus, social groups that have little else in common are connected via the importance they attach to the functions of suddenness and brevity in their knowledge practices. The trope of the moment has no political or religious or discursive affiliation. It is a figure of universal importance. And yet it has been subjected to little critical investigation.

Here, I attempt such an investigation, focusing on the nineteenth century in England, a time and a place where moments – especially through minutes, their next of kin – became more visible and more consequential.

I place the notion of the moment as an autonomous spiritual and aesthetic instance in contention with the moment that emanates from economic and industrial time. From the mid nineteenth through the twentieth centuries, the trope of the moment has proceeded on a largely unbroken path of ascent in Western art and critical discourse. My hypothesis is that this historical process of investment in the moment hides its own past. Writers in every arena of culture have attributed immaterial values (aesthetic, spiritual, epistemological) to momentary occurrences, but they often ignore the material conditions, technological and economic, which set the stage for a hyperawareness of the momentary. It is this process that I wish to understand.

NINETEENTH-CENTURY TECHNOLOGY AND TEMPORALITY

Because the importance of technological changes in timekeeping for time-consciousness is an assumed backdrop to the chapters that follow, I will take a few pages to review it here. The factory system, the postal service, railways, the telegraph: these innovations, occurring in quick succession, transformed the infrastructure of business and communication in Britain. With their physical presences, they transformed the environment. Britain was the first country to undergo large-scale industrialization and all the social and cultural changes that involves. One change was in the lived experience of time. Industrialization affected social time-consciousness in Britain on two empirically verifiable counts. First, it brought about a wider distribution of abstract time. I use "abstract time" to indicate time that is (one) Newtonian time, that is homogeneous, quantifiable, and neutral; (two) precise to the minute; and (three) standardized across geographical space by institutional practices and business or political agreements.[1] The second effect of industrialization was a more widespread and precise attention to small intervals of abstract time.

Lewis Mumford famously wrote "the clock, not the steam-engine, is the key machine of the modern age."[2] Anthony Giddens identifies "the uniformity of time measurement by the mechanical clock" as a defining aspect of modernity. It enables what he calls "disembedding" – "the 'lifting out' of social relations from local contexts of interaction and their restructuring across indefinite spans of time-space."[3] There is ample evidence supporting Mumford and Giddens's claims for the interdependence of improved timekeeping and the rise of industrialization. Clock making and chronometry not only made it possible to run factories efficiently, but also contributed designs for fine and rapid mechanical movements that

facilitated mass production. Richard Arkwright, whose mechanized spinning processes were key to the industrialization of the British textile industries, listed himself as a clockmaker on a patent from 1769. Arkwright hadn't identified himself as such before, but he had collaborated with a clockmaker named John Kay on a perpetual motion machine.[4] This failed, of course, but Arkwright employed Kay in future factory-spinning inventions. Their goal was to reproduce spinning motions as speedily as possible by maximizing the number of revolutions per minute. Eventually, something as grand as the manufacturing wealth of Britain was said to be based on this ability to execute a large number of mechanical motions in a very short time.

England's excellence in chronometry, a necessity for its maritime dominance, is well known, but for a long time it was neither practical nor necessary to replicate that precision in clocks designed for everyday use. E. P. Thompson's influential essay "Time, Work-Discipline, and Industrial Capitalism" explains how the factory system necessitated the spread of accurate timekeeping and argues that the early nineteenth-century workforce resisted this tight structuring of their lives by the clock.[5] An impressive proportion of British working-class men owned watches early in the eighteenth century. They were valuable tools, often owned with pride, regardless of their association with work regimes. David Landes reports that one incentive for workers to buy watches was to protect themselves from the cheating clocks of their employers (he also reports that British watch-owners were by and large men).[6] Workers might own watches intermittently, as watches also functioned as portable property ready to be turned into cash. Arthur Morton, the hero of the Chartist novel *Sunshine and Shadow*, sells his watch, along with some clothing, to raise his ship fare to America.[7] William Dorrit calls for money to be raised on his watch as he slips into delirium and death.[8] Among the working and lower middle classes, as among the bankrupt, watch ownership was a marker of the line between solvency and poverty.

Clocks made possible the factory system, Mumford claims. It's also the case that the factory system made possible a cheap and nearly universal dissemination of clocks. An American, Eli Terry, facilitated the mass ownership of private timekeepers with minute hands. He did so by making clocks an article of industrial manufacture. At considerable expense, Terry set up a water-powered shop in Plymouth, Connecticut, which produced several hundred clocks a year. Less than a decade later he had increased output to 4,000 clocks per anuum. Following in Terry's steps,

Chauncey Jerome started a factory in nearby Bristol and by the 1840s flooded the British market with his cheap, mass-produced brass clocks. These were the first articles of American craftsmanship to compete with domestic ones in Britain.[9]

Hans-Joachim Voth has studied Old Bailey reports and depositions in the years around 1800 to see how closely witnesses marked time. He states that this evidence "demonstrate(s) eloquently that access to time-keeping instruments was not the privilege of the wealthy few, and that, in London at least, even those without watches could easily tell the time to within one hour."[10] Londoners in the city had long been aware of minutes: the first public clock in London to have a minute hand was constructed in 1671 for St. Dunstan's Church, Fleet Street. Watches with minute hands appeared in the city between 1665–1675, Stuart Sherman recounts, adding that the ownership of such a watch "pointed to the prosperity of its owner," Samuel Pepys providing a case in point.[11] Writing at the beginning of the twentieth century, Georg Simmel observed "the universal diffusion of pocket watches" among denizens of the modern metropolis and concluded that watch-ownership was critical to urban subjectivity and full membership in social and economic institutions.[12] In these ways, abstract time was materialized in the form of more and better clocks and watches, with attending implications for wealth, status, and urban identity.

Starting with the coach companies' adoption of strict timetables in the 1780s, and continuing on through the rise of the postal system and the railroads, Britons negotiated among several temporal frames of reference, since only over several decades did these different institutions come into conformity with Greenwich Mean Time and supplant solar time. (Hence Squire Hamley's watch, in Elizabeth Gaskell's *Wives and Daughters*, is set approximately by local time; it reads six-fifteen, while his son's watch, set to the modern clock of the Horse Guards Parade in Whitehall, reads six o'clock.[13]) In the late 1840s British railway companies, working in quick succession of each other, adopted Greenwich Mean Time for their operations, using electrical signals sent along the tracks. Eviatar Zerubavel comments that the adoption of a standard time in different cultures is often "viewed as a blasphemous interference with the divine natural order."[14] In Britain, the blasphemy of imposing a London standard was not a serious impediment to progress. On the one hand, the time differentials were relatively small, roughly sixteen minutes from London to northwest Wales. On the other hand, they were just great enough to cause people to miss their trains.

From 1850 onwards, Sir George Airy, the Astronomer Royal, stated that a primary duty of the Royal Observatory, Greenwich was "to provide Greenwich time whenever and wherever it was needed."[15] Needed or not, he was soon providing it almost everywhere. By 1855, 98 percent of the public clocks in Great Britain were set to Greenwich Mean Time.[16] The regularization of the rail system and public business by abstract time both eclipsed the importance of solar time and contributed to the importance of accuracy. While in the eighteenth century it was a luxury to have a clock with a minute hand, in the 1870s bureaucrats and scientists were troubled by the quarter of a minute it took for an electrical signal to traverse Paris. As Peter Galison reports, "now a fifteen second discrepancy could drive engineers to modify public clocks."[17]

In 1872 the watch of another literary character, Phileas Fogg, is set to Greenwich Mean Time during all the eighty days of his globetrotting.[18] Halfway around the world and traveling by sea, Fogg is satisfied to find his watch is consistent with the ship's chronometer: "I knew for sure that one day or the other the sun would make up its mind to set itself by my watch."[19] Another forty days and, having traversed the rest of the earth's circumference, Fogg is devastated to find that he has lost his wager at a London club by one day. But he's wrong, because he gained a day by traveling east. A scientific man, connected to Greenwich by his admirably reliable watch, Fogg is so attuned to abstract time that he forgets to calculate for solar time.

William R. Everdell claims that we call "modern" everything which happens to a culture "after it builds its first railroad."[20] Giddens cites train timetables as an instance of how abstract time severs time from space (in the first gesture) and (in the second) "provides a basis for their recombination in relation to social activity."[21] In addition to trains and telegraphs, newspapers and periodical literature also promoted readers' mental insertion into a single temporality shared across geographical regions. Benedict Anderson points to the role of newspapers in promoting the "imagined communities" of nation states.[22] Walter J. Ong more broadly identifies printed matter with the type of mental interiorization that literacy brings, where "dated material imping[es] on consciousness."[23]

Some historians object that the claims for an industrial reordering of time-consciousness have been overstated. Mumford himself equivocates: "the mechanical clock did not create the implementation of cosmic order and regularity," he writes, as if to correct earlier impressions he may have made, "it just advanced and perfected it."[24] Jeremy Stein contends that

"it is inaccurate to assume that any one period of the nineteenth century witnessed a revolution in the experience of time and space," making the pointed critique that such interpretations rely on "accounts of privileged social observers, and thereby are elitist."[25] (Voth's reliance on the testimonies of industrial and agricultural workers seems to indicate otherwise.) David Vincent warns against the tendency in historical writing "to oppose the clock discipline of trains, schools and factories to a timeless pre-industrial countryside," which, as he goes on to show, was never without time.[26] Church bells (in monasteries) and work bells (in textile towns) had for centuries publicly divided the day into periods designated for work, prayer, meals, and rest.[27] Arguably the more important shift in social time-consciousness was not from church bells to clocks and watches, but rather from local time, reckoned by the sun, to abstract time, where time is an independent variable – it flows, in Newton's words, "without relation to anything external."[28] And examples of a social implementation of abstract time in Europe predate the start of the industrial revolution by over two hundred years.[29]

Thus the transition from pre- to post-industrial temporality may not have been as dramatic as some have claimed, and it certainly eludes specific dating. And yet many Victorians experienced their lives as subject to a temporal regimentation that was new, drastic, even humorous. Elizabeth Gaskell writes to a friend in 1845 with a detailed account of how the clock orders her days:

> call Hearn at six, 1/2 p. 6 she is dressed, comes in, dresses Flora, gives her breakfast the first; 1/2 p. 7 I get up, 8 Flora goes down to her sisters & Daddy, & Hearn to her breakfast. While I in my dressing gown dress Willie. 1/2 p. 8 I go to breakfast with parlour people, Florence being with us & Willie (ought to be) in his cot; Hearn makes beds etc in nursery only. 9 she takes F. & I read chapter & have prayers first with household & then with children, 1/2 p. 9 Florence & Willie come in drawing room for an hour while bedroom & nursery windows are open; 1/2 p. 10 go in kitchen, cellars & order dinner. Write letters; 1/4 p. 11 put on things; 1/2 p. 11 take Florence out. 1 come in, nurse W. & get ready for dinner; 1/2 p. 1 dinner; 1/2 p. 2 children, two little ones, come down during servants' dinner half hour open windows upstairs; 3 p.m. go up again & I have two hours to kick my heels in (to be elegant & explicit). 5 Marianne & Meta from lessons & Florence from upstairs & Papa when he can comes in drawing room to 'Lilly a hornpipe' i.e. dance while Mama plays, & make all the noise they can. Daddy reads, writes, or does what she (sic) likes in dining room. 1/2 p. 5 Margaret (nursemaid) brings Florence's supper, which Marianne gives her, being answerable for slops, dirty pinafores & untidy misbehaviours while Meta goes upstairs to get ready & fold up Willie's basket of clothes while he is undressed

(this by way of feminine & family duties). Meta is so neat & so knowing, only, handles wet napkins very gingerly. 6 I carry Florence upstairs, nurse Willie; while she is tubbed & put to bed. 1/2 p. 6 I come down dressed leaving (hitherto) both asleep & Will and Meta dressed (between 6 and 1/2 p.) & Miss F. with tea quite ready. After tea read to M. A. & Meta till bedtime while they sew, knit, or worsted work. From 8 till 10 gape. We are so desperately punctual that now you may know what we are doing every hour.[30]

Her day divided into half-hour increments from morning to evening, Gaskell doesn't seem to know whether to laugh or cry. Like other Victorians, she observes her new subservience to analog time with bemused wonder. And it is this uncertainty that makes Victorians a compelling case study in the emergence of modern time-consciousness: judgments have not been formed; abstract time has not been unequivocally demonized; one can be "desperately punctual" with mixed feelings of exhaustion and amazement, gravity and laughter. Before the novelty of precise and ubiquitous time reckoning, Victorians are a bit mystified; they watch the segregation of their labor from their leisure with emotions that range from horror to sadness, ambivalence, and pride. In this crucible, the temporal unit of the moment rises in value, but it is still visibly tied to institutional and economic forces, and so charged with an ambiguous cultural prestige.

For the purpose of this study, I am presenting these signs of a Victorian time-consciousness neither as a "revolution," in Wolfgang Schivelbusch's term, nor as the emergence of new temporal forms without a pre-industrial history, but rather as intensifications of habits and techniques already in place.[31] I am not equipped to explain their causality, technological or otherwise. Describing these changes as intensifications rather than as a revolution is no doubt taking the easier route through contentious material. I am taking it because my primary concern is not with identifying historical origins. Even acknowledging the objections to technological determinism in the matter of time-consciousness, it is indisputable that these intensifications had significant consequences, and that the question of temporality, especially in the arts, entails questions about our relationship to technology, questions that we shouldn't refrain from asking because of the difficulties of tracing causes.

OVERVIEW OF CHAPTERS

Chapters 1 and 2 paint a broad canvas for envisioning the role of the moment in Victorian culture. Chapter 1 suggests ways in which the

nineteenth century's changing metrics for time impacted the knowledge practices of philosophy, psychology, literary criticism, religion, and aesthetics. These knowledge practices are grouped together in this chapter because they employ the moment to analyze subjectivity, or the cultivation of a self in time. Chapter 2 extends this discursive analysis into factory history and socialist economics. Economics employs the moment to figure intersubjective relations, specifically between producers and consumers in the complexly mediated marketplaces of modern exchange.

These chapters yield two general propositions. First, over the course of the nineteenth century time becomes a reified structure, a key modality in a more general process of social abstraction. Second, the technological and economic reification of time generates the need for a hermeneutic approach to life, on the grounds that a sensory and affective response to life's flows is no longer adequate to the challenge of the mysteries and powers that time seems to contain. Thus the figure of the moment loses some of its former immediacy as an embodied event, but gains importance as a window into esoteric structures of meaning.

Subsequent chapters test and develop these propositions in readings of novels by Dickens, Eliot, and Conrad. There are several reasons why the novel is an opportune field of investigation for the subject of time. People's perception and experience of time are reflected in and shaped by the narratives they write and read. As Pierre Bourdieu writes, "the temporalization of our experience of the world" is a 'shared *doxa*' with the novelistic representation of the world.[32] Paul Ricoeur develops at length a similar thesis in the second volume of his magisterial *Time and Narrative*. He argues for the phenomenological demonstrability of a widely assumed claim – that the fictive experience of time governs the ways in which readers represent to themselves the temporality of their own lives.[33] At a general level, then, fictive and lived time shape each other; at a specific level, they shape each other by generating narrative figures for time. The moment is one such figure. Insofar as it is recognizable literary convention, we might say that the moment has a reductive force – it is employed as a signifier for qualitatively different events. This capacity of narrative to create patterns of temporality that have a formal status almost apart from their content encourages us to conceive the moment as an entity in its own right, something we use as a single classification for dissimilar occurrences.

Nineteenth-century novels are instrumental in this reification of the moment. Even as they exercise several temporal modalities (diegetic stasis, pastoral rhythms, arcs of suspense, retrospection, typological repetitions),

over the course of the later nineteenth century, their formal energies seem to coalesce behind the figure of the moment. In this way the Victorian novel helps deliver to modern and contemporary discourses the figure of the moment as a term partially void of content, a word we use to signal transcendence, change, rupture, revolution, or semi-magical power. At the same time there is another force in the novel genre that pulls against the reification of moments. However, this subtle and by no means decisive strain has largely been omitted from our interpretive practices and novel histories.

But that is a long story. At a more basic level we can observe the relationship between narrative and lived time simply by noting that nineteenth-century novels offer striking first impressions of the cultural impact of more precise time reckoning. There are more references to "moments" and "minutes" in Dickens than in Austen, more still in Conrad than in Dickens. Conrad and James frequently use "instants," and in addition use "moments" more often than the earlier writers. Ian Watt observed long ago that the novelistic use of analog time, which provides a "minutely discriminated time-scale," made the "slowness" of life available to representation to an unprecedented degree.[34] Novels, it seems, are generically programmed to cultivate their reader's experience of speed and slowness, and relatedly of moments and duration. Roland Barthes argues that the advent of photography exacerbates this process by taking duration out of the picture entirely; "everything, today, prepares our race for this impotence: to be no longer able to conceive *duration*, affectively or symbolically."[35] Bergson maintained that duration *naturally* eludes imaging. It is inherently impossible to "think" duration, he suggests; the only recourse is "to install ourselves within it straight away."[36] Nineteenth-century novels have a fascinating relationship to this disappearing, unrepresentable duration: on the one hand they cultivate the interest-value of the moment; on the other they require from their readers a considerable investment of reading time. Thus, while novels may be subject to cultural influences that make duration recede from representation, given their famous lengths, they are a remarkable cultural practice *in* duration. This is one way in which the novel form mitigates the appeal of the situational or epiphanic moments that embellish their copious textual bodies.

The novel's shaping impact on time-consciousness is a complex matter, involving the exercise as well as the representation of multiple temporal modalities – and involving, as well, a tension between these modalities. As we can begin to see, the steady encroachment of temporal precision and suddenness on the diction of narrative fiction is not simply a matter

of verisimilitude, although it is that in part. The increasing precision in narrative time marking also reflects the changing temporal landscape of modernity, with ramifications for how we perceive and assess events. On this subject, *Time and the Moment* argues that the rise of abstract time and temporal precision contributes to a shift in literary uses of the moment from an affective to a symbolic register. While the early nineteenth century inherits a belief that the primary objective for artistically shaping time is to evoke emotion, by the end of the century affective objectives no longer seem sufficient. Something more is expected from literature – a vision into hidden things, into deep structures of meaning. Time itself contains these hidden meanings, and the pathway to their discovery lies through the moment. If, as Barthes says, nineteenth-century culture was no longer able to conceive duration "affectively *or* symbolically," this coincides with a compression of both functions in the moment, which comes to be used both affectively *and* symbolically.

In all of these chapters we will see that Victorian thinkers and writers make associations between momentary figures and time technology, industrialization, economic realities, or urban shock. By the late nineteenth century, however, some observers disregard the moment's association with these influences. We might date the moment's independence from baser determinants to Walter Pater, whose aestheticist manifesto charges his readers to live a serial bliss of moments.[37] Pater's famous conclusion implies that punctualist living is an escape from, not a concession to, the instrumentalist presence of modern temporality. His emphasis on brevity – the moment, the instant, the interval – as an ontological ritual for the priest of the beautiful resembles the conditions that James Joyce places on the epiphany; "it [is] for the man of letters to record" these "sudden spiritual manifestations … with extreme care, seeing that they themselves are the most delicate and evanescent of moments."[38] With Joyce, the sensory impact of the "evanescent" moment slides into a symbolic register – it is a "spiritual manifestation" – but its fleeting, ephemeral quality is the same. Pater's moments, Joyce's epiphanies: echoes of these aesthetic statements on the importance of figures of brevity survive in contemporary critical discourse, whenever moments of rupture or moments of textual, psychological, or historical exceptionality are invoked.

CRITICAL CONTEXTS AND OBJECTIVES

Past studies of Victorian temporality (Jerome H. Buckley, Gilliam Beer) tended to go big, analyzing the impact of geological and evolutionary