The novel and the horological revolution:

Defoe, Sterne, and the register of Huygensian chronometry

by

Justin Christopher Yang

An essay submitted in partial fulfillment of
the requirements for the degree of
Bachelor of Arts (Honours)
in the
Department of English

We accept this essay as conforming
to the required standard

.............................

.............................

THE UNIVERSITY OF BRITISH COLUMBIA

April 2012
CONTENTS

A prolegomenon on time.................................................................3

Telling time..................................................................................5

Pre-modern time...........................................................................5

Mechanical timekeeping.............................................................7

The horological revolution...........................................................9

Defoe and the changing times......................................................15

Work time....................................................................................16

Religious time..............................................................................20

Social time....................................................................................22

Sterne and the problems of keeping (up with) time......................25

Shandean time in the age of Locke..............................................26

The mechanics of Tristram Shandy..............................................28

Visualizing time..........................................................................34

Running (away) with time............................................................39

The Clockmakers Outcry............................................................45

Bibliography................................................................................49
FIGURES

Figure 1 The verge-and-foliot escapement mechanism.................................................................8

Figure 2 Progressive improvements in the accuracy of mechanical clocks.................................10

Figure 3 The pendulum escapement mechanism.........................................................................11

Figure 4 Frontispiece to volume I of Tristram Shandy.................................................................36

Figure 5 From volume VI of Tristram Shandy............................................................................36

Figure 6 Top elevation of the pendulum escapement mechanism...............................................38
ACKNOWLEDGEMENTS

This project has benefitted enormously from the support of my professors and colleagues at UBC – it is their scholarly vivacity and inspiring energy that first prompted me to take on this research topic. I owe particular thanks to Dr. Scott MacKenzie, whose support has been boundless and without whom I would never have been able to engage in this project. He has been a truly inspiring and insightful mentor.

I thank also Drs. Miranda Burgess, Lorraine Weir, and Nicholas Hudson for their honours seminars – they opened my eyes to new modes of discovery in the field and their work has been instrumental to my own.

For the support they have given me throughout my undergraduate career, I also thank my parents. Without them, I would never have been able to embark on the journey of scholarly discovery that has led me to the Department of English at UBC.
Modern attempts to discern a coherent narrative to track the development and ascendancy of the novel as a distinct literary genre have generally focused upon its formal features, its social and political milieu, or practices of reading prior to the emergence of the novel. Such modes of inquiry have yielded a rich understanding of the novel with critical depth and theoretical robustness with recourse to schools of thought ranging from structuralism to psychoanalytic, Marxist thought to feminist critique. Increasingly, however, there have been attempts to ground such analyses upon the material experiences of reading and publishing, that is to say, a history of the book as cultural artifact and material determinant. James Raven and Franco Moretti, for instance, offer accounts of the history of the novel by drawing upon historical records about printing and circulation. Their work, above all, emphasizes the way in which novels were objects, commodities that were produced, sold, and consumed. By grounding a study of texts in their material histories, Moretti suggests that we may achieve “a more rational literary history,” one capable of transcending the limitations imposed by case studies of selected canonical texts. While Moretti’s quantitative, holistic approach provides a novel, data-driven

---


3 Ibid., 4
methodology to literary study, I think that he may too readily dismiss the knowledge that can be
gained from a more balanced approach to elucidating the history of the novel, its ascendancy and
development. I want to suggest that there exists an opportunity to balance a theoretically robust
discussion of the history of the novel equally sensitive towards its material history as well as the
material history of objects around it. As such, this essay will seek to understand the history of the
novel within the context of technological development, namely, of the clock by remarking upon
the ways in which technological changes prompting social, political, and philosophical change
may be reflected in contemporaneous literature. In particular, I want to examine two particular
novels: Daniel Defoe’s *The Life and Adventures of Robinson Crusoe* and Laurence Stern’s *The Life
and Opinions of Tristram Shandy, Gentleman*. Both novels are instances of what Paul Ricoeur
refers to as “tales about time”:

> [a]ll fictional narratives are ‘tales of time’ inasmuch as the
> structural transformations that affect situations and characters take
time. However only a few are ‘tales about time’ inasmuch as in
> them it is the very experience of time that is at stake in these
> structural transformations

---

Both *Robinson Crusoe* and *Tristram Shandy* have been identified as works seriously engaged with questions about time, its passing and its representation, through formal and textual means. I wish to here supplement what has already been said (in painstaking detail) with an approach that highlights the ways in which moments in these work resonate with contemporaneous developments in the material history of time and timekeeping. By doing so, I believe that participate in two ongoing scholarly projects: to comment upon one way in which the phenomenological experience of time is partially contingent upon the technologies enabling the measurement of duration and the rationalization of past time and to contribute towards a material history of the novel by drawing attention towards the ways in which contemporaneously occurring technological changes are brought to bear upon artistic output in the form of novels.

**A PROLEGOMENON ON TIME**

This paper extends from the claim that requires some qualification, namely that the perception of time is, in some part, contingent upon the technologies enabling the reckoning of the passing of time or duration. In order to do so, this paper necessarily defers to the work of others such as Henri Bergson. According to Bergson, there exist two forms of time: pure time and mathematical time. Pure time exists as time as it experienced, infinitesimally and continuously, whereas mathematical time is time as it is reckoned, finite and unmoving. For Bergson,

---

mathematical time necessarily enables a rational understanding of the passing of time while all at once falsely purporting to represent real intervals of definable moments – pure time, Bergson suggests, can only be intuited but not calculated. Consequently, this paper arises from a belief that the ability to discern mathematical time, more or less accurately, is one that has significant implications for the faculties of intuition that enable the perception of pure time.

This paper also owes, in no small part, to the work of thinkers such as E.P Thompson who have theorized time-discipline, that is to say, the social, economic, and cultural conventions that scaffold an understanding of Bergsonian mathematical time. In short, the field of time-discipline views the measurement of time as a social practice, one that may vary through history due to various factors such as the emergence of new technologies and changes to economic paradigms. This paper, of course, focuses upon technological changes that prompt new ways of understanding time, new time-disciplines, which are reflected in both Robinson Crusoe and Tristram Shandy. Specifically, I am interested in horological change, that is to say, the ways in which the measurement of time with mechanical clocks changes as a result of the discovery of the Dutch mathematician, Christiaan Huygens.

TELLING TIME

Pre-modern time

Various accounts of the history of horology, that is to say, the science of timekeeping, have provided differing points of origin for the modern reckoning methods of reckoning time; E.P. Thompson argues, for instance, in his seminal essay, “Time, Work-Discipline, and Industrial Capitalism,” that the ascendancy of clock-time occurs concomitantly and as a consequence of the European industrial revolution, particularly in response to the capitalist superstructure rendered necessary therefor.7 Samuel Macey suggests, alternatively, that clock-time became the dominant paradigm for reckoning the passing of time because it offered an isochronous, rational conception of the hour, a conception that displaced earlier, relativistic definitions of the temporal hour.8

Prior to the invention of horloges, a term broadly including mechanical clocks, sandglasses, and water-clocks, in the fourteenth century, the measurement of time was relativistic, founded upon either “the cycle of work or of domestic chores” or the division of night and day into discrete units.10 In both instances, either task-oriented or diurnally-oriented, a sense of time “follows upon” other events – time lacks its own periodicity and rhythm, relying instead

9 Thompson, Time, Work-Discipline, and Industrial Capitalism, 58
10 Macey, The Dynamics of Progress: Time, Method, and Measure, 3-4
upon external referents in order to gain a sense of duration or chronology. Attempts to rationalize time without the ability to accurately keep time or to transport devices capable of keeping time prompted the conception of the temporal or unequal hour, defined as one-twelfth of the daylight time of a day or one-twelfth of the night-time. Macey notes that:

though temporal hours may very well seem irrational to us, they were of far less inconvenience when more than 95 percent of the people lived on and from the land. With almost no artificial light, virtually all of the productive work was performed during daylight hours. It therefore appeared natural enough to use the sun’s shadow to mark off the passage of the daylight. In such a society, the daylight hours were bound to predominate.\(^\text{11}\)

Even as attempts were made to rationalize time in terms of an external referent, for example, the passing of the sun or the changing of seasons, a temporal understanding of the hour was still essentially, in Thompson’s view, task-oriented insofar as the purpose of keeping time in these cases related to agricultural work.\(^\text{12}\)

\(^{11}\) Ibid., 4-5

\(^{12}\) Thompson, *Time, Work-Discipline, and Industrial Capitalism*, 60
Mechanical timekeeping

During the fourteenth century, sometime after the invention of the mechanical clock, Chaucer writes of “howres in-equales…[and] equales” in his Treatise on the Astrolabe, drawing attention towards more than one way in which time could be calculated: temporally or rationally.\(^\text{13}\) Glennie and Thrift note that “mechanical timekeeping was comparatively unhelpful for reckoning in unequal hours,” prompting the emergence of the rational hour as an incompatible conception of timekeeping at odds with the older paradigm of time as task-oriented.\(^\text{14}\) This disjunction necessitated a Kuhnian paradigm shift in understanding the nature of time – time could be measured in terms of referents such as the time it took to complete a task or the passing of the sun in the sky or by mechanical means, but not both. The emergence of a non-relativistic understanding of time and its discrete units, particularly the hour, was concomitant with technological innovations that permitted the reckoning of this conception of temporality, chief of which was the pendulum escapement which permitted the measurement of time with greater precision and the portability of timekeeping devices capable of maintaining regular, rational time.

The first mechanism used in mechanical clocks was the verge-and-foliot mechanism (see Figure 1) in which:

\(^\text{13}\) Macey, The Dynamics of Progress: Time, Method, and Measure, 4
energy was supplied from a slowly falling weight attached to a cord coiled around a drum; the weight turned the clockwork as it fell. Its descent was slowed and regulated by a “verge escapement,” a stop-start device consisting of a toothed wheel alternately checked and released by a pair of small brakes, and a “foliot” regulator, an oscillating bar bearing weights at both ends, which controlled the motion and the impact of the brake pads and so ensured that the wheel moved and stopped...at small regular intervals.15

Figure 1 The verge-and-foliot escapement mechanism.16

In contrast to former methods of reckoning time which either relied upon an external referent for keeping time, such as sundials, or upon the flow of some material in a regulated fashion, as in


water-clocks or sandglasses, the verge-and-foliot mechanism enabled what E.P. Thompson called the “inward notation of time,” the containment of a sense of time in a discrete device that could reliably be called upon to report the passing of time.17

Despite its widespread adoption and role in shifting conceptions of temporality from task-orientation towards mechanical regularity, the verge-and-foliot mechanism was problematic for a variety of reasons; its mechanism suffered significant design flaws and the types of materials available to make clocks were inadequate. For instance, the verge-and-foliot lacks intrinsic periodicity, that is to say, the means by which to maintain its own rhythm against which time could be reckoned. Constant manual maintenance was required in order to maintain any degree of accuracy in clocks using this mechanism, maintenance that actually required the use of older timekeeping devices, chiefly the sundial. Even as mechanical clocks began to displace older timekeeping devices, they relied upon them integrally.

**The horological revolution**

During the mid-seventeenth to late-eighteenth centuries, a series of technological innovations, to which Glennie and Thrift refer as the “horological revolution,” led to significant improvements to mechanisms of timekeeping (see Figure 2). Chief among these advancements was the development of the pendulum escapement mechanism by the Dutch mathematician,

---

17 Thompson, *Time, Work-Discipline, and Industrial Capitalism*, 12
Christiaan Huygens. Huygens’s discovery resulted in a “sixty-fold” improvement in the accuracy of mechanical clocks, prompting both other innovations that contributed towards the increasingly accurate reckoning of time by mechanical means as well as the beginnings of new ways of conceptualizing time in increasingly smaller units of duration, from hours to minutes to seconds.

Figure 2 Progressive improvements in the accuracy of mechanical clocks.\(^{19}\)

\(^{18}\) Macey, *The Dynamics of Progress: Time, Method, and Measure*, 11
\(^{19}\) Glennie and Thrift, *Shaping the Day: A History of Timekeeping in England and Wales 1300-1800*, 251
In 1657, Huygens, drawing upon Galileo’s experiments elucidating the nature of pendulum motion, produced a working prototype of a clock using a pendulum escapement and shared his schematics with several notable correspondents across the continent.\textsuperscript{20} The invention of a mechanism based upon the pendulum permitted much more accurate timekeeping because pendulum motion is guided intrinsically based only on the length of the pendulum bob and because pendulum mechanisms have fewer moving parts that can fail.

\begin{figure}[h]
\centering
\includegraphics[width=0.3\textwidth]{pendulum.png}
\caption{The pendulum escapement mechanism.\textsuperscript{21}}
\end{figure}

\textsuperscript{20} Nicole Howard, "Marketing Longitude: Clocks, Kings, Courtiers, and Christiaan Huygens," Book History 11, no. 1 (2008), 60.

\textsuperscript{21} Lepschy, Mian and Viaro, Feedback Control in Ancient Water and Mechanical Clocks, 7
Realizing the marketability of a clock mechanism capable of much more accurate timekeeping than the verge-and-foliot clocks to professionals such as astronomers and navigators, Huygens requested that his correspondents not share his design, “Not having at present the time to respond as I would like to your obliging letter, I offer here only a few lines in order to ask you not to communicate to anyone the construction of my clock, which, while vague enough, could be understood by someone”.22 In 1658, Huygens published his *Horologium Oscillatorium*, publicly revealing his mechanism, sent it to various recipients across Europe, and applied for patents shortly afterwards. Huygens spent the following years marketing to and instructing navigators how best to use his clock for seafaring as well as educating the lay public about the mechanics of the pendulum escapement. While he was doing so, the English clockmaker, Salomon Coster, to whom Huygens had licensed his mechanism, shared Huygens’s design with John Fromanteel who brought the technology back to England, commencing a century of British innovation and dominance in clockmaking, including moments such as John Harrison’s invention of the marine chronometer.

The problem of determining longitude at sea is of foremost navigational significance, dependent upon the reckoning of differences in time; an hour’s difference between any two longitudinal points at sea indicates a difference of fifteen degrees east or west at the equator.23

---

22 Howard, *Marketing Longitude: Clocks, Kings, Courtiers, and Christiaan Huygens*, 60
Problems with reckoning time at sea were many: changes in barometric pressure, movement of a ship on waves, or differences in temperature could affect the accuracy of timekeeping equipment intended to measure longitude. Pendulum clocks were unhelpful to seafaring navigators as the rocking induced by the waves combined with the wildly changing temperatures resulted in inaccurate timekeeping, resulting in possible navigational errors resulting in catastrophe. In 1714, the British Parliament, recognizing the value of accurate timekeeping at sea and its implications on establishing Britain as a maritime power, established a prize equal to a king’s ransom for a “practicable and useful” way in which to measure longitude.\textsuperscript{24} John Harrison, a British clockmaker who eventually produced several working prototypes for consideration, claimed the prize in 1773 after forty years of struggling against a variety of leading scientific figures who contested his claim to the prize.\textsuperscript{25}

By 1796, Mary Favret notes that the British clock- and watch-making had reached its zenith; between 120,000 and 190,000 were being produced, most of which were for export.\textsuperscript{26} The reach of the Huygensian horological revolution had finally become a global phenomenon – both mechanical-time and the capitalist time-discipline were being purchased worldwide. Not soon thereafter, due to taxation policies by the Pitt government, British dominance in clock- and

\textsuperscript{24} Ibid., 8
\textsuperscript{25} Ibid., 10
\textsuperscript{26} Mary A. Favret, \textit{War at a Distance: Romanticism and the Making of Modern Wartime} (Princeton: Princeton University Press, 2010), 50.
watch-making waned significantly, marking the emergence of new, foreign standards of
timekeeping and horology.

Concurrently with these developments in chronometry, Sherman notes that “textual
practices developed along parallel lines,” that is to say, changes in the outward notations of time,
in timekeeping devices as well as documents about time, reflected the changing
phenomenological experience of pure time.\(^{27}\) Sherman has identified two specific qualities unique
to new Huygensian chronometry that are particularly influential in changing the ways in which
time-notations, that is to say, writing about time, function: an understanding of time as a running
sequence and time as a series of identical, successive, and discrete units.\(^{28}\) To varying degrees,
Sherman identifies these changes to the index of time-notation and the ways in which they bear
upon prose writing in various forms: journals, essays, diaries, and novels. It is the last of these
about which this paper will be chiefly concerned – I will draw attention towards to particularly
salient novels for study: Daniel Defoe’s *Robinson Crusoe* and Laurence Sterne’s *Tristram Shandy*. I
begin with a discussion of *Robinson Crusoe* partly because, as some have suggested, it marks the
commencement of the novel as a distinct literary genre but also because it meditates on different
temporalities, conspicuously juxtaposing various ways of thinking about time. In this way, it
marks both a departure point for a history of the novel as well as a point of convergence in which
ways of thinking about time conspicuously clash. Afterwards, I will take a look at *Tristram*

\(^{27}\) Sherman, *Telling Time: Clocks, Diaries, and English Diurnal Form, 1660-1785*, 8

\(^{28}\) Ibid., 3
*Shandy*, a novel self-conscious about, the ways in which it is represented and the mechanics of
timekeeping. *Tristram Shandy*’s strangeness makes its inclusion in this paper particularly
important – no other novel of the eighteenth century so explicitly addresses questions of time and
temporality, duration and its measurement. It, like *Robinson Crusoe*, exposes the social practices
of keeping time in a way that is unavailable or inaccessible in other novels written about the same
time. (Sherman 1996)

**DEFOE AND THE CHANGING TIMES**

Ian Watt’s influential work, *The Rise of the Novel*, situates Daniel Defoe’s *The Life and
Adventures of Robinson Crusoe* directly at the beginning of the “rise of the novel,” a phenomenon
propelled by the development of “formal realism” as a distinct literary convention arising from
the increasing emphasis upon the individual through the 17th and 18th centuries. In particular,
Watt identifies connections between Defoe’s philosophical outlook with seventeenth century
English empiricism, contributing to an understanding of *Robinson Crusoe* as a sort of allegory for
the *homo economicus*. On the other hand, Stuart Sherman, whose work focuses on understanding
the common grammar of calendars and clocks in the formulation of prose fiction, has identified
another reason why Defoe rightfully deserves a place at the start of any history of the novel –
Defoe, along with Frances Burney, are identified by Sherman as having “set up many of the
patterns and problems by which the dialectic of diurnal form will help shape novels throughout
the [eighteenth] century.” What Sherman finds in the works of Defoe and Burney are inherent conflicts with the journals and diaries that populated the literary marketplace prior to their novels – Sherman notes that “the intrinsic parataxis of diurnal forms [such as essays or diaries] decisively differentiates it from the novel.”

Situated precisely at the watershed moment of defining the generic conventions of the novel form, Defoe’s work problematizes and challenges the types of temporalities present in earlier works – coherent, linear, objective – by introducing a heteroglossia of temporalities, all at once competing and reflective of the changing time-discipline of early modern Europe, partly in response to the Huygensian revolution.

What I will attempt to do in this section is to identify some strands comprising the heteroglossia of temporalities present in Robinson Crusoe.

Work time

Robinson Crusoe is, in many ways, a work distinctly occupied with economics. The eponymous Crusoe spends much of the early sections of the novel focused on accruing wealth and devotes a careful attention towards the market value of tradable goods throughout the work.

29 Ibid., 226
30 Ibid., 223
31 Sherman discusses, for instance, a variety of genres in which the linearity of time is taken for granted as a generic convention: diaries, essays, and travel writing. Robinson Crusoe is unique in some ways because while it purports to convey the “life and adventures” of a single person, it “deals conspicuously in omissions and compressions, as well as in retrospective interlacements” (226).
On the island, however, Crusoe realizes that the value of money lies solely in its exchange-value and without a market present, it is worthless:

I smild to my self at the Sight of this Money, O Drug! Said I aloud,
what art tho good for, Thou art not worth to me, no not the taking
off of the Ground, one of those Knives is wroth all this Heap, I have
no Manner of use for thee, ë'n remain where thou art, and go the
Bottom as a Creature whose Life is not worth saving.\(^\text{32}\)

The value system of the island, Crusoe realizes, is founded entirely upon use-value, not exchange-value. How much things are worth is a function of in what way they satisfy a use – primarily through the fulfillment of labour of sorts. In this way, Crusoe shifts from a time-discipline based upon telling time with recourse to accruing wealth towards a time-discipline approximating what E.P. Thompson identifies as task-orientation. Sherman insightfully notes that:

Crusoe's activities on the first island days take the “logic of need” to
an extreme that has achieved the status of myth; their sequence is
dictated by necessity – by what he must do first, and what next, in
order to survive.

Crusoe labours for the barest minimum in order to survive, recognizing that anything not of immediate use is superfluous, “But all I could make use of, was, All that was valuable. I had enough to eat, and to supply my Wants, and, what was all the rest to me?” Lacking the outward notations of time in order to establish a sense of time-discipline, the value of time is subordinate to the acts of labour that take time – time for time’s sake lacks intrinsic value and so the importance of reckoning duration is subsequently diminished. It is interesting then, that Crusoe feels that it is important to expend the energy to construct a means for reckoning the passing of days – a calendar:

After I had been there about ten or twelve days, it came into my thoughts that I should lose my reckoning of time for want of books, and pen and ink, and should even forget the Sabbath days; but to prevent this, I cut with my knife upon a large post, in capital letters—and making it into a great cross, I set it up on the shore where I first landed—“I came on shore here on the 30th September 1659.”

Upon the sides of this square post I cut every day a notch with my knife, and every seventh notch was as long again as the rest, and every first day of the month as long again as that long one; and thus

33 Ibid., 110
I kept my calendar, or weekly, monthly, and yearly reckoning of
time.\textsuperscript{34}

Crusoe’s concern with being able to reckon time is contextualized with a desire to be able to
observe the Sabbath on which day no work ought to be completed. While he is living in a state of
task-orientation, he begins to shift back towards an antecedent, historical time-discipline in
which work is dictated by measurements of time and not vice versa.

Another method by which Defoe maintains a sense of order (and therefore ownership)
over time is through his journal. After organizing his living arrangements, Crusoe writes, “now it
was when I began to keep a Journal…for indeed at first I was in too much Hurry, and…too much
discomposure of the Mind.”\textsuperscript{35} Sherman suggests that “the journal masters time as the shelving [of
his tools] masters things: by compartmentalization, by “separat[ing] ever thing at large in their
Places”…journal-keeping [is construed] as the \textit{next} task dictated by the logic of need, the
temporal correlative of the spatial order Crusoe has just established.”\textsuperscript{36} However, as I have
remarked earlier, the novel as a whole conflicts somewhat with the journal form – Crusoe
subsumes his journal into his larger autobiographical project, “I shall here give you the Copy.”\textsuperscript{37}

In doing so, the journal form is conspicuously altered and edited – Crusoe intrudes into the

\textsuperscript{34} Ibid., 55-6
\textsuperscript{35} Ibid., 60
\textsuperscript{36} Sherman, \textit{Telling Time: Clocks, Diaries, and English Diurnal Form, 1660-1785}, 231
\textsuperscript{37} Defoe, Keymer and Kelly, \textit{Robinson Crusoe}, 60
narrative of the journal with omissions and comments, “N.B. This wall being described before, I purposely omit what was said in the journal.” 38 Even while drawing upon the journal form in order to lend credibility to the narrative as “a just History of Fact,” Defoe actively works against the mechanics of the journal, the way in which day-to-day activities are transcribed in linear succession, through editorial acts that compress or dilate time-notations. 39 This act of authorial mastery over narrative time is one more aligned with the novel form than with the journal, whose internal structure relies integrally upon a linear, coherent succession of time in order to arrange a narrative of events in sequential order.

That Crusoe shifts from chronometric-orientation to task-orientation and, at the end of the novel, back towards time-discipline is worthy of comment; once he is among civilization again, he accounts value in terms of both use- and exchange-value – similarly, time-discipline becomes the predominant conception of time and work. Defoe leaves few clues about the causal link between civilized society and the dominance of time-discipline but the differences in devices used for timekeeping (calendars and journals on the island; clocks in civilization) are certainly worth noting.

**Religious time**

Sherman contrasts *Robinson Crusoe* against Puritan conversion narratives:

38 Ibid., 66
39 Ibid., 4
in most Puritan diaries, the conversion experience organizes the
text and is present everywhere with in it, both as reiterated
narrative and as pervasive point of view...Defoe, by contrast,
arranges Crusoe's journal so that conversion will occur as a
disruption40

Indeed, Crusoe's story is one of spiritual autobiography with links to the parable of the prodigal
son. Writing about how he began his seafaring ways, Crusoe writes, “I consulted neither Father or
Mother any more, nor so much as sent them Word of it; but leaving them to hear of it as they
might, without asking God's Blessing, or my Father's,” indicating his defiance of not only parental
authority but also Providence.41 The moment of his conversion, as Sherman has noted, is strange
– while in most conversion narratives, the conversion takes place at the beginning, Crusoe's
conversion occurs somewhere in the middle of the text at a moment wholly incongruous with the
gravity of the change. Some of the entries directly preceding his religious vision are the shortest in
the whole journal, “June 23. Very bad again, cold and shivering, and then a violent Head-ach.
June 24. Much better.” These entries anticipate the Richardsonian technique of writing-to-the-
moment – they function paratactically with one another in a way that underscores the formal
realism of these sections of the text.

40 Sherman, *Telling Time: Clocks, Diaries, and English Diurnal Form, 1660-1785*, 233
41 Defoe, Keymer and Kelly, *Robinson Crusoe*, 9
In contrast, Sherman notes that “the conversion entries…shift away from momentary scribal realism.” He no longer writes to the moment but rather seeks to both interpret and represent his religious experience, necessarily setting aside attempts to render time with any degree of verisimilitude by using the diurnal form of the journal entry. During his religious experience, Crusoe loses all semblance of time altogether, “I’m partly of the Opinion, that I slept all the next Day and Night…for otherwise I knew not how I should lose a Day out of my Reckoning in the Days of the Week…” After this incident, we can no longer take Defoe’s reckoning of days as completely accurate – his religious conversion breaks down any semblance of time or timekeeping. Defoe’s religious experience is something similar to Messianic time, that is to say, time empty of meaning except for that religious moment which gives the empty time meaning.

Social time

Yahav notes another dimension of Crusoe’s time on the island – social time. Once Crusoe realizes that he is not alone on the island, his time begins to be occupied with avoiding the cannibals:

\[42\] Ibid., 75
\[43\] Ibid., 75-6
It happen'd one Day about Noon going towards my Boat, I was exceedingly surpriz'd with the Print of a Man's naked Foot on the Shore, which was very plain to be seen in the Sand: I stood like one Thunder-struck, or as if I had seen an Apparition; I listen'd, I look'd round me, I could hear nothing, nor see any Thing. I went up to a rising Ground to look farther, I went up the Shore and down the Shore, but it was all one, I could see no other Impression but that one, I went to it again to see if there were any more, and to obseve if it might not be my Fancy; but there was no Room for that, for there was exactly the very Print of a Foot, Toes, Hell, and every Part of a Foot; how it came thither, I knew not, nor could in the least imagine. But after innumerable fluttering Thoughts, like a Man perfectly confus'd and out of my self, I came Home to my Fortification, not feeling, as we say, the Ground I went on, but terrify'd to the last Degree, looking behind me at every two or three Steps, mistaking every Bush and Tree, and fancying every Stump at a Distance to be a Man.\footnote{Defoe, Keymer and Kelly, Robinson Crusoe, 130}

Interpersonal interaction suddenly takes on the urgency of the logic of need for Crusoe – to fail to spend time thinking about his relationship with others is to be eaten, to be devoured. Moreover,
while Crusoe uses a calendar and his journal as external, outward referents for the passing of time, it is precisely after he realizes that he is not alone that he begins to cultivate an interiority of duration, a temporality drawn from his own experience of living it.

Yahav also notes the moment wherein Crusoe recognizes that he is not alone as a pivotal change in Crusoe’s thoughts about time. Whereas previously, Crusoe considered time as infinite, as endlessly abundant, Crusoe approaches time as a finite resource after he realizes that there are others around. He distinctly spends time in order to anticipate his interactions with others – building a second habitation, for instance. Time does not function according to either task-orientation or to religious experience but with respect to Crusoe’s neighbours and how they spend their time as well.

On the topic of time, John Locke wrote:

‘Tis evident to any one who will but observe what passes in his own Mind, that there is a train of Ideas, which constantly succeed one another in his Understanding, as long as he is awake. Reflection on these appearances of several Ideas one after another in our Minds, is that which furnishes us with the Idea of Succession: And the distance between any parts of that Succession, or between the
appearance of any two Ideas in our Minds, is that we call

Duration.\textsuperscript{46}

In contrast to Locke’s somewhat solipsistic understanding of duration (or mathematical time), Defoe seems to suggest a temporality founded in relations with others and their ideas as well. Crusoe understands that he is not the only subject on the island capable of having ideas but also the cannibals with their ideas too.

STERN AND THE PROBLEMS OF KEEPING (UP WITH) TIME

That Laurence Sterne’s whimsical novel, The Life and Opinions of Tristram Shandy, Gentleman, critically engages contemporaneous discourses regarding the nature of time and its reckoning, its passing and measurement, has not escaped the notice of a variety of literary scholars; Theodore Baird declares, for instance that “Sterne’s contribution to the English novel, derived from [John] Locke’s remarks on duration, is his treatment of time”\textsuperscript{47} and Joseph Drury writes that “despite its clockwork form, Tristram has no respect for the traditional narratives of time.”\textsuperscript{48} It is important to note, however, in spite of the consistent recognition that Tristram Shandy draws upon discourses relating to time, critical thought about Sterne’s construction of an account of time and its significance is somewhat more divergent; whereas Baird insists that


\textsuperscript{47} Theodore Baird, “The Time-Scheme of Tristram Shandy and a Source,” PMLA 51, no. 3 (Sep., 1936), 803.

Stern’s creation of a time-scheme in *Tristram Shandy* is characterized by specificity, Drury argues conversely, suggesting that Sterne seeks to subvert a sense of temporality as fixed and linear through the formal and textual features of the novel, thereby destabilizing the passage of time through reading. What can supplement what has already been said about *Tristram Shandy*’s curious form, I think, is an attention towards contemporaneous developments in chronometry and the ways in which they are inflected in works leading up to the composition of *Tristram Shandy*. Such an analysis can, I believe, enable a more nuanced understanding of Sterne’s account of fluid time, drawing upon both intellectual history, literary theory, and material history. In this section of my essay, I will devote particular attention towards the ways in which Sterne works with time in his novel – slowing it down, speeding it up, dilating it, contracting it, -- altering the experiences of both the protagonist, Tristram, and his audience.

**Shandean time in the age of Locke**

Baird suggests that Sterne draws heavily upon Locke’s theory of mind, in particular, the succession of ideas, in order to compose his narrative⁴⁹:

Sterne learned from Locke the secret of why time moves slowly or rapidly in the consciousness of an individual; namely, that its speed depends upon the rapidity of the succession of ideas. In analyzing

---

⁴⁹ Baird, *The Time-Scheme of Tristram Shandy and a Source*, 803
and representing through the medium of words the ideas as they
pass through a character's mind, Sterne shows his greatest genius.

Sterne does, indeed, display an interest in the formal construction of narrative, the frameworks
surrounding and supporting his novel and the ways in which they are paced, insofar as *Tristram
Shandy* features a multiplicity of inventive and experimental formal features. Because of the
deliberate and elaborate ways in which *Tristram Shandy* is structured, I am convinced that Sterne's
formal experimentation is an attempt to render in text what Locke suggests occurs in the mind, as
Baird notes. Additional evidence can be found in the sections of *Tristram Shandy* that excerpt
Lockean philosophy, for instance, Tristram's mention of the animal spirits in volume I. Work by
Arthur Cash, however, problematizes somewhat an attempt to impose a Lockean-Rationalist
understanding of *Tristram Shandy*. While he, like Baird, argues that the structure of the work can
be elucidated through the lens of Lockean psychology, he draws attention towards his belief that
"an untenable interpretation has prevailed...that Locke's association principle, functioning in the
mind of the narrator, is the structural principle of *Tristram Shandy*."\(^{50}\) Cash argues against literary
criticism drawn heavily from chapters of Locke's *Essay Concerning Human Understanding*
regarding the association of ideas because he suggests that concept was added merely as an
afterthought to supplement Locke's more ambitious theoretical work regarding the mind.

Moreover, Cash believes that the kind of Associationist thought espoused in *Tristram Shandy*

owes much more to other thinkers such as David Hume and David Hartley, neither of whom, Cash further suggests, influenced Sterne’s composition of *Tristram Shandy*. Instead, Cash proposes that Sterne draws upon the British empirical tradition, focusing on the importance of human thought and experience. By doing so, Cash seeks to reconfigure the primary organizing principle of *Tristram Shandy* from one of a frenetic series of thoughts succeeding one another to one founded upon the primacy of the human experience, the durations between such experiences, and the ways in which these experiences are connected.

Regardless of how much stock can or should be placed in Lockean Associationism, it is clear that *Tristram Shandy* is deeply concerned with the ways in which thoughts occur and how they are represented in text. The ways in which thoughts are presented in the novel can be elucidated when the kind of thought espoused by Locke and described earlier are considered. In contrast to Cartesian models of time which focus upon the discreteness of units of time or against the task-oriented time that E.P. Thompson identifies as a characteristic of pre-modernity, the kind of Lockean time we find in *Tristram Shandy* is characterized by two distinct characteristics: a focus on succession and not separation, enabling a more fluid conception of temporality, and reference to an objective, external referent.

**The mechanics of *Tristram Shandy***

*Tristram Shandy* is not only notable for structural qualities but also its contents. Unlike other novels, such as *Robinson Crusoe*, which offer the promise of a coherent, linear narrative, a
“life,” *Tristram Shandy* also offers ancillary material under the nebulous category of “opinions.” This shift away from a focus upon the veracity or sequential order of narrated events as in Aphra Behn’s *Oronooko* or Samuel Richardson’s *Pamela,* is a significant one; by interjecting the sequence of events in Tristram’s life with his (often lengthy) opinions, Sterne frustrates attempts to read “through” *Tristram Shandy,* forcing readers, instead, to both pause and digest, thereby controlling the flow of time through his readers minds, as Baird has pointed out, through the medium of words. This technique, explains Tristram, is central to the underlying digressive-progressive mechanism of his narrative:

> the machinery of my work is of a species by itself; two contrary motions are introduced into it, and reconciled, which were thought to be at variance with each other. In a word, my work is digressive,

and it is progressive too,—and at the same time.

Tristram readily identifies the novelty of his narrative technique as a “species by itself.” He seeks to underscore the difference raised by his work rather than to situate it in relation to previous forms of narrative. Moreover, the mechanics of his book-machine are interesting: it takes two “contrary motions” and reconciles them. Tristram’s emphasis on the digressive nature of his narrative should not be altogether surprising however – Herodotus, in book 4 of his *Histories,* writes that “Digressions are part of my plan,” thereby situating digression within a historiographical framework with a long genealogy. That the novel can function progressively
and digressively at the same time, however, is somewhat problematic – we simply can’t be in two places (or at two times) at the same time. Tristram continues with his discussion of the mechanics of the book:

This, Sir, is a very different story from that of the earth’s moving round her axis, in her diurnal rotation, with her progress in her elliptick orbit which brings about the year, and constitutes that variety and vicissitude of seasons we enjoy…Digressions, incontestably, are the sunshine…for instance, – you might as well take the book along with them; – one cold eternal winter would reign in every page of it.51

Upon a cursory reading, we might be led to believe that Tristram is here disavowing what Sherman describes as the “diurnal form,” that is to say, narratives structured around organizing principles of linearity and succession as exemplified by a narrative such as Robinson Crusoe or Pamela. However, this reading is problematized because earth’s “elliptick orbit” is not linear but is circular, gesturing backwards towards earlier ways of reckoning time based on the passing of cyclical events: the transit of the sun through the day or the changing of the seasons. If digressions are supposed to be the sun, the fulcrum around which the narration pivots, then the narrative is doomed to never escape its orbit, its circular trajectory.

Tristram continues his discourse on method:

All the dexterity is in the good cookery and management of digressions, so as to be not only for the advantage of the reader, but also of the author, whose distress, in this matter, is truely pitiable: For if he begins a digression, ---from that moment, I observe, his whole work stands stock-still;--and if he goes on with his main work,---then there is an end of his digression…I have constructed the main work and the adventitious parts of it with such intersections, and have so complicated and involved the digressive and progressive movements, one wheel within another, that the whole machine, in general, has been kept a-going\textsuperscript{52}

In this passage, Sterne makes some interesting points about the passing of time, its duration and reckoning. For Sterne, at the time a digression takes off, it suspends the plot-time even as things are ostensibly occurring in pure time. When the narrator resumes plot-time, a digression consequently ends. In this chiasmic relationship between plot and digression, Sterne suggests that he has constructed a sort of perpetual motion machine, something that can be kept “a-going.” The phrase “kept a-going” should also remind us of a passage from the beginning of the novel:

\textsuperscript{52} Ibid., 58-9
Well, you may take my word, that nine parts in ten of a man’s sense or his nonsense, his successes and miscarriages in this world depend upon their motions and activity, and the different tracks and trains you put them into, so that when they are once set a-going, whether right or wrong, ’tis not a half-penny matter,—away they go cluttering like hey-go mad; and by treading the same steps over and over again, they presently make a road of it, as plain and as smooth as a garden-walk, which, when they are once used to, the Devil himself sometimes shall not be able to drive them off it.\textsuperscript{53}

In the same way that the book acts as a perpetual machine, Sterne draws attention towards the ways in which human life functions somewhat mechanistically – the way in which human life moves becomes its vehicle through life. Interestingly, whereas narratives feature the reconciliation of two contrary motions, progression and digression, human life appears to only proceed in a unitary fashion, “treading the same steps over and over again.”\textsuperscript{54} While the book is capable of meandering, digressing, human life proceeds, more or less, linearly – I am reminded again of a Bergsonian notion of time – life-time appears to function phenomenologically like pure time while narrative time can be measured and altered like mathematical time.

\textsuperscript{53} Ibid., 5
\textsuperscript{54} Ibid., 5
Sterne’s mention of “cookery” of books is somewhat suggestive of another author who speaks about the mechanics of novel-writing as well: Henry Fielding. In book 2 of Henry Fielding’s satirical novel, *Joseph Andrews*, the narrator elucidates the ways in which authors “divid[e] our Works into Books and Chapters.”55 Fielding’s narrator suggests that the organization of prose fiction is based upon “the Advantage of…Reader[s], not [authors]”56 first, those little spaces between our chapters may be looked upon as an inn or resting-place…As to those vacant pages which are placed between our books, they are to be regarded as those stages where in long journies the traveller stays some time to repose himself…a consideration which I take the liberty to recommend a little to the reader; for, however swift his capacity may be, I would not advise him to travel through these pages too fast; for if he doth, he may probably miss the seeing some curious productions of nature, which will be observed by the slower and more accurate reader. A volume without any such places of rest resembles the opening of wilds or seas, which tires the eye and fatigues the spirit when entered upon.

55 Ibid., 76
56 Ibid., 76
Sterne, like Fielding, believes that there exist certain underlying mechanics for prose fiction. Both authors are deeply sensitive to the passing of readerly time – Fielding suggests, for instance, that reading too fast is detrimental and it is the duty of authors to provide adequate pauses in the experience of reading. Sterne, on the other hand, inserts digressions in order to suspend time to provide his readers with pause. However, whereas Fielding's acts of regulating his readers’ pace through the books, Sterne could be said to be accelerating the pace of his readers. Because the motion of his book-machine is reconciliatory, progression or digression both yield advancement in either case, propelling the reader further in time in spite of appearing to be led nowhere at all.

**Visualizing time**

In his essay, “Representations of time in Hogarth's paintings and engravings” Peter Wagner considers the impact of the horological revolution on the works of William Hogarth, a contemporary of both Daniel Defoe and Laurence Sterne. In particular, Wagner draws attention towards a frontispiece designed by Hogarth for *Tristram Shandy*:

> When William Hogarth illustrated two scenes from the novel, he seems to have been aware of the importance of clock...Hogarth's appreciation of Sterne's handling of the representation of time in fiction is perhaps most obvious in the frontispiece he produced for the first volume. The engraving, produced by Ravenet after a design by Hogarth, is a graphic answer as it were to a compliment
Sterne had made Hogarth when, in volume 2, chapter XVII, he
described the stance of Corporal Trim, who commences reading a
sermon, as falling ‘within the limits of the line of beauty’. The first
state of the print shows no clock, but in the second state, as if he
had had second thoughts, Hogarth added a grandfather clock in the
corner behind Walter and Toby Shandy.  

Figure 4 Frontispiece to volume I of *Tristram Shandy*\(^{58}\)

Hogarth's artistic representations of timekeeping, however, are not the only ones to be found in *Tristram Shandy*. At the end of volume VI of *Tristram Shandy*, Tristram seeks to visually depict the motions through which his text has moved:

![Diagram of Tristram Shandy's motions](image)

*Inv. T. S.*  
*Soul. T. S.*

Figure 5 From volume VI of *Tristram Shandy*\(^{59}\)

While Stephen Soud has insightfully remarked upon the labyrinthine qualities of these lines,\(^{60}\) I am reminded of Christiaan Huygens's mathematical proofs and accompanying diagrams in his *Horologium Oscillatorium* elucidating the isochronous nature of cycloid curve motion which ultimately resulted in his invention of the pendulum escapement mechanism. Elsewhere in

---


\(^{59}\) Sterne and Ross, *The Life and Opinions of Tristram Shandy, Gentleman*, 379

*Tristram Shandy*, specifically chapter XXV of volume III, Sterne alludes to work of l’Hôpital and Bernoulli, the former a mathematician and the latter a physicist, on the cycloid curve – a geometric shape unknown to the Ancients. The importance of a direct reference to the cycloid curve cannot be understated – having only been the subject of study since sometime during the 17th century, the cycloid would be a shape whose importance was only known to the learned.

These plot-lines also bring to mind the digressive-progressive motion that propels the narrative; as the plots digress or oscillate, they also progress – such motion resembles that of sinusoidal curves roughly representing pendulum motion. Indeed, we can see in the plot-lines drawn by Tristram a sort of oscillatory pattern – a digression in one direction is balanced by a return in the other, ultimately leading to progress along a linear scale. Schematically, this can be said to parallel the kind of oscillatory motion presented by Huygensian chronometry – a system not marked by distinct, discrete moments but by a continuous movement of back and forth through time:
Tristram's subsequent remarks are, however, somewhat incongruous with the digressive-progressive approach he purports to adopt:

In this last volume I have done better still...I have scarred stepped a yard out of my way...If I mend at this rate, it is not impossible...but I may arrive hereafter at the excellency of going on even thus;

which is a line drawn as straight as I could draw it, by a writing-master's ruler...turning neither to the right hand or to the left.\textsuperscript{62}

Tristram here seems to turn away from the “machinery of [his] work,” that is to say, the reconciliation of the digressive and progressive thrusts of the novel. He suggests that to do better

\textsuperscript{61} Lepschy, Mian and Viaro, \textit{Feedback Control in Ancient Water and Mechanical Clocks}, 8
\textsuperscript{62} Sterne and Ross, \textit{The Life and Opinions of Tristram Shandy, Gentleman}, 380
is to sparingly step “out of the way” and that he seeks to ultimately convey a narrative that is fixed, straight, and linear. I think, though, that Sterne here must be being somewhat facetious. In spite of Tristram’s valorization of the straight plot-line, he still digresses in order to describe its positive qualities, referencing Cicero and Archimedes among others. In doing so, Sterne may be slyly suggesting the impossibility of a conception of narrative time as purely linear, purely experiential like Bergsonian pure time. In this sense, the machinery of *Tristram Shandy* is posited as the only viable manner in which pure time may be represented in prose – pretensions to being able to write “turning neither to the right hand or to the left” are misguided at best. ⁶³

Perhaps what Tristram is suggesting, of course, is not a straight plot-line but (as he does in other parts of the novel) unbounding typography from its pre-existing limits, that is to say, to permit the dash to expand past its normal boundaries in the same way that the text threatens to expand past established conventions of typography. By extending the normal boundaries of the dash, Tristram is able to not only manipulate the ways in which his plots take place but also to extend nearly indefinitely the time and duration spent reading, keeping his book-machine “a-going.”

**Running (away) with time**

Volume 7 of *Tristram Shandy* is, in many ways, particularly well-suited for the type of analysis raised by this essay, specifically investigating the ways in which Sterne’s work functions

⁶³ Ibid., 380
vis-à-vis the ongoing development of a sense of clock-time, the refinement of the novel form, and post-Lockean associationism. In this section, Tristram attempts to flee from death by travelling while concomitantly narrating this escape attempt. The formal and textual qualities of this section, as in all parts of the book, reflect Tristram's experiences in a variety of ways – in the same ways that Tristram experiences difficulties in his travels, for instance, readers are similarly impeded in an attempt to progress through the narrative as they are led through a heteroglossia of temporalities. Additionally, this volume is suggestive of Joseph Addison's work in Spectator No. 4:

    We might carry this Thought further, and consider a Man as, on one Side, shortening his Time by thinking on nothing, or but a few things; so, on the other, as lengthening it, by employing his Thoughts on many Subjects, or by entertaining a quick and constant Succession of Ideas.⁶⁴

Addison, drawing upon Locke's Train of Ideas, suggests that the act of successive thinking is one that is healthful, giving rise to a longer life. Tristram, as a narrator, does indeed manage to lengthen time, narrative-time and reading-time, by leading the reader through various digressions and thoughts and thereby exposing the fluid nature of time, its ability to dilate and constrict, shorten and lengthen.

Tristram commences by describing his attempts at writing down the events of his life as a sort of perpetual motion machine, that “it should be kept a going.”65 This description gestures backwards towards the very first chapter of the novel, in which Tristram writes that “[man's] successes and miscarriages in this world depend upon their motions and activity...when they are once set a-going...away they go clattering like hey-go-mad; and by treading the same steps over and over again, they presently make a road of it.”66 Sterne here, I think, adroitly combines a variety of contemporaneous schools of thought: the Lockean-Addisonian succession or train of ideas and the mechanical nature of timekeeping practices.

Tristram recognizes however, the limitations of various mechanisms – the train of ideas and the form of prose fiction– with regards to bearing excessive acceleration, “When the precipitancy of a man's wishes hurries on his ideas ninety times faster than the vehicle he rides in – woe be to truth! and woe be to the vehicle and its tackling.”67 While these machines may be set a-going, they may only reach a certain speed. Unlike Fielding, whose chief concern is that his readers will read too quickly and not appreciate his work, Tristram may be gesturing to the fact that in spite of all attempts to keep these machines “a-going,” they ultimately also come to a halt – the book (and his life) both end. Apparently cognizant of this fact, Tristram demonstrates a

65 Sterne and Ross, The Life and Opinions of Tristram Shandy, Gentleman, 385
66 Ibid., 1
67 Ibid., 392
continued anxiety about interruptions to his travel plans, even while interrupting the readerly experience.

When Tristram writes “What’s wrong now?—Diable!—a rope’s broke!—a knot has slipt!—a staple’s drawn!—a bolt’s to whittle!—a tag, a rag, a jag, a strap, a buckle, or a buckle’s tongue, want altering,” he replicates in his narrative the exact types of disjunctions he encounters during his travels by way of punctuation. Readers are forced to parse his text, stop, and parse again at each pause, interrupting the flow of ideas but by doing so increasing the duration of the reading experience, thereby reflecting the increasing time Tristram spends waiting for travel. The question is – do these pauses signify the extension of duration or do they represent a sort of *memento mori* as one moves closer towards death? The former would require a sort of Messianic conception of time, empty time, punctuated by events while the latter alludes to a finite sense of time with a distinct beginning and end. *Tristram Shandy* never quite makes clear which of these senses of time makes sense within the context of the novel.

In chapter twenty-eight, Tristram notes that he has conflated several narratives at the same time and has, resultantly, found himself in three loci simultaneously. This strange arrangement results partly from Tristram’s attempt, to borrow Richardson’s terms, to “write to the moment.” While he is writing, he is trying to render present the past which has already occurred and,

---

68 Ibid., 392
through the inexpert arrangement of his story, he has tangled two points in the past with one another: heading to dinner through the market-place of Auxerre and entering Lyons.

—Now this is the most puzzled skein of all—for in this last chapter, as far at least as it has helped me through Auxerre, I have been getting forwards in two different journeys together, and with the same dash of the pen—for I have got entirely out of Auxerre in this journey which I am writing now, and I am got half way out of Auxerre in that which I shall write hereafter—There is but a certain degree of perfection in every thing; and by pushing at something beyond that, I have brought myself into such a situation, as no traveller ever stood before me; for I am this moment walking across the market-place of Auxerre with my father and my uncle Toby, in our way back to dinner—and I am this moment also entering Lyons with my post-chaise broke into a thousand pieces—and I am moreover this moment in a handsome pavillion built by Pringello, upon the banks of the Garonne, which Mons. Saligniac has lent me, and where I now sit rhapsodising all these affairs.\footnote{Ibid., 413-14}
That Tristram is able to “get forward in two different journies...with the same dash of the pen” (emphasis mine) is perhaps some gesture towards the ability to master time when one has the ability to compose a narrative. It suggests that the past is a matter of not only temporal concern but one of mere arrangement. Of course, Tristram’s recognition that he is at “this moment...rhapsodising all these affairs” is a pointed recognition that while he may master the arrangement of the past, he still moves forward in time in his own time.

When Tristram finally arrives in Lyons, he is disappointed to find that the preeminent clock of Lippius of Basil was no longer functioning:

That Lippius’s great clock was all out of joints, and had not gone for some years—It will give me the more time, thought I, to peruse the Chinese history; and besides I shall be able to give the world a better account of the clock in its decay, than I could have done in its flourishing condition.

What Tristram appears to be suggesting is that because Lippius’s clock no longer runs, no longer can reckon the passing of time, it paradoxically gives him more time to both peruse the Chinese history as well as to describe the clock. The loss of the ability to reckon the passing of time, the ability to discern mathematical time, permits a purely experiential conception of time in which it passes but duration does not exist. With the cessation of the pendulum mechanism, there exists

---

70 Ibid., 413
no referent for the passing of time and so time becomes unbound by that which would delimit
one moment from another. Potentially, this could suggest that far from helping to keep the
motion of the book a-going, figurations of time and timekeeping which assist in referencing the
passing of time and its durations actually are counterproductive to the task of producing an
endless sense of unbound time.

The Clockmakers Outcry

One of the best-known responses to Sterne’s novel was an anonymously published
pamphlet entitled *The Clockmakers Outcry against the Author of the Life and Opinions of Tristram
Shandy*, in which “a group of clockmakers…claim that Sterne has harmed them in the execution
of their professional duties…it is Tristram’s association of clocks with human procreation that is
said to be harmful to their trade.”71 The clockmakers also accuse Tristram of being guilty of
various philosophical contradictions, for instance, being a philosophical materialist because of his
opening passage on his conception but also presenting a sentimental account of Yorick’s death.
That the clockmakers find somehow threatening (it is not made clear why this is so) the notion
that winding clocks and conception are linked speaks directly to one of the strands I have looked
at in *Tristram Shandy*: that of setting in motion life and mechanism at the same time. As the
clockmakers would have it, no relationship should exist between clocks, which are purportedly
the domain of business, and human life:

71 René Bosch and Piet Verhoeff, *Labyrinth of Digressions: Tristram Shandy as Perceived and Influenced by Sterne’s
So then to wind up the clock on the first Sunday of the month, was
the matter of business; and [Walter’s] having gradually brought some
other family concerns to the same period, was the matter of
amusement – Well said, worthy pioneer, good copulating Levite! he
must return to his favourite entrenchments, although it were but
once a month: seldom is better than never.72

What the clockmakers may be suggesting is that mechanisms for adjudicating mathematical time
(business) should have no bearing upon experiences of pure time (amusement). That Sterne dares
to suggest (rightfully, I think) that the experience of telling time, of setting his clock, is somehow
linked with an experiential phenomenology of time is condemned by the clockmakers. What they
may find threatening is that if the two are somehow linked, if pure time and mathematical time
have a reciprocal and not unilateral relationship as Bergson suggests, then the entire profession of
clockmaking is not one that is elevated above the human experience of time but that they co-exist
in a reciprocal relationship. In this way, Tristram Shandy radically resituates the clock-users and
clock-makers on an even plane; the experience of passing time is no longer subordinate to the
ability to tell time accurately according to time-discipline.

I want to conclude this essay by returning to the basic claim upon which the entirety of
this project rests: that the ways in which we tell time somehow affect the ways in which we

72 The Clockmakers Outcry Against the Author of the Life and Opinions of Tristram Shandy. Dedicated to the most
experience it. By describing the ways in which Defoe presents time not as a unitary, monolithic reification but as a heteroglossia of competing ways of perceiving time and by looking at some of the ways in which Sterne pushes the concept of time and duration to their limits, I have sought to gesture towards some of the ways in which novels functioned in ways that actively strain against the imposition of paradigmatic qualities of linearity or succession brought about by the Huygensian revolution. In each Robinson Crusoe and Tristram Shandy, readers are confronted with narratives that feature, more or less, incoherent senses of time – heteroglossia of temporalities – which challenge fundamental conventions of narrative time and structure, Robinson Crusoe by virtue of being written at the beginning of the development of the novel as a genre and Tristram Shandy as a conscious and deliberate thought by Sterne. In the same way that Sherman suggests that Samuel Pepys’s diary becomes a sort of timekeeping device in itself, serving as an index by which the events of his day-to-day life were reckoned, I want to suggest that novels participated in the making of modern time by acting as technologies for timekeeping as well – ways of experiencing mathematical time that changed the phenomenology of pure time. At the very least, of course, I have wanted to highlight some of the ways in which an attention towards a material history of novels and the material relation of novels to other contemporaneous objects, here I have looked at clocks, may elucidate a fuller understanding of the history of the novel. Future directions that exist include an application of the type of analysis presented in this paper upon other novels of the period, such as Samuel Richardson’s Pamela or Ann Radcliffe’s gothic fiction in order to widen the scope of this form of analysis. Alternatively, an attempt may
be made to track forward the development of new time-disciplines, such as that brought about by railway time in the late-eighteenth century and early nineteenth century.\textsuperscript{73}

BIBLIOGRAPHY


