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The Mechanical Aspirations of Written Things in Sterne's
Tristram Shandy

MACHINE, má-shéén'.¹¹² *n. s.* [*machina*,
Lat. *machine*, Fr.] This word is pro-
nounced *masheen*.

1. Any complicated work in which one
part contributes to the motion of an-
other.
We are led to conceive this great *machine* of the
world to have been once in a state of greater sim-
plicity, as to conceive a watch to have been once in
its first materials. *Burnet*.

In a watch's fine *machine*,
The added movements which declare
How full the moon, how old the year,
Derive their secondary pow'r
From that which simply points the hour. *Prior*.

2. An engine.
In the hollow side,
Selected numbers of their soldiers hide;
With inward arms the dire *machine* they load,
And iron bowels stuff the dark abode. *Dryden*.

3. Supernatural agency in poems.
The marvellous fable includes whatever is super-
natural, and especially the *machines* of the gods.
Pope.

Maxwell Harrison Cohn
Honors Essay for The English Department
Project Advisor: Professor Laura Baudot

Oberlin College

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¹ My scan, from: Samuel Johnson, *A Dictionary of the English Language: In Which The Words are Deduced from their Originals, and Illustrated in Their Different Significations by Examples From The Best Writers* (Philadelphia: Moses Thomas, 1818).
[Oberlin Special Collections]

Introduction

Unhappy *Tristram!* child of wrath! child of decrepitude! interruption! mistake! and discontent! What one misfortune or disaster in the book of embryotic evils, that could unmechanize thy frame, or entangle thy filaments! (IV.xix, 233)²

Laurence Sterne's *The Life and Opinions of Tristram Shandy, Gentleman* (1759-67) has a way of appearing genuinely interested in everything it covers. Legal documents, noses, ballistics, fortifications, homunculi, window sashes, hobby-horses, jack-boots, sailing chariots, obstetrical instruments, jerkins, sermons, squirrel cages, smoke-jacks, raree-shew-boxes, goosecaps, buttons, clocks, and keyholes represent but a brief selection of the things Tristram dwells on throughout his book. To great comedic effect, Tristram's fascination with all things stymies him from fulfilling his intended business of writing an autobiography; Tristram finally leaves behind an enormous yet piecemeal collection of writings. This cluttering makes *Tristram Shandy* appear as scrupulously researched, indiscriminatory, and conclusive as an encyclopedia, albeit entirely disheveled.³

As a portion of my list shows, Tristram describes an assortment of curious devices—squirrel cages, smoke-jacks, raree-shew-boxes—in his book.⁴ Yet my list

² Laurence Sterne, *The Life and Opinions of Tristram Shandy, Gentleman*, ed. Robert Folkenflik (New York: Modern Library Classics, 2004). All quotations from *TS* refer to page numbers in this edition.

³ There is in fact an encyclopedia being compiled in the book, Walter Shandy's *Tristrapedia*. For Sterne as encyclopedist and cataloguer, see: Jack Lynch, "The Relicks of Learning: Sterne among the Renaissance Encyclopedists," *Eighteenth-Century Fiction* 13:1 (2000), 1-17; Amélie Junqua, "Surfeits of Words, Surviving Lists in *Tristram Shandy*," in *Hilarion's Asse: Laurence Sterne and Humour*, ed. Anne Bandry-Scubbi and Peter de Voogd (Newcastle upon Tyne: Cambridge Scholars, 2013), 107-20. I reference Lynch in greater detail later in my essay.

⁴ Squirrel cage: a hamster wheel. Smoke-jack: the eighteenth-century equivalent of a meat rotisserie. Raree-show and Savoyard's box: a mechanical peep show. I return to the smoke-jack and raree-show in my discussion of machines that Sterne situates in the brain of Tristram's Uncle, Toby Shandy.

excludes the most surprising machine that Sterne details throughout—the machine of *Tristram Shandy* itself:

the machinery of my work is of a species by itself; two contrary motions are introduced to 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. (I.xxii, 54)

Sterne was openly intrigued in books' inherent link to the mechanical by means of the printing press—expressed perhaps most famously in *Tristram Shandy* by the “black page,” a visual confrontation between writing subject, reader, printed page, and death.⁵ However, Sterne's frequent descriptions of his own book as a machine—beyond a motionless thing produced by mechanical means—invite a closer look into what I call *Tristram Shandy's* mechanical aspirations.

The “digressive” nature of the *Tristram* machine typically acts a conduit for the book's intertextual discourses; *Tristram's* reader often confronts an outside text when removed from *Tristram's* story. As I hope to qualify, *Tristram Shandy's* intertexts signal moments where the mechanics of the book appear most conspicuous. Therefore, I use this passage to think both about the metaphor of the book as machine and as an object filled with rampant borrowings and plagiarism.⁶

⁵ See: Peter de Voogd, “Sterne and visual culture,” in *The Cambridge Companion to Laurence Sterne*, ed. Thomas Keymer. (New York: Cambridge University Press, 2009), 142-59; de Voogd, “*Tristram Shandy* as Aesthetic Object,” in *Laurence Sterne's Tristram Shandy: A Casebook*, ed. Thomas Keymer, 108-19. (Oxford: Oxford University Press, 2006), 108-19; Christopher Fanning, “Sterne and print culture,” in *Cambridge Comp*, ed. Keymer (2009), 125-41; Thomas Keymer, *Sterne, The Moderns, and the Novel* (Oxford: Oxford University Press, 2002), 72-82.

⁶ See: Jonathan Lamb, *Sterne's Fiction and the Double Principle* (Cambridge: Cambridge University Press, 1989), 3-4. Lamb's reading of Sterne's intertextuality as a “tactical and toughminded experiment with privation, breach, shortage, and emptiness” is integral to my reading of the book. And while I agree with Lamb that Sterne's “use of literary fragments is not the key some enormously clever puzzle whose clue we go on solving in the hope of total disclosure,” I would be remiss to undervalue my debts to edited versions of *Tristram Shandy*, namely those by Robert Folkenflik and Melvyn New, whose notes have greatly informed my project.

Despite Tristram's various registers of literary allusion, he ultimately assumes the identity of a totally self-sufficient author and machine. This inconsistency raises a question concerning *Tristram Shandy's* mechanical ontology: is *Tristram Shandy* a machine fueled by outside texts, or is it instead an automaton, a *self-moving* device made independent through the energies of its own writings?⁷ Although he describes pentagraphs⁸ as our "great historians," Tristram insists by the final volume of his autobiography that he envies no writing machine but his own:

I do not know what envy is: for never do I hit upon any invention or device which tendeth to the furtherance of good writing, but I instantly make it public; willing that all mankind should write as well as myself.
—Which they certainly will, when they think as little. (IX.xii, 498)

And, just as no invention or device outstrips Tristram's, only *Tristram Shandy* can satisfy his book thirst: "I am resolved never to read any book but my own, as long as I live" (VIII.v, 439).

Seeing Tristram as a self-sufficient author, however, remains as difficult as visualizing his book as a self-powered apparatus. Roy C. Caldwell writes:

Employing the archaic technologies of first-generation modern machines (e.g., windmills, water-wheels), *Tristram Shandy* does not produce its own power, but traps and transforms natural energies. It captures and converts desire into text.⁹

Tuning Caldwell's argument to my own purposes, I instead suggest that Sterne converts text into text. This tautology informs the machine-building (and indeed humorous) character of the book's composition. *Tristram Shandy* represents a machine that writes and that reads too—and at the same time.

⁷ While automata are machines, they specifically describe self-moving machines (*OED*). My use of "machine" in this analogy describes devices that rely on external sources of energy.

⁸ Sterne's note: "Pentagraph, an instrument to copy prints and pictures mechanically, and in any proportion" (I.xxiii, 56).

⁹ Roy C. Caldwell, "'Tristram Shandy', Bachelor Machine," *The Eighteenth Century* 34:2 (1993), 107.

The word “machine,” in its first usage recorded by the *Oxford English Dictionary*, means to contrive, to imagine—to think.¹⁰ Etymologically, then, it makes sense that a desire to build a machine stems from the desire to conceive a new world—chiefly to mimic things pre-existing in the natural world by artificial means. Yet, as Tristram argues, mankind will only write as well as his machine “when they think as little.” I don’t mean to suggest that Sterne plays directly with the etymology of “machine” in this passage. However, I do find that this semantic departure is representative of what makes Sterne’s book-machine so individual. The mechanical world Sterne strives to build is not modeled on natural things, but rather on—to reuse Sterne’s own phrase—“non-naturals.” The most common non-natural Sterne copies is that of the printed page; Tristram’s intertexts perform the bulk of his thinking for him.¹¹

Jack Lynch, taking note of Sterne’s tendency to reproduce outside texts in the book, views *Tristram Shandy* as following in the Renaissance tradition of *copia*.¹² And as Lynch suggests so wonderfully, Tristram’s cosmology applies to his own writing:

Tristram calls the earth “this vile, dirty planet of ours,—which o’ my conscience, with reverence be it spoken, I to be made up of the shreds and clippings of the rest”; the same might be said of his work, made up of the shreds and clippings of other discourses.¹³

Taking Lynch’s parallel a step further, I mean to show how the mechanicity of *Tristram Shandy*’s universe becomes clearest upon realizing that it contains and produces other

¹⁰ *OED*: “Machine” first use ca. 1450, as a verb: *Life of St. Cuthbert* (1891) 523 (*MED*), “Sho..machynd in hir mynde, for thy, Pat it was best for hir to fly.” I am indebted to Professor Wendy Hyman for this observation.

¹¹ Tristram describes his pen as the thinking entity of his work, even more so than his textual sources: “But this is neither here nor there—why do I mention it?—Ask my pen,—it governs me,—I govern not it” (VI.vi, 333).

¹² *Copia*: A style characterized by mimesis and abundance, evident in the writings of Erasmus and Early Modern encyclopedias.

¹³ Lynch, 15.

texts. Building *Tristram Shandy*, Sterne ultimately presents a tremendous palimpsest of a machine.

Though *Tristram* is the first to call his book a machine, the notion that this book appears most machine-like in its intertextuality is largely my own. At first blush, *Tristram* does not illustrate the engineering of his work by raising our awareness to its bookiness, but rather through rendering his book in mechanical terms:

I have constructed the main work and the adventitious parts of it which 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[.] (I.xxii, 54)

“one wheel within another” can show Sterne speaking strictly as a machinist. But a separate reading finds Sterne lifting this line directly from Ezekiel 1:16.¹⁴ Sterne’s literary fragmentation thus represents an inextricable component of his machinery. He shows wheels within wheels and texts within texts using a single motion.

Still, *Tristram* engineers the machine-obsessed world of his autobiography using mechanical knowledge accumulated in various encyclopedias.¹⁵ Despite drinking deeply on mechanical concepts from the Enlightenment, Renaissance, and earlier, *Tristram* admits he knows nothing about the mechanical principles that he uses to drive his book:

Now, of all things in the world, I understand the least of mechanism—I have neither genius, or taste, or fancy—and have a brain so entirely unapt for every thing of that kind, that I solemnly declare I was never yet able to comprehend the principles of motion of a squirrel cage, or a common knife-grinder’s wheel—tho’ I have many an hour of my life look’d up with great devotion at the one—and stood by with as much patience as any Christian ever could do, at the other——
(V.xxx, 415)

¹⁴ “The appearance of the wheels and their work *was* like unto the colour of a beryl: and they four had one likeness: and their appearance and their work *was* as it were a wheel in the middle of a wheel.” From: *Ezekiel* 1:16, in: *The Bible: Authorized King James Version*, ed. Robert Carroll and Stephen Prickett (New York: Oxford University Press, 1997), 904.

¹⁵ Namely: Ephraim Chambers’ *Cyclopaedia* (1728); Pierre Bayle’s *Dictionnaire historique et critique* (1697); Denis Diderot’s *Encyclopédie* (1751).

The humor of *Tristram Shandy* comes in large part from this undying fascination with mechanical apparatuses—from the simplest of wheels to the most complex automata. And the recurring punch line of *Tristram Shandy* seems Tristram’s sense of false mastery over his own mechanical universe; he somehow understands the ins-and-outs of the *Tristram* machine while knowing nothing of the very principles from which it springs. *Tristram Shandy* can in turn seem a marvelous satire on the way books hold and transmit information—specifically how collections of books can culminate not in knowledge or expertise but in confused experiences and a less solid understanding of the natural, and indeed mechanical, world.

I am by no means the first to pick up on *Tristram Shandy*’s materialist bent and mechanicity. It remains easy to become—as Tristram writes in a separate context—“*befetish’d* with the bobs and trinkets of criticism” (III.xii, 140). A.D. Nuttall, for instance, writes: “The whole book seems to have been written as a sort of hedonistic device, an elaborate eighteenth century apparatus for combating melancholy.”¹⁶ Perhaps with the desire to combat a more recent melancholy, Caldwell asks:

What now prevents you or me from pulling *Tristram Shandy* off the scrapheap, oiling its hinges, replacing a part here and there, and assembling on our own screens its tenth volume?¹⁷

While alluring readings, Nuttall and Caldwell take Sterne’s book-machine metaphor for granted in adopting and recycling it without hesitation. As I argue, the book-machine is not a self-evident notion but rather a complex question: in what ways do books behave like machines?

¹⁶ A.D. Nuttall, *A Common Sky: Philosophy and the Literary Imagination* (London: Sussex University Press, 1974), 57.

¹⁷ Caldwell, 112.

Instead of the book as machine, the questions that guide many critical receptions of *Tristram Shandy* concern Sterne's attitude toward military technology and mechanical philosophy. Uncle Toby receives a great deal of attention here, because of his battle re-enactments and since Sterne frequently imagines Toby's brain as containing various machines.¹⁸ Sigurd Burckhardt argues that Uncle Toby's obsession with military bridges and pyroballology helps influence the curve of *Tristram Shandy's* narrative trajectory. Scott Nowka views the mechanizing of Toby's mind as heavy-handed, silly, and thus a satire of mechanical philosophy:

Toby's strictly associational turn of mind is ridiculous, and it is meant to be. In this one character, Sterne both illustrates the limitations of any mechanical explanation of the human mind, and provides his ultimate critique of such theories.¹⁹

In many ways opposite to Nowka, William C. Mottolese²⁰ demonstrates how Sterne uses Uncle Toby to showcase tool use as a sophisticated type of language, for tools—more than words—represent the site where minds and bodies connect; Sterne delights unironically in creating the cyborgs of his book.²¹

¹⁸ I view Burckhardt, Nowka, Mottolese (below) as representative yet unique examples of how critics approach Uncle Toby—but they hardly sum up the scholarship *in toto*. For Toby's battle re-enactments, see: Ann Campbell, "Tristram Shandy and The Seven Years' War: Beyond the Borders of the Bowling Green," *The Shandean*, 17 (2006), 106-20; Madeleine Descargues, "Tristram Shandy and the Appositeness of War," in *Casebook*, ed. Keymer (2006), 240-58; Keymer, *Sterne, The Moderns* (2002), 197-214; Jonathan Lamb, "Sterne, Sebald, and Siege Architecture," *Eighteenth-Century Fiction* 19:1 (2006), 21-41; Richard Lanham, *Tristram Shandy: The Games of Pleasure*. (Berkeley: University of California Press, 1973), 77-92.

¹⁹ Scott Nowka, "Talking Coins and Thinking Smoke-Jacks: Satirizing Materialism in Gildon and Sterne," *Eighteenth-Century Fiction*, 22:2 (2009), 215.

²⁰ William C. Mottolese, "Tristram Cyborg and Toby Toolmaker: Body, Tools, and Hobbyhorse in *Tristram Shandy*," *Studies in English Literature, 1500-1900* 47:3 (2007), 679-701.

²¹ For an earlier and influential account of Toby's language as based in military science, see: Jonathan Lamb, "The Comic Sublime and Sterne's Fiction," *English Literary History*, 48:1 (1981), 110-43; Also: Ross King, "Tristram Shandy and the Wound of Language," *Studies in Philology* 92:3 (1995): 291-310. For separate readings of Sterne's (comedic) engagement with materialism, see: Paul Goring, "'Into What a Delicious Riot of Things Am I Rushing?': Material Things and Humour in *Tristram Shandy*," in *Hilarion's Asse: Laurence Sterne and Humour*, ed. Anne Bandry-Scubbi and Peter de Voogd (Newcastle upon Tyne: Cambridge Scholars, 2013),

My essay intervenes in this debate about Sterne's relationship to mechanical philosophy and various technologies by linking it to another much-discussed element of *Tristram Shandy*—its relationship to other books. I think about *Tristram Shandy*'s intertextual discourse as qualifying its status as machine.²² The book as machine remains, as in other critical works on *Tristram Shandy*, an amusing metaphor in this essay. But, unlike many Shandean, I try to avoid reusing this metaphor with ease: I approach the book-machine as a flummoxing and difficult concept in that it yearns to transcend figurative speech.

This essay mostly offers a theorization of the reading process throughout *Tristram Shandy*; Sterne depicts the book as a piece of visual and temporal technology—not a conveyer of ideas—in order to make us think about how we interact with texts. I take a rather self-reflexive and performative turn in understanding the sort of reader *Tristram Shandy* creates.

I begin my argument in Shandy fashion with a seeming digression. I use Agostino Ramelli's book wheel—a machine from the Renaissance that uses epicyclic gearing

81-92; Paul Surgi Speck, "Bricolage, Analogies, and Hinges: Order in the Recombinant Universe of *Tristram Shandy*," *South Central Review* 2:4 (1985), 64-82.

²² In some sense similar to the way in which I use machines to explain Sterne's intertextuality, Stephen Soud views horticultural mazes as the guiding model for *Tristram Shandy*'s registers of literary allusion and hunt for knowledge. More interestingly, gardens were mechanized, seen as machines, and modeled after fortification design in the eighteenth-century. I do not consider this relationship in my following discussions, but I must note that a comparison of machines and intertextuality has much in common with a comparison of gardening and intertextuality. See: Stephen Soud, "'Weavers, Gardeners, and Gladiators': Labyrinths in *Tristram Shandy*," *Eighteenth-Century Studies* 28:4 (1995): 397-411. For accounts of mechanized gardens in the period and earlier, see: Barry Bergdoll, *Architecture 1750-1890* (Oxford and New York: Oxford University Press, 2000), 85; Hanno-Walter Kruft, *Architectural Theory from Vitruvius to the Present* (New York: Princeton Architectural Press, 1994), 263; Barbara Maria Stafford and Frances Terpak, *Devices of Wonder: From the World in a Box to Images on a Screen* (Los Angeles: Getty Research Institute, 2001), 266-67.

found in astronomical clocks as its mechanical basis²³—to illustrate my argument on how Sterne’s book functions as a (perhaps misleadingly) intertextual machine. Ramelli’s book wheel helps us visualize the way *Tristram Shandy* thinks of itself as a book among books and machine amidst machines.

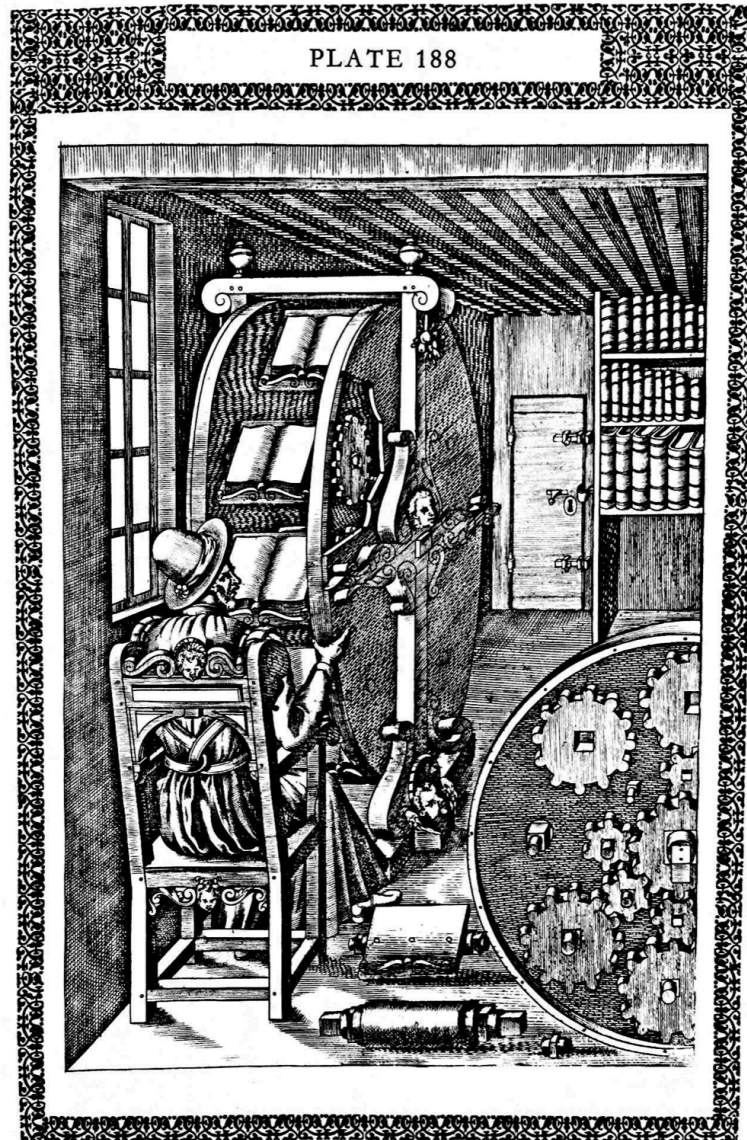
I take this reading of Ramelli to look at *Tristram Shandy*’s machinery as containing two parts: a visual and temporal element. My second section, on the visual half of the *Tristram* machine, thinks about the way in which Sterne, like Ramelli, uses mechanical principles to move through certain zones of his book. This mechanical movement helps frame Sterne’s intertextual discourse as a kaleidoscope of empty referencing and name-dropping.

My third section focuses on clocks, the only machine Tristram tries to encounter firsthand. The episode of focus in this section recounts Tristram visiting an old astronomical clock in Lyons. Tristram finds it broken. Meditating on this ruined time-keeping apparatus, Tristram admits this gives him all the more time to read and write. I suggest that Tristram’s time-consciousness here helps complete a dyad in which writing indicates progressive movement and reading indicates digressive movement; the machinery of Tristram’s work strives, unsuccessfully, to do both at once.

²³ See: Bert S. Hall, “A Revolving Bookcase by Agostino Ramelli,” *Technology and Culture* 11:3 (1970), 394.

I. Agostino Ramelli's Book Wheel

In the second year my uncle *Toby* purchased *Ramelli* and *Cataneo*, translated from the *Italian*;—likewise *Stevinus*, *Marolis*, the *Chevalier de Ville*, *Lorini*, *Coehorn*, *Sheeter*, the Count de *Pagan*, the Marshal *Vauban*, Mons. *Blondel*, with almost as many more books of military architecture, as *Don Quixote* was found to have of chivalry, when the curate and barber invaded his library. (II.iii, 69)



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²⁴ My scan, from: Agostino Ramelli, *The Various and Ingenious Machines of Agostino Ramelli* (1588), trans. Martha Teach Gnudi and ed. Eugene S. Ferguson (London and Baltimore: The Johns Hopkins University Press, 1976), 189. Original material taken from a copy of the 1588 edition located in Cambridge University Library. [Oberlin Special Collections]

Although Sterne places *The Various and Ingenious Machines of Agostino Ramelli* (1588) in Uncle Toby's library, the beloved and militarized codger of *Tristram Shandy*, critics find it unlikely that Sterne had any firsthand experience with the Italian engineer's writings and engravings.²⁵ According to this line of conjecture, Sterne probably had no clue what Ramelli's book wheel was.²⁶

Given the many machines Sterne describes in the book, it might appear strange that my essay lends heavy focus to a device, the book wheel, that Sterne does not mention explicitly. Yet, as a device that uses an epicyclic gear train²⁷ to rotate texts, Ramelli's book wheel represents a most perfect machine with which to liken *Tristram Shandy*, from the book's intertextual apparatus to its preoccupation with mechanics and time.

Ramelli's critics called his design fussy and elaborate; while the epicyclic system allowed each book to stay in the same position throughout the wheel's rotation, a simpler model would have used gravity as its means for keeping the books upright, as with a ferris wheel.²⁸ A similar argument applies to the "machinery" of Tristram's book; Tristram remains forever partial to digressions and complications, turning a potentially straight plot curve into a tortuous knot. And, like a book wheel, *Tristram Shandy* has a penchant for creating literary fragments; when Sterne reproduces an outside text, it

²⁵ Folkenflik: "Sterne obtained the names of these military writers from Chambers' article on fortifications and probably did not read them" (549).

²⁶ Though Ramelli never saw one built in his lifetime, many book wheels have since been made, most notably: the architect Daniel Libeskind constructed a book wheel for the 1986 Venice Architecture Biennale; Princeton Historian Anthony Grafton keeps (and uses) a book wheel in his home office. A 2013 article in *The Atlantic* dubbed the book wheel the Kindle of the sixteenth-century.

²⁷ *OED* entry for "Epicycle": "A small circle, having its centre on the circumference of a greater circle."

²⁸ Hall: "Grollier de Servière, writing in 1719, criticized this unnecessary complexity and proposed a similar bookwheel having independently slung shelves to allow gravity to maintain them at the proper angle" (392).

usually appears only for a brief moment, truncated by the writing subject's restless motions; and, more often than not, Sterne distorts the original almost past the point of recognition. Tristram mentions and reproduces as many as two hundred different book titles, some true and some fake.²⁹ The texts shuffle with dizzying speed into and out of sight, as if by an excited book wheeler who has too much, and yet not enough, time. Ramelli's wheel even seems to cure Tristram's great fear of beginnings and endings, for the device allows its user to stay perpetually *in media res*.

Before returning to Sterne, I want to offer a visual analysis of Ramelli's engraving of the book wheel, as well as the unique placement of this engraving in Ramelli's book of inventions. Such a detour, I hope, will illuminate the way in which Sterne blurs the boundaries between books and machines.³⁰

Ramelli's representation of books as empty objects offers a visual solution to the very problem of discussing Ramelli in an essay on *Tristram Shandy*. Ramelli presents two types of book in his engraving: opened books, located on the various lecterns of the book wheel; and closed books, arranged on the bookshelf in the background. But this distinction soon weakens upon a closer look; the books on the lecterns have no visible writing on them; they are books comprised of blank pages. The books spinning on the wheel reveal no more secrets than the closed books on the shelves, whose spines bear neither titles nor author names. There appears no difference between the books on the wheel and those on the shelf—but also the books hidden from view on the wheel's back

²⁹ Goring: "*Tristram Shandy*...is a work which vociferously situates itself as a book among other books: Sterne's witty pseudo-scholarship involves the citation of around two hundred book titles, both genuine and fictional, a cumulative effect of which is further highlighting of the fact that *Tristram Shandy* itself is just one physical work amongst many jostling for shelf space" (84).

³⁰ I owe the inspiration of this analysis to Professor Laura Baudot's study of the *vanitas*.

lecterns, and the shelved books that continue toward the right past the frame of the plate.

The only language that Ramelli uncovers in his engraving is a mechanical one—yet he leaves this language partially hidden. Ramelli carves out a space on his book wheel to reveal a single, smaller wheel that comprises one piece of the machine’s epicyclic system. At the risk of speaking in overly metaphorical terms, Ramelli opens his machine as if opening a book—revealing a single page in a longer work. Ramelli displays—to steal Sterne’s own borrowing from Ezekiel 1:16—“one wheel within another.”

True, Ramelli does begin to show the full workings of the machine in the right hand side of the page. But he presents only one half of the device. In addition, some of the wheels and cogs in this half-wheel appear missing, perhaps to better illustrate how these various pieces fit together. The full idea remains barred from us, as if by the three bolted locks Ramelli installs to the door of his imaginary library. The entire substance of the machine—like the books both on display and hidden from view—relies on the imagination of the viewers, for they must affix letters to these blank pages and visualize the full network of wheels within the machine.

As I uncover in subsequent close reading of passages from *Tristram Shandy*, many of the books and machines in Sterne’s book also refuse to give up their full secrets, even after the most scrupulous editors of the text have combed through it. In turn, saying that Sterne did or did not read any of the books he nods to is but to situate them on the book wheel or book shelf in Ramelli’s image. Sterne leaves it to his reader to fill so many of these books with ink. This tireless job, upon reading a single footnote in Melvyn New’s edition of *Tristram Shandy*, can seem an ingenious farce Sterne

orchestrated more than two hundred years prior. Such editorial work satisfies a command identical to the one found in the thirty-eighth chapter from the sixth volume: Tristram presents a blank page and asks his reader to fill it with their fancy (VI.xxxviii, 374-75).

My approach to this conundrum of intertext and influence is admittedly equal and opposite—I enter a book for answers, Ramelli’s, that editors have rendered equivalent to one of Tristram’s blank or black pages—void of meaning or cloaked in ink due to Sterne’s alleged lack of an encounter with it. Yet my essay does not aim to prove once and for all that Ramelli’s book of inventions did or did not influence Sterne’s *Tristram Shandy*. Rather, I wish to show that Sterne arranges his book in such a way that outside sources resemble blank and black pages, just as the books and internal machinery of Ramelli’s engraving appear paradoxically opened and closed, empty and full.

Reading Ramelli’s *Various and Ingenious Machines* from beginning to end, the book wheel comes out of nowhere; it represents a fanciful tangent in a book comprised largely of practical inventions. More simply, the book wheel is a digression. Ramelli’s book, which contains nearly two hundred machines, at first presents itself as a monotonous collection of devices: the first one hundred or so plates all detail ways to mechanically drain or transport water from one place to another; forty plates show various ways to grind grain; thirty are means for excavating earth for bridge and fortification construction. As Ramelli’s work drags on, it becomes more and more interspersed with other sorts of machines, including ones that can “tear out the bolt of a

door or the like without much noise,”³¹ devices for lifting heavy objects, fountains, and a vase with mechanical noisemaking birds built into it. The book concludes with different ideas on how to move and fire artillery.

Ramelli sandwiches his book wheel directly between the mechanical vase and the section on military machinery. The book wheel therefore occupies a space in the text that signals a sharp turning point from playful to deadly machines. A machine that allows one to move from one text to another, the book wheel tacitly comments upon the larger text it inhabits, for it illustrates its own change in focus using the mechanical language it employs. It wheels us into a new sort of text.

The placement of the book wheel in *Various and Ingenious Machines* shows Ramelli devising a mechanical solution to a literary problem—that of transitioning between different sections in a single book without turbulence. We can locate similar moments of textual liminality in *Tristram Shandy* where Sterne too relies on mechanical wheels to move and introduce new passages.

This becomes clearest in the figure of Uncle Toby. And, because he received a blow to the groin while soldiering in the battle of Namur, Toby even seems apart of the book wheel’s target audience. Ramelli writes of his machine and its intended user: “This is a beautiful and ingenious machine, very useful and convenient for anyone who takes pleasure in study, especially those who are indisposed and tormented by gout.”³² Tristram’s veteran uncle relies on others—namely Corporal Trim, Toby’s servant, friend, and righthand man—to bring him his books on fortifications and pyroballogy, as well as arrange his battle re-enactments in the Shandy garden. The book wheel, situated in the Shandy library, would have offered the indisposed Uncle Toby infinite utility. The

³¹ Ramelli, 416-17.

³² Ramelli, 188.

freedom to peruse Stevinus, Ramelli, Cataneo, and Vauban all at once would have made Corporal Trim's job easier if not obsolete. Perhaps Walter Shandy, armed with a book wheel, would have finished compiling his *Tristrapaedia*, the encyclopedia made for Tristram's education but left incomplete for lack of time.

That said, the book wheel has no place in Shandy hall, where machines function not to make life easier and more efficient, but more complex, drawn out, painful, yet entertaining. The book wheel helps us visualize the complex manner in which Sterne forces his reader to think of books as both machines and empty objects. The book wheel does not represent a perfect embodiment of Sterne's engineering: while overly elaborate in design, the book wheel remains far too useful in its intentions to relate to *Tristram Shandy*.

However anachronistic, *Tristram Shandy* instead resembles a Rube Goldberg contraption—a machine that accomplishes a simple task using a chain reaction of many complicated steps. Quoting Alexander Pope totally out of context, Sterne's machine uses “a vast force to lift a feather.”³³ Then again, Sterne might just merely fulfill Dr. Johnson's machine criteria—the entry for “machine” in his dictionary reads: “Any complicated work in which one part contributes to the motion of another.”³⁴ As a digressively progressive work, Tristram strives to get from point A to point B using every letter in the alphabet; or, he constructs his autobiography using every book inside—and outside—the Shandy library.

³³ Alexander Pope, “Postscript” to *Translation of The Odyssey of Homer*, trans. Alexander Pope and ed. W.C. Armstrong (Hartford: Silas Andrus and Son, 1851), 407.

³⁴ See note 1.

II. Mobile Digressions, or *Tristram Shandy* as Visual Machine

Digressions, incontestably, are the sunshine;—they are the life, the soul of reading;—take them out of this book for instance,—you might as well take the book along with them[.] (I.xxii, 54)

An analysis of Ramelli's book wheel does not fully explain or mirror the oddity of *Tristram Shandy's* mechanical apparatus. Rather, a reading of Ramelli leaves this essay better equipped to tackle some of the bigger questions it fields, namely: what kind of machine is *Tristram Shandy*, and what is at stake for Sterne in highlighting the mechanical language and character of his book?

In the broadest possible sense, Ramelli equips us because—like *Tristram Shandy*—his book wheel represents a machine that combines, and even conflates, the visual and the temporal. I find that Ramelli's visual representation of books works at cross-purposes: books appear empty objects; yet the placement of this engraving presents Ramelli's larger text as overstuffed with machines, and thus requiring a mechanism to sort through it.

The book wheel's relationship with temporality appears similarly twofold. On the one hand, the book wheel expedites cross-referencing. On the other, subtler hand, Ramelli models the book wheel's epicyclic system on the insides of astronomical clocks.³⁵ Spinning Ramelli's book wheel therefore does not just imply a speeding up of the reading process, but a manipulation of time keeping itself; Ramelli puts his reader in direct contact with a type of mechanism used for measuring time. Stopping on a text within the book wheel puts clockwork at a standstill in a rather literal sense.

I consider the visual half of the *Tristram* machine in this section and the temporal in my third section. Here I argue that Sterne—more heavy-handedly than

³⁵ See: Hall, 394.

Ramelli—employs mechanical devices to move between the sections of his book. This appears most acute in the way Sterne “wheels” things out of sight before entering a new scene or literary style—or as a means for creating an empty surface. Furthermore, I analyze Tristram’s application of outside texts as physical delivery systems for his own writing.

Tristram asks a peculiar favor just before reproducing Uncle Toby’s “Apologetical Oration,” a celebration of war lifted from Burton’s *attack* on war in *The Anatomy of Melancholy* (1621); Sterne misquotes Burton so fiercely that the intertext comes to suggest something exactly opposite from the original. In part because of this intertextual slipperiness, the “Apologetical Oration” receives a fair share of critical attention.³⁶ Missing from this discussion, however, is the observation that Tristram asks his reader to help him wheel his uncle’s military gear out of sight before presenting the oration:

I beg the reader will assist me here, to wheel off my uncle *Toby*’s ordnance behind the scenes,——to remove his sentry-box, and clear the theatre, *if possible*, of horn-works and half moons, and get the rest of his military apparatus out of the way;——that done, my dear friend Garrick, we’ll snuff the candles bright,--sweep the stage with a new broom,--draw up the curtain, and exhibit my uncle Toby dressed in a new character[.] (VI.xxix, 363-64)

Tristram’s sudden impulse to move Toby’s military apparatus before entering a new genre (oratory) at once implies a desire to segregate various literary types, and to facilitate this movement with a mechanical aid. (Sterne and Ramelli even treat military machines specifically as objects deserving their own literary space). But Tristram separates Toby’s status as pastoral war hero from orator by invoking David Garrick³⁷ and using theatrical flourishes, in turn folding a new genre into the mix. Such a

³⁶ See: Descargues (2006), Keymer (2002), Lamb (1989).

³⁷ David Garrick (1717-79): a famous playwright and actor in England—also Sterne’s friend and pen pal.

confusion might appear clearest in Tristram's command to "draw up the curtain," since the word "curtain" also describes the ramparts in Toby's fortifications at various points throughout the book. Sterne thus satirizes—destroys, even—what at first seems a desire to keep distinct literary sensibilities from contaminating one another.

I want to think about Sterne's choice to wheel off Toby's gear—as opposed to move, hide, or simply shift away from it without mention. He uses the exact expression in the same context later in the eighth volume, when Corporal Trim prepares for one of Toby's battle re-enactments:

—The attack was determin'd upon: it was facilitated still more by my uncle Toby's having ordered the corporal to wheel off the pioneer's shovel, the spade, the pick-axe, the picquets, and other military stores which lay scatter'd upon the ground where Dunkirk stood—The corporal had march'd—the field was clear.
(VIII.xxiii, 465)

As a continuation of Tristram's earlier command to wheel off these military stores, the act of wheeling represents a need to create vacancy. Both appear moments of anxiety, wherein Tristram becomes overwhelmed by his own cluttering of textual sources—or mere objects—and needs an air bath. Hiring the wheel as the tool facilitating this emptying of space, Sterne too imagines mechanical solutions in navigating through his own clutter.

The idea that Sterne imagines wheels to move between literary genres raises a separate problem: Tristram depicts the genres of oratory and theatre as either inherently mechanized constructs or having mechanical counterparts. When Corporal Trim orates Parson Yorick's sermon—an episode I will visit in detail shortly—Sterne describes Trim as an engineered piece of anatomy:

He stood before them with his body swayed, and bent forwards just so far, as to make an angle of 85 degrees and a half upon the plain of the horizon;—which sound orators, to whom I address this, know very well, to be the true persuasive angle of incidence[.] (II.xvii, 93)

Yet, in preparing Uncle Toby for his “Apolegical Oration,” Sterne does not mention the orator’s “angle of incidence” insomuch as he makes Uncle Toby seem an actor (or automaton) in a mechanical peep-show.

Sterne lists two sorts of mechanical theatre, or peep-show, in *Tristram Shandy*: the Savoyard’s box and a raree-shew-box (rarity-show-box)³⁸—both involve Uncle Toby, and each depicts the human sensorium as a mechanical spectacle in its own way. One shows Uncle Toby looking out from his sentry box (where he stores his military apparatus) and into the eyeball of his love interest, Widow Wadman, “with as much innocency of heart, as ever child look’d into a raree-shew-box” (VIII.xxiv, 466). The second depicts Uncle Toby’s head as such a peep-show, filled with the materials of his battle re-enactments—the very things Garrick, Tristram, and Corporal Trim wheel off:

Had my uncle *Toby*’s head been a *Savoyard*’s Box, and my father peeping in all the time at one end of it,—it could not have given him a more distinct conception of the operations in my uncle *Toby*’s imagination, than what he had; so not withstanding the catapulta and battering-ram, and his bitter imprecation about them he was just beginning to triumph——(III.xxvi, 166)

This passage leads William C. Mottolese to level the claim that “the fortifications become not only a physical embodiment of Toby’s ideas and passions but also the substance of his mind itself.”³⁹ It requires less stretching of the imagination to visualize Toby’s mind as a collection of images from military books than actual catapults and battering rams. Describing Toby’s mind as a peep-show, then, merely animates the notion that these military books occupy the bulk of his thoughts—that the mind brings engravings of machines to life.

³⁸ Melvyn New renders these two synonymous. See: *Tristram Shandy*, Vol. III, ed. Melvyn New (Gainesville: University of Florida Press, 1984), 261.

³⁹ Mottolese, 694.

Tristram's desire to "wheel off" Toby's ordnance mirrors the desire to clear his uncle's brain—and for Tristram to supplant Toby's Savoyard's box of a head with his own warped take on Burton. Even if the "Apologetical Oration" does not ultimately resemble a machine, it does nevertheless fill the space, Toby's mind, where a machine once was.⁴⁰ Therefore, the book as machine is linked to the mind as machine, for the mind is a machine full of books.

John Stedmond builds on this observation that Sterne only mentions mechanical peep-shows in the context of Uncle Toby's military obsession and offers a plausible source;⁴¹ Stedmond considers the "mock battlefields" that traveled across England around the time Sterne was writing *Tristram Shandy*. Joseph Strutt's *The Sports and Pastimes of the People of England* (1801) describes one such military-themed peep-show:

To be seen, the greatest piece of curiosity that ever arrived in England, being made by a famous engineer from the camp before LISLE, who, with great labour and industry, has collected into a MOVING PICTURE the following figures: first, it doth represent the confederate camp, and the army lying intrenched before the town; secondly, the convoys and the mules with prince Eugene's baggage; thirdly, the English forces commanded by the duke of Marlborough; likewise, several vessels laded with provisions for the army, which are so artificially done as to seem to drive the water before them...In short, the whole piece is so contrived by *art*, that it seems to be *life* and *nature*.⁴²

This military show was a moving picture in an added sense: Shandean who pay special attention to mechanical peep-shows in the book show how these machines were themselves associated with travel. As Melvyn New notes in his edition of *Tristram Shandy*, natives of Savoy were known for their itinerant wanderings, and often depicted

⁴⁰ Also, Walter Shandy's aside to Toby: "I would not, I would not, brother *Toby*, have my brains so full of saps, mines, blinds, gabions, palisadoes, ravelins, half-moons, and such trumpery, to be proprietor of *Namur*, and of all the towns in *Flanders* with it" (II.xii, 86).

⁴¹ John Stedmond, "Uncle Toby's 'Campaigns' and Raree-Shows" in *Notes and Queries* 201 (1956): 28-29.

⁴² Joseph Strutt, *The Sports and Pastimes of the People of England* (London: Methuen & Co., 1801), Internet Archive edition. <https://archive.org/details/sportspastimesof0ostruoft>

with some combination of chained monkey, hurdy-gurdy, and raree-shew-box.⁴³ Stedmond appears in tune with New here, for his own example of the military peep-show—the one that Strutt describes—was part of a traveling spectacle. Sterne therefore makes Toby’s brain appear all the more like a raree-shew-box by affixing wheels to his ordnance, the true substance of his imagination. Uncle Toby has a mind of its own—and his mind appears a machine in more than one sense of the word, for it thinks and wanders.

Tristram reproduces Parson Yorick’s sermon, “For we trust we have a good Conscience,” in another sort of textually profuse manner. For starters, Yorick’s sermon has no place in this scene; it falls out of a book by a sixteenth-century Flemish engineer called Stevinus. The sermon is in this sense exactly like Uncle Toby’s “Apologetical Oration”—an impromptu speech that appears without motivation. Uncle Toby sends Corporal Trim to fetch his Stevinus for a singular purpose: to look upon the engineer’s famous sailing chariot—essentially a boat on wheels that tackles land. But, instead of a machine, Trim opens the book to discover something else:

There is something fallen out, however, said *Trim*, an’ please your Honour; but it is not a chariot, or any thing like one:—Pri’thee Corporal, said my father, smiling, what is it then?—I think, answered *Trim*, stooping to take it up,—’tis more like a sermon,—for it begins, with a text of scripture, and the chapter and verse;—and then goes on, not as a chariot,—but like a sermon directly.

The company smiled.

I cannot conceive how it is possible, quoth my uncle *Toby*, for such a thing as a sermon to have got into my *Stevinus*. (II.xv, 92-93)

Stevinus’ text quickly becomes a chariot in its own right; it acts as a physical apparatus for transporting the sermon bookmarked within it. Trim’s lame attempt at distinguishing between the motion of a sermon and a chariot calls attention to the flatness and artificiality of Tristram’s own medium—paper and ink. Using Trim’s

⁴³ See: *TS*, ed. New, 261.

epistemological crisis, Sterne reminds us that, because a chariot cannot not fall from a book, its engraved representation must in turn bear something in common with Yorick's handwritten sermon.

Nevertheless, the lack of depth in this episode comes mostly from the way in which Sterne almost opens Stevinus' book but, by jumping into this "outside" sermon, promptly shuts it. While Sterne might indeed have read enough of Stevinus⁴⁴ to know about his sailing chariot, the book finally appears no more than an animated palimpsest—it functions not to impart its own knowledge, but to deliver from its interior surface another one of Sterne's spiels.

I must acknowledge that Tristram moves whole chapters of his book without mechanical flourishes whatsoever. While my analysis focuses particularly on the way Tristram introduces orations, hand-written sermons, and entire books in a machine-like manner, written discourse travels with less mechanical ceremony—and greater agility—in separate parts of the book. This type of textual movement occurs in the ninth volume, wherein Tristram relocates the unwritten eighteenth and nineteenth chapters into the twenty-fifth chapter (IX.xxv, 512-15). Though Tristram does not merely shuffle his chapters out of order. Instead, he renders the eighteenth and nineteenth chapters as blank pages (IX.xviii-xix, 503-04), and only explains this blankness upon introducing said missing chapters in the twenty-fifth. Although Tristram goes on to fill these blank pages—and the lacuna they create—with his later writings, he nevertheless instructs us to turn back and sit with these blank pages a little longer: "When we have got to the end

⁴⁴ Folkenflik: "*saling chariot*: Sterne draws his account from John Wilkins, *Mathematical Magick*, as Gwin Kolb first noted" (556).

of this chapter (but not before) we must all turn back to the two blank chapters. [...] besides, I look upon a chapter which has, *only nothing in it*, with respect” (IX.xxv, 512).

Indeed, this directive has no mention of mechanism. Then again, in asking us to turn the pages of his book backwards, Tristram recognizes his reader as the entity powering the digressive machinery of his work. Falling back on these chapters with “*only nothing in it*,” we confront the tactile, mechanical, fruitless, and at times random manner in which readers consult and reread texts for answers. Sterne ultimately presents the printed page as an interface between the mind of the reader and that of the writer. Such blankness might reveal how the machinery of *Tristram Shandy* attempts to create certain thoughts and images in the reader’s mind. Sterne draws our attention to the book as thing in order to conceptualize how characters and readers think, and to articulate a link between mind and printed body.

III. The Ruins of Lippius, or *Tristram Shandy* as Temporal Machine

Time’s out of rule; no Clock is *now wound-up*:
TRISTRAM the *lewd* has *knock’d* Clock-making up.⁴⁵

Clockmakers might have engineered the traveling peep-show Joseph Strutt describes above. Most recently, Adelheid Voskuhl argues that machines—namely automata that could draw, play songs on harpsichords and dulcimers—of the late eighteenth-century reflect the imaginations and pastimes of only a small and financially capable group of people throughout Western Europe. Consequently, these machines do not reflect a ubiquitous or mounting anxiety toward mechanical technology in the

⁴⁵ *Clockmakers Outcry Against the Author of The Life and Opinions of Tristram Shandy* (London: 1760), Google Books edition.
<http://books.google.com/books?id=9XdaAAAACAAJ&pg=PP1#v=onepage&q&f=false>

period.⁴⁶ A common thread throughout the book, she observes that clockmakers were among the most frequently commissioned engineers for this sort of courtly device. While *Trisram Shandy's* attitude toward machines might support Voskuhl's claim here, her book does not discuss the sort of peep-shows, or any of the machines, that Sterne describes.⁴⁷ My conjecture that clockmakers constructed the raree-shew-box in Strutt's account comes from his detail that it housed "flat painted images moving upon a flat surface, like those frequently seen upon the tops of clocks."⁴⁸ These painted figures seem to describe a *jacquemart*, "an articulated automaton that struck a clock-bell."⁴⁹

I am not in the business to argue that Voskuhl faults her study of sophisticated androids by overlooking this Renaissance automaton or eighteenth-century peep-shows. I rather mean to suggest that there exists, as in Ramelli's clock-inspired book wheel, a shared symbolism in putting *jacquemarts* in a peep-show and using sophisticated clockwork to animate automata. As mechanical entities built to entertain, both the raree-shew-box and automata can indicate—through their own labor and warfare—departures from human toil, battle, and, thus, pauses in time. In the Enlightenment and perhaps even earlier, the Western European clockmaker has two jobs: first, to keep time and, second, to help pass it.

Perhaps unsurprisingly, recording and wasting time represent two of the greatest concerns throughout Sterne's progressively digressive book. I consider how the conflict

⁴⁶ Adelheid Voskuhl, *Androids in the Enlightenment: Mechanics, Artisans, and Cultures of the Self* (Chicago: Univ. of Chicago Press, 2013).

⁴⁷ Mottolese argues differently: "Sterne reveals that in the eighteenth-century, devices of all kinds were a part of everyday life more than at any previous time in history" (686). Adjusting this claim to match my own project, I would say *writing* about devices of all kinds was more ubiquitous than ever in Sterne's time.

⁴⁸ Strutt: "A juggler named Flockton, some few years back, had an exhibition of this kind, which he called a grand piece of clock-work. In this machine the combination of many different motions, and tolerably well contrived, were at one time presented to the eye" (146-47).

⁴⁹ See: Wendy Beth Hyman, "'For now hath time made me his numbering clock': Shakespeare's Jacquemarts," *Early Theatre* 16:2 (2013), 145.

between time wasting and time keeping becomes particularly acute during Tristram's encounter with a broken astronomical clock in a French cathedral. Paying close attention to Tristram's realization that this broken clock gives him all the more time to read and write, I suggest that Sterne conflates reading and writing with procrastination and productivity, respectively.

The first critical reception of *Tristram Shandy* was an anonymously published pamphlet titled *The Clockmaker's Outcry* (1760). The writer of this humorous critique on Sterne's book assumed the voice of a clockmaker and writes toward the conclusion:

[Sterne's] infernal scheme is to overturn church and state: for clocks and watches being brought into contempt and disuse, nobody will know how the time goes, nor which is the hour of prayer, the hour of levee, the hour of mounting guard, &c. &c. &c.⁵⁰

As the author of the pamphlet shows, Sterne's crooked time scheme makes it easy to imagine a clockless and chaotic world. While some argue that Sterne devises a strict time scheme in *Tristram Shandy*, critics nevertheless still seem to agree that time remains a wildly flexible substance throughout the book.⁵¹ Tristram plays constantly with the discrepancy between the timeline of his writing and the action of his characters. For instance, when Tristram takes his reader aside to impart some piece of wisdom to them privately, he leaves his Uncle Toby partially frozen in the last scene: "But I forget my uncle *Toby*, whom all this while we have left knocking the ashes out of his tobacco pipe" (I.xxi, 49). Similarly, upon finding his mother eavesdropping on Walter and Toby, says: "I am determined to let her stand for five minutes" (V.v, 285).

⁵⁰ *Clockmaker's Outcry*, 44.

⁵¹ For the possibility of a time-scheme in *TS*, see: Theodore Baird, "The Time-Scheme of *Tristram Shandy* and a Source," *PMLA* 51:3 (1936). For a general discussion on temporality in *TS* and a summary of critical approaches, see: Jo Alyson Parker, "The Clockmaker's Outcry: *Tristram Shandy* and the Complexification of Time," *Disrupted patterns: on chaos and order in the Enlightenment* (2000): 147-60.

Tristram even challenges his reader to test the peculiar periods of time he assigns to various actions—such as the true distance between a doorbell and knock at the door:

If the hypercritick will go upon this; and is resolved after all to take a pendulum, and measure the true distance betwixt the ringing of the bell and the rap at the door;—and, after finding it to be no more than two minutes, thirteen seconds, and three fifths,----should take upon him to insult over me for such a breach in the unity, or rather probability, of time[.] (II.viii, 80)⁵²

When it comes to counting seconds in the book, I am no hypercritick. Instead, I aim to show how Sterne’s blurring of perceived time with mechanical measurements of time influence our perception of the book itself as a time-conscious thing.

Tristram discusses clocks more than any other machine in *Tristram Shandy*. The Shandy house clock is the first machine Sterne mentions in the book. Lippius’ astronomical clock in the cathedral of Lyons is the only machine Tristram tries to encounter firsthand. And just as Walter Shandy forgets to wind the house clock on the night of Tristram’s conception—the reason “Tristram’s misfortunes began nine months before ever he came into this world” (I.iii, 3)—Tristram finds Lippius’ clock in complete disarray:

I cannot say, in my heart, that it gave me any concern in being told by one of the minor canons, as I was entering the west door,—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 it’s decay, than I could have done in its flourishing condition—(VII.xxxix, 425)

Tristram’s immediate impulse upon finding this stopped clock pinpoints the book’s constant struggle of dividing time between reading and writing. Tristram’s resolve to write forever without ever finishing the full story, read no book but his own, yet read more in the event of a temporal pause all contribute to Tristram’s temporal anxiety.

⁵² Folkenflik: “Many critics from the Renaissance to the eighteenth century insisted upon a ‘unity of time’ that is not a rule in Aristotle’s poetics, though probability is one of his criteria” (552).

In contrast with Tristram's exacting measurements of time, there exists something wonderfully ambiguous in his saying the clock "had not gone for some years." The book suddenly seems a reliquary for antiquated machines as opposed to a time-keeping apparatus. The word "decay" sticks out too, as it usually brings to mind the action of time on organic matter. Decay would more easily apply to a figure like Parson Yorick, descendant of the chapfallen jester-skull from *Hamlet* (1603). I bring up Yorick here because he makes time stop singlehandedly in the first volume of *Tristram Shandy*, and Sterne uses an equally odd description of deterioration in this episode by saying Yorick keeps "his philosophy from rusting":

—you will easily comprehend, that the parson, so appointed, would both hear and see enough to keep his philosophy from rusting. To speak the truth, he never could enter a village, but he caught the attention of both old and young.---- Labour stood still as he pass'd,---the bucket hung suspended in the middle of the well,---the spinning-wheel forgot its round,---even chuck-farthing and shuffle-cap themselves stood gaping till he had got out of sight; (I.x, 13)

The juxtaposing of rusting philosophy and decaying clockwork further emphasizes Sterne's conflating of mechanisms with bodies, ideas, and printed materials. Yorick facilitates an intervention between time and mechanical objects using what appears his singular strangeness as an intertextual, and thus misplaced, figure. Sterne's Yorick, like Shakespeare's Hamlet, struggles to move forward in time because of the name he has inherited. And, by imagining the name of *Hamlet's* skull as a living entity, Sterne perhaps tries to keep Shakespeare's play from rusting. In doing so, however, the mechanisms in and of his book begin to malfunction.

Just as Parson Yorick disturbs *Tristram Shandy's* progressive movement by invoking the older text of *Hamlet*, the discovery of Lippius' broken clock alters the text's identity as a technologically forward book. Many of the machines and engineers

Tristram mentions were already gathering dust by the end of the seventeenth-century.⁵³ What Tristram finally describes might then seem less a piece of technology and more a decomposing visual artifact—a *memento mori* for the machinery of his book.

The time at which Tristram tries to visit the cathedral says even more of the clock's visual significance. This clock was celebrated for the mechanical show it performed every day at noon. A traveler named Edward Wright describes visiting Lyons in the early eighteenth-century:

Here I saw the famous clock so much talked of. I came at the best time for seeing it, which is twelve o'clock; at which time the figures move. An angel opens a little door and discovers the Blessed Virgin; a figure of God the Father descends to her, and immediately a brazen cock crows at top.⁵⁴

Although Tristram does not mention this spectacle concretely, he does write: “for 'tis almost eleven—then we must speed the faster, said I, striding away to the cathedral” (VII.xxxix, 425). The clock performs a microcosmic equivalent of entering the cathedral and finding Lippius' mechanical treasure; the experience of seeing this cathedral at noon functions almost like a Russian doll, for it directs its viewer inward and divests layers to reveal even smaller entertainments.

But does Tristram even enter the cathedral? It remains unclear whether Tristram gets any farther than the west door—for it was only here under the tympanum that the minor canon informed him of the clock's sorry state. Assuming Tristram did not penetrate the entrance, this episode represents yet another one of the book's breaches with surface and emptiness. Tristram writes upon hearing the news of the broken clock

⁵³ Namely: Ramelli (1531-1600), Cataneo (c. 1510-74), Stevinus (1548-1620), and Lorini (c. 1540-1611). For a reading of Sterne's references to older mechanisms, see: Caldwell.

⁵⁴ Edward Wright, *Some Observations made in Travelling through France, Italy, &c. In the Years 1720, 1721, and 1722* (London, 1730), Google Book edition.
http://books.google.com/books?id=KZ1GAQAIAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

that he wishes to “peruse the Chinese history”—though he admits earlier, “I almost know as little of the Chinese language, as I do of the mechanism of Lippius’s clock-work” (VII.xxx, 415). In the end, Sterne uses no Chinese characters in the book and includes no account of this great clock, neither in its decay nor in its flourishing condition.

Therefore, Lippius’ clockwork and the Chinese bear more in common than the fact that Tristram knows nothing of them—they share in common, along with Stevinus’s chariot, that they do not in fact appear in the book.

Extra time does not allow Tristram the opportunity to read and write more, but to further extend vast swaths of surface over his reader’s eyes. The machinery of *Tristram Shandy* works oppositely to the noon spectacle built into Lippius’ clock, which at its core tells a story of revelation and discovery. The *Tristram* machine tells a story of approaching revelation asymptotically and thus never arriving. We therefore find Sterne using the temporal half of this machine to inform its visual half, for he relies on the weight of expectation to emphasize the text’s constant collisions with emptiness.

Yet Tristram’s disappointments in Lyons do not end with Lippius’ great clock—he also wished to visit the “tomb of the lovers” but found no tomb at all:

—Tender and faithful spirits! cried I, addressing myself to Amandus and
Amanda—long—long have I tarried to drop this tear upon your tomb—
—I come—
—I come—
When I came—there was no tomb to drop it upon. (VII.xl, 426)

What Tristram finally lands upon is a space without memorialization—a space without writing. And, unable to muster a tear, Tristram himself leaves no imprint on this site. This experience helps capture the essence of Sterne’s machinery—for it shows the effect of reading about something, trying to find that something, and confronting nothing. The question that Sterne finally asks using this mechanical experiment of a book might then

seem uncharacteristically straightforward: are machines, books included, better engineered for use or misuse?

Conclusion

Read, read, read, read, my unlearned reader! (III.xxxvi, 175)

As Rube Goldberg's great-grandson, I had no choice in obsessing over the machinery of *Tristram Shandy*, the closest textual equivalent to a contraption ever written. And, in entirely Goldberg-Shandy fashion, my own essay began—or at least picked up steam—by accident. I only wanted to know if the inventors Sterne placed in the library of Uncle Toby were from the Enlightenment or the Renaissance or earlier. I knew full well that the entire list was lifted directly from an entry on fortification in Chambers' *Cyclopaedia*, that Sterne possessed no more than a surface knowledge of these men, and that any "discovery" thereafter was off limits. But, after typing the first name from Chambers' list into Google, sharing the findings of my own digressive reading soon became irresistible.

I only got so far as Ramelli. I did not explore the texts of Cataneo, Marolis, de Ville, Lorini, Coehorn, Sheeter, de Pagan, Vauban, Blondel, or even Stevinus. In the end, lack of time prevented me from such extensive perusing—if only I too had encountered Lippius' broken clock... If anything, I hope my essay shows how *Tristram Shandy* demands misuse and uninformed, digressive reading—and that this essay has far from exhausted such misuse. As Sterne illuminates using Yorick's sermon hidden inside Stevinus, books attract outside writings, trade hands, and otherwise move about in unknowable ways. In Sterne's world and in ours, reading does not always terminate in

enhanced knowledge. Reading can lead to even shakier understandings, or simply to misreadings.

Since my essay broods on Sterne's intertextuality and a character called Parson Yorick, it might seem that I leave a gaping hole in my thinking by skipping over Shakespeare's *Hamlet*. Therefore, I wish to conclude with a note on the play. As Kenneth Monkman said, "Sterne knew *Hamlet* intimately, and...this perhaps greatest-ever tragicomedy ever written was never far from his mind."⁵⁵ Nevertheless, I do not consider this final portion of my essay an attempt at proving influence, but rather a symptom of my genetic propensity for digressing. In addition to one scene from *Hamlet*, I consider a particular eighteenth-century reception of this greatest-ever tragicomedy. I hope that this, more than just a summary of my work, offers a thought on how to put the ideas and methodology of my essay to further use.

George Stubbe was no great fan of *Hamlet*. In 1736, he published a list of remarks, many of them complaints, about Shakespeare's play. Stubbe argued that "our Poet, by keeping too close to the Ground-work of his Plot, has fallen into an absurdity," more specifically that the "Scene of the Grave-Diggers" was "very unbecoming" and "*Hamlet's* Behaviour to the King, &c. (Act fourth) concerning *Pononious's* Body, is too jocose and trivial." Yet Stubbe's most unusual problem with the play, I find, centers around a piece of paper: "*Hamlet's* Letter to *Ophelia*, which *Polonius* reads, is none of the best Parts of this Play, and is, I think, too Comick for this Piece."⁵⁶

⁵⁵ As quoted in: Robert L. Chibka, "The Hobby-Horse's Epitaph: *Tristram Shandy*, *Hamlet*, and the Vehicles of Memory," *Eighteenth-Century Fiction*, 3:1 (1991), 125.

⁵⁶ George Stubbe, "Some Remarks on the Tragedy of *Hamlet* (1736)," in *Shakespeare: The Critical Heritage, Volume 3: 1733-1752*, ed. Brian Vickers (London and Boston: Routledge & Kegan Paul, 1975), 40-69.

Why this episode with the letter bothered him exactly, Stubbe does not specify. But all of the reasons why Stubbe might have disliked it resemble the precise reasons why Sterne (probably) cherished this part of the play: as a letter, it creates an intertextual hiccup; the word “vile” appears twice in it, which Sterne uses to describe the machinery of his work among other things; Polonius and Queen Gertrude quickly meet this letter with interruption and criticism; and it contains the only use of the word “machine” in Shakespeare’s corpus:⁵⁷

POLONIUS: [*Reads.*] ‘To the celestial and my soul’s idol, the most beautified Ophelia’—that’s an ill phrase, a vile phrase, ‘beautified’ is a vile phrase. But you shall hear—‘these in her excellent white bosom, these’.

QUEEN GERTRUDE: Came this from Hamlet to her?

POLONIUS: Good madam, stay a while. I will be faithful.

‘Doubt thou the stars are fire,

Doubt that the sun doth move,

Doubt truth to be a liar,

But never doubt I love.

O dear Ophelia, I am ill at these numbers. I have not art to reckon my groans. But that I love thee best, O most best, believe it. Adieu.

Thine evermore, most dear lady, whilst this machine is to him,
Hamlet.’ (II.ii, ll.110-24, 1721-22)⁵⁸

The Arden and Norton editors agree that Hamlet refers to his body, or physical framework, in his sign off. But Hamlet’s body remains absent here; to deliver this epistle, Shakespeare relies on Polonius. It seems no accident that Polonius, and not somebody else, reads this aloud, since Polonius will later act as the springboard for Hamlet’s detached views on the human body, just as Yorick’s skull will inspire Hamlet’s timeless meditation on things cerebral. Upon killing Polonius, Hamlet says of his corpse: “I’ll lug the guts into the neighbour room” (III.iv, l.186, 1752). Hamlet’s brutal

⁵⁷ See: William Shakespeare, *Hamlet*, ed. Ann Thompson and Neil Taylor (London: The Arden Shakespeare, 2006), 246.

⁵⁸ William Shakespeare, *The Tragedy of Hamlet, Prince of Denmark*, in *The Norton Shakespeare*, 2nd edn., ed. Stephen Greenblatt, et al. (New York: Norton, 2008). Subsequent *Hamlet* references are to this edition.

diction, the guttural lugging of guts, dovetails with his conflicted attitude toward bodily experience, or at least toward Polonius.

Upon viewing Polonius' corpse and Hamlet's letter side by side, Hamlet's suspicions concerning the limits of language and sensory experience start to mirror one another. It thus also seems no accident that it is Polonius—only seventy lines after reading Hamlet's letter—who asks, “What do you read, my lord?”—to which Hamlet famously replies: “Words, words, words” (II.ii, ll.191-92, 1723). In this instant, Hamlet reveals an idea we have already encountered in Ramelli and *Tristram Shandy*—that books contain emptiness and surface, not depth and substance.

This confrontation with emptiness also occurs in Hamlet's letter to Ophelia. The letter, once onstage, represents not a piece of writing but a prop. Its actual substance the audience can only guess at. Perhaps the actor playing Polonius has written his lines onto it, making his job slightly easier. Then again, Polonius—having memorized the scene—might as well use a piece of paper with anything, or absolutely nothing, scribbled onto it. Shakespeare might then present a theory of the reading process, wherein reading seems fragmented and has uncertain, or nonexistent, connections to written materials.

Shakespeare emphasizes this lack of connection in Hamlet's sign off, with this image of mind or soul as distinct from the body. I would not call this letter a prefigure to Cartesian dualism; Descartes was six-years-old when Shakespeare completed *Hamlet*. But what if this letter instead signals a moment in which Hamlet appears skeptical about the future of a written object after it has left the author's hand? Although the term “corpus” did not yet have the meaning as a collection of texts, “body” described the main section in a piece of writing since Chaucer's *Canterbury Tales* (c. 1400). The body of this letter, after all, is a “poem,” which comes from the Greek word meaning “made thing,” a

variant of the verb “to make.”⁵⁹ There thus appears a semantic overlap—however distant—between “poem” and “machine.”⁶⁰ It seems reasonable to read the last remarks of Hamlet’s letter not as an exclusive reference to his physical frame, but to his own writing—this thing, or collection of words, he has thought, made, and relinquished.

Did Sterne’s idea of the book-machine spring from Hamlet’s letter to Ophelia? The possibility of arriving at an answer does not excite me. The more exciting activity rests in the questioning itself. Such questioning comes from setting books side by side and playing them against one another, not with the goal of disclosing their secrets, but with the hope of turning a page and falling upon something new—something the eye wasn’t looking for and the clock couldn’t afford. My thinking here uncovers the final yet infinitely repeatable creation of Sterne’s machinery: an unlearned yet curious reader.

⁵⁹ *OED* entry on etymology of “poem”: “early variant of *ποίημα*, thing made or created, work, poetical work, also applied to prose of poetic quality < *ποιεῖν* (early variant *ποεῖν*) to make.”

⁶⁰ *OED* entry on etymology of “machine”: “The Italian verb (*macchinare*) had a non-pejorative sense ‘to frame, to devise, to build’, recorded by Florio (1598).”

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I HAVE ADHERED TO THE HONOR CODE IN THIS ESSAY