

Romantic Experiment:
The Second Scientific Revolution and 19th-century English Literature

BY

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DISSERTATION

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This dissertation by John Connor Mulligan is accepted in its present form
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John Mulligan was born in the state of New Hampshire in 1983, to Diane Cooper and Sean Mulligan. He grew up playing in the snow and in the swamps with his sister Devon in Gilmanton and Meredith. He attended pre-K and elementary schools in Laconia (Lakeland at the Weirs) and Gilford, before moving to Inter-Lakes, in Meredith, which he attended through his graduation from high school. In high school, he embraced individuated team competition in endurance running and skiing, and math team, with varying success. In his junior year, he broke his face open while alone on a rope swing at the beach, and only narrowly avoided drowning. In 2002, he matriculated at Bates College, where he learned to truly love the rigorous study of literature, primarily under Sanford Freedman. He travelled to Germany for a semester in his junior year, but did not make the most of it. Upon returning, he began work on his senior project, on the discourse of violence in literary theory. Climbing a rock wall with his friends in the fall of his senior year, he slipped and fell thirty feet downwards, and landed uninjured. He graduated summa cum laude with a B.A. in English and a minor in mathematics. After college, John spent a year working for St. Paul's School, for Simon and Schuster Publishing, for himself in Brooklyn, then for a PR firm in San Francisco, the latter two as a digital marketing analyst. John matriculated at Brown University in 2008, where he met some of his closest friends, and the love of his life, Niki Clements. He worked under Vanessa Ryan, Bill Keach, Marc Redfield, and Jacques Khalip, slowly giving form to an unorthodox interdisciplinary project that required for its full realization several failed forays into the digital humanities and various secondary fields of scientific research, and work in student advocacy with Brown's Graduate Student Council, as the body's secretary. He has taught at Brown, at the University of Rhode Island, and at Rice University. He now lives and teaches in Houston with his partner, Niki, and their two rabbits.

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ABBREVIATIONS

- CC* John Guillory, *Cultural Capital: The Problem of Literary Canon Formation* (Chicago: University of Chicago Press, 1993).
- CJ* *Critique of Judgment*. Trans. Werner S. Pluhar. Indianapolis, Indiana: Hackett, 1987.
- CR* *Critique of Pure Reason*. Trans. and edited by David Walford in coll. with Ralf Meerbote. Cambridge: Cambridge University Press, 1998.
- CV* Barbara Herrnstein-Smith, *Contingencies of Value* (Cambridge, MA: Harvard University Press, 1988).
- DG* George J. Stigler and Gary S. Becker, "De Gustibus Non Est Disputandum," *The American Economic Review* 67:2 (1977) 76-90.
- DU* Michael Hoskin, *Discoverers of the Universe: William and Caroline Herschel* (Princeton: Princeton University Press, 2011) 93.
- DWJ* Dorothy Wordsworth, *The Grasmere Journals*, ed. Pamela Woof (New York: Oxford University Press, 2002) 18.
- JL* Mike Goode, "The Joy of Looking: What Blake's Pictures Want," *Representations* 119:1 (Summer 2012) 1-36.
- LPE* De Quincey, *Logic of Political Economy*, in *The Works of Thomas De Quincey*, ed. John Whale, v. 14 (London: Pickering & Chatto, 2001).
- OE* Thomas De Quincey, *Confessions of an English Opium-Eater, and Other Writings*, ed. Robert Morrison (Oxford: Clarendon Press, [2013] 1821) 38. Hereafter cited as OE.
- POE* Alfred Marshall, *Principles of Economics* (London: Macmillan and Co., 1890).
- PPE* David Ricardo, *On the Principles of Political Economy, and Taxation* (London: John Murray, 1817).
- SS* *Solitude and the Sublime: Romanticism and the Aesthetics of Individuation*. New York: Routledge, 1992.

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Introduction

Between his 1798 “Advertisement” to the *Lyrical Ballads* and his 1802 “Preface,” William Wordsworth’s use of the word “experiment” undergoes a significant change, from a radical disclaimer to a defensive manifesto. In 1798, he encourages his reader to understand the poems that follow as “experiments. They were chiefly written with a view to ascertain how far the language of the conversation in the middle and lower classes of society is adapted to the purposes of poetic pleasure.”¹ “Experiment,” here, consists not simply in testing a hypothesis (*is* such language adapted to such an end), nor in fiddling around in an indeterminate field of variables (what happens if I write in the voice of a Lake District villager), and nor in demonstrating the consequences of such work (behold, the fitness of such language to poetry). Wordsworth is making an appeal to a common sense here, but it is a common sense that does not exist yet; he has an intuition that the language of the lower and middle classes will make good poetry, and his stated goal, at least, is to push this idea to its limit. The 1802 “Preface” expands but domesticates this radical experimentalism in its invocation of scientific rhetoric. Like poetry, science is anticipated to test and break the limits of its own project; however, poetry’s task *in relation to the sciences* now seems to be cleaning up its mess, as it is transformed into a social technology for the humanization of an inhuman environment. “The remotest discoveries of the chemist, the botanist, or mineralogist, will be as proper objects of the poet’s art as any upon which it can be employed, if the time should ever come when these

¹ William Wordsworth and Samuel Taylor Coleridge, *Lyrical Ballads, with a few other poems* (New York: Penguin Books, 1999) v.

things shall be familiar to us...."² Poetry cannot change itself without changing its readers, but science seems capable of producing a new world under our very feet, and leaving us without bearings.

For Romantic scholars interested in the intersection between science and literature, the gap between these usages of "experiment" has easily been reconciled under the heading of an organicist aesthetics,³ the first of which attempts to render high culture common and produce a republican nation through the culture of readership; and the second of which projects the reconciliation of that nation to all material change, in this now-experimental cultural domain. But this account of an organic experimentalism in which the experiment gives forth its own form *ex nihilo* makes it difficult to ask some important critical questions. For instance, what was it about the sciences, circa 1802, that Wordsworth found so inhuman? The arts and sciences had not fully broken from one another, and the term "scientist" would not appear in print for another thirty years (by Whewell). What we have come to identify as the scientific disciplines were, however, undergoing a rapid series of upheavals. Chemistry, for instance, became a radical example of popular Enlightenment following Joseph Priestley's publication of an accessible but highly technical textbook showing experiments in fairly affordable apparatuses; and just as quickly, that radical potential was snuffed out by the anti-Jacobin

² William Wordsworth "Preface to *Lyrical Ballads*," in *The Norton Anthology of English Literature, Vol. D: The Romantic Period*, ed. Julia Redhead (New York: W. W. Norton & Company, 2012 [1802]) 302.

³ This organicist reading of the Wordsworthian experiment has been pursued most extensively by Robert Mitchell in his 2013 *Experimental Life*, under the heading of vitalism. Mitchell nominates the 1798 "Advertisement" as the beginning of an open-ended process of internal differentiation in aesthetics, drawing on but exceeding the sciences' capacity for the systematic "production of differences" (Robert Mitchell, *Experimental Life: Vitalism in Romantic Science and Literature* [Baltimore: Johns Hopkins University Press, 2013] 9-10, 40-1).

riots against the author on the one hand, and the consolidation of power and capital in the Royal Society, best-evidenced by the money-hungry large-scale experimental apparatuses built by his disciple, Humphry Davy, on the other.⁴ Crucially, this professionalization and industrialization in the sciences was accompanied by an increasing receptivity to theorization and even mathematical abstraction. Where before emphasis was placed on the social sharing of novel phenomena and methods without explanatory theoretical frameworks (in order to avoid dogmatic fights), the turn towards professionalization and industrialization saw a proliferation of systematizing theories and attempts to explain physical phenomena in terms of abstract representations.⁵ It is primarily because of this turn towards abstraction that Thomas Kuhn nominated the first half of the nineteenth century as the period of a “second scientific revolution,” before abandoning this revolutionary rhetoric as too teleological.⁶ It is my contention that the abstract formal dimension of Romantic experimentalism, both scientific and literary, is a necessary component to understanding not only what has been called the “persistence” or “insistence” of Romantic aesthetic theory in general, but also what we will see are the strangely perennial nature of specific experiments in abstraction.⁷

And yet, this shift towards industrialization and abstraction has largely been ignored, or when addressed represented oppositionally, in interdisciplinary treatments of

⁴ This declension narrative is Jan Golinski's. Golinski, *Science as Public Culture: Chemistry and Enlightenment in Britain, 1760-1820* (New York: University of Cambridge Press, 1992).

⁵ Golinski, *Science as Public Culture*, 25-7, 49, 86, 104.

⁶ Thomas Kuhn, *The Essential Tension* (Chicago: University of Chicago Press, 1977).

⁷ See Forest Pyle, “‘The Power is there’: Romanticism as Aesthetic Insistence,” introduction to “Romanticism and the Insistence of the Aesthetic,” *Romantic Circles* (Feb 2005). <<http://www.rc.umd.edu/praxis/aesthetic/pyle/intro.html>>. Pyle also presented work on abstraction and Romantic aesthetics in a comparative reading of Cy Twombly and John Keats, at the Brown University “Constellations of a Contemporary Romanticism” conference in 2011.

Romantic-era science and literature. A competing paradigm for what is Romantic about Romantic science, that of Humboldtian organicism, has proved rich enough to satisfy most interdisciplinary scholarship. The German organic theory of knowledge, theorized by Kant and Fichte, and above all institutionalized by Humboldt, saw knowledge as articulated into various branches, and yet harmoniously functioning as a whole; the project was fundamentally idealist: “The new philosophy carried out a new ordering and linking of the disciplines in the terms of the producing self or consciousness coming to understand its own productions.”⁸ This paradigm of the form-giving human mind revolutionizing knowledge as a whole can go a long way towards explaining just how it is that Wordsworth, in 1802, can see poetry as not only humanizing the sciences but reclaiming them with a philosophical poetry. But as I have already suggested, such a framework has a harder time representing the Romantic-era shift towards abstraction in the natural sciences in terms other than those of opposition, or as part of a competing and therefore untranslatable paradigm.

The purpose of this dissertation is to reevaluate the relationship between the aesthetics we call Romantic and the abstracting scientific procedures that have been underappreciated as Romantic. I proceed by example, attempting to demonstrate that some major cultural producers from the period were critically engaged, and often quite technically, with problems of abstract representation that also fascinated, puzzled, and oftentimes terrified the more scientific writers I pair them with. Therefore, where previous work on Romantic science and literature has tended to reinforce widespread assumptions regarding the period’s organicist aesthetics, mine revisits what has subtly

⁸ Elinor S. Shaffer, “Romantic philosophy and the University of Berlin,” in *Romanticism and the Sciences*, eds. Andrew Cunningham and Nicholas Jardine (New York: Cambridge University Press, 1990) 38-54 at 40.

been argued by more critical work to be the period's critique of such ideology, in part by shifting the focus on what science means in the period. As might be expected, this necessitates a shift in which disciplines are focused on, and I believe it is one of the more worthwhile aspects of this dissertation that it has spent a good deal of time with scientific disciplines that often go untreated in interdisciplinary work on the period. Writers working implicitly with the organicist account of Romantic science have tended to focus on questions of sensation, the bodily, and the natural, and so favor chemistry, the weather, biology, and to a lesser extent ecology. This project's interdisciplinary companion discourses are, by contrast, geometry, cosmology, and political economy.

Specifically, I proceed from a discussion of the formalization of sensation in general in an analysis of William Blake and Immanuel Kant,⁹ to the abstraction of intellectual labor in the literary household of William and Dorothy Wordsworth and the astronomical household of Caroline and William Herschel, to the quantification of pleasure in Thomas De Quincey's *Confessions* and his later work on the political economics of David Ricardo. This dissertation, in short, attempts to ascertain how far Romantic-era representational strategies in both the arts and sciences were adapted to the purposes of quantification and formalization. Doing so requires, as might be expected, not only the introduction of alternative scientific disciplines, but also a shift in our methods of understanding these relations. Interdisciplinary work on Romantic-era science and literature has, in addition to adopting the organicist paradigm, tended to focus on biographical and discursive relations between these cultural activities. Richard Holmes,

⁹ A phrase which I take from Frances Ferguson's *Solitude and the Sublime*, and which I deploy and discuss at greater length throughout the dissertation. Frances Ferguson, *Solitude and the Sublime: Romanticism and the Aesthetics of Individuation* (New York: Routledge, 1992).

for instance, examines biographical connections between poet-scientists (e.g., Humphry Davy), and scientist-poets (e.g., Coleridge);¹⁰ Noel Jackson, and Robert Mitchell, on the other hand, examine the ways that conceptions of experiment and embodiment inform cultural producers in each domain;¹¹ Alice Jenkins has examined the ways in which metaphors taken from geometry participated in discourses of cultural progress.¹² My intended contribution to my curious sub-field is a third kind of interdisciplinary inquiry, concerning itself with what I will call formal relations. By formal, I mean representational abstraction, practically iterable and productive of quantities.

This dissertation's partial archive of the sciences' turn towards the abstract and the industrial is intended to provoke a methodological reconsideration of what it is we do when we do interdisciplinary work in the nineteenth century across the humanities/sciences divide. Briefly, my aim is as much aesthetic as it is discursive. By presenting the work of Blake, the Wordsworths, and De Quincey under the strobe light of contemporaneous scientific attempts to quantify and abstract experience, I attempt not only to sketch a map of social relations' entanglements with representational strategies, but also to bring these representational strategies into palpable contact with our own. In doing so, I hope to contribute to the persistent claim of Romantic studies on contemporary aesthetics, specifically in the context of what we call the information age, and Timothy Morton has called the age of acceleration (importantly, within the horizons

¹⁰ Richard Holmes, *The Age of Wonder: How the Romantic Generation Discovered the Beauty and Terror of Science* (New York: Vintage Books, 2010 [2008]).

¹¹ Mitchell, *Experimental Life*. Noel Jackson, *Science and Sensation in Romantic Poetry* (Cambridge: Cambridge University Press, 2007).

¹² Alice Jenkins, *Space and the 'March of Mind': Literature and the Physical Sciences in Britain 1815-1850* (New York: Oxford University Press, 2007).

of the post-1800 “anthropocene”).¹³ By approaching this question of historical relevance from the aesthetic perspective of representational abstraction and quantification, I hope to produce a sense of familiar estrangement and estranged familiarity that exceeds the politics of the previous generation’s historicism. Specifically, by meditating on Romantic aesthetics’ *most* formal dimension, that is, what I hope to show is its fascination with quantification and abstraction, I attempt a dialogue between systems *as* systems. It is my hope that within such a dialogue, as Frances Ferguson argued in 1992, “the coordination of meaning counts neither as oppression nor as formal accident,”¹⁴ but instead as the production of a much-needed map to the experiential terrain of modernity.

1. Methods and Stakes

John A. Walsh, writing in Blackwell’s 2008 *Companion to Digital Literary Studies* (foreword by Alan Liu), makes a case that it is only with the help of today’s technological resources that we can come to terms with the media environment of the Romantic and Victorian era.

[I]n the nineteenth century may be found the origins of the modern phenomenon of information overload, when the amount of recorded information produced -- even in a focused discipline -- becomes overwhelming and nearly impossible to process through traditional means, such as reading. ... [T]he *Nineteenth-Century Short Title Catalog (NSTC)*, a ... database with coverage from the beginning of the nineteenth century

¹³ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013).

¹⁴ Ferguson, *Solitude and the Sublime*, 169.

to the end of World War I, includes over 1.2 million records, three times as many titles as were published in the previous four centuries.

Manipulation and full analysis of such a massive volume of textual (and other) data demand digitization, modern information retrieval techniques, and computer analysis.¹⁵

It would seem to me that this situation is better formulated going the other way: the culture of massive databases is what demands that we see scholarship in terms of database “manipulation and full analysis,” and reading as a subcategory of information processing. Walsh in fact goes on to give a version of this argument, laying out the stakes of digital scholarship for the nineteenth century in terms of a mirrored encounter with our own, increasingly digital, world:

[A]rtists, critics, scholars, and others from both periods are faced with transformative social change that necessitates reflection and commentary as they are simultaneously provided with conditions and tools (cheaper printing, growing literacy, word processors, the internet) that facilitate the communication of their ideas.¹⁶

This is a comfortingly dialectical historicism, in which the nineteenth century demands computerized databases in order to be read, and our digital selves require the nineteenth century’s digitization in order to understand our contemporary condition. It is comforting, in other words, because it establishes a long-historical identity as a backdrop against

¹⁵ John A. Walsh, "Multimedia and Multitasking: A Survey of Digital Resources for Nineteenth-Century Literary Studies," in *A Companion to Digital Literary Studies*, ed. Susan Schreibman and Ray Siemens. Oxford: Blackwell. 2008. March 30, 2015. <<http://www.digitalhumanities.org/companion/view?docId=blackwell/9781405148641/9781405148641.xml&chunk.id=ss1-4-5>>.

¹⁶ Ibid.

which cultural and technological differences can be traced, with a steady hand, back to their origins.

Practically speaking, this approach to the technological historicization (and historicist technologization) of the nineteenth century obscures two kinds of unsettling affinities between the Romantic period and our own, specifically with respect to the question that Walsh raises, of “information overload.” The de-historicizing naturalization of information technology (e.g., reading as information processing) can easily blind us to the very different status that problems of scale had in the era: easily, because information technology thrives on its own facticity, by convincing us that anything can be scanned into the database, in preparation for our godlike “manipulation and full analysis.” And if we can be blinded to radical differences, so too can we miss moments of historical resonance, in which artists in seemingly different times and places suddenly touch on representational problems that concern us directly. It is my contention that Romantic abstraction is immediately relevant to our own difficulties with abstract representation; I will begin by exploring one such example of convergence before moving on to the question of radical difference.

a. Identity, or indifference

The notion that the outmoded, Romantic category of interpretation should be broadened to cover the general activity of “nonconscious cognitive” information processing, has been aggressively advanced by N. Katherine Hayles: “If ... interpretation is understood as pervasive in natural and built environment, the humanities can make important

contributions to such fields as architecture, electrical and mechanical engineering, computer science, industrial design, and many other fields.”¹⁷ The humanities are critically outdated, in other words, because they haven’t merged, as so-called creatives, with the managerial class of the information society. This backwardness leaves us incapable of understanding not only the internet, but nature too. Hayles’ examples come from the insect world:

Nonconscious cognitive systems are distinct from the processes that generate them because they show an “intention toward” not present in the underlying material processes as such. For example, a termite mound is a complex architectural structure that emerges as a result of pheromone trails laid down by individual termites enacting simple behavioral rules. It has an “intention toward,” namely the protection and preservation of the colony. Another example is a beehive, an emergent result created when individual bees position themselves at a certain distance from their fellows and, moving in a circle, spit wax. Since the adjacent bees are doing the same, the wax lines press against each other and form a hexagon, the polygon with the most efficient packing. The “intention toward” is instantiated in the beehive, the emergent result of individual bees acting as autonomous individual agents, each of which need only perform a few simple behaviors to achieve an effect greater than the sum of the beehive’s parts.¹⁸

¹⁷ N. Katherine Hayles, “Cognition Everywhere: The Rise of the Cognitive Nonconscious and the Costs of Consciousness,” *New Literary History* 45:2 (Spring 2014) 199-220, at 217-18.

¹⁸ Hayles, “Cognition Everywhere,” 201.

I quote at length because both these examples are readily found in eighteenth and nineteenth century biology, which itself drew heavily on the arts in its attempts to expertly represent life in such a way as to strike a balance between the representation's general applicability and its particular divergences.¹⁹ The termite example was reported in detail to the Royal Society in 1781 by Henry Smeathon, who wrote an awe-filled account of the complex social organization and intricate internal architecture of the termite mounds he encountered in Africa: "[T]hey are constructed upon so different a plan from any thing else upon the earth, and so complicated, that I cannot find words equal to the task, and must therefore refer to the different figures, which, however extraordinary, scarce do justice to the subjects."²⁰ Describing the "turret nests" whose "external form is ... curious, and their solidity considered they are prodigious buildings for so small an animal."²¹ The beehive example is originally Darwin's, one which he was exceptionally proud of for having demystified by showing the perfect geometric structures to be emergent properties of aggregated, coordinated actions:

We hear from mathematicians that bees have practically solved a recondite problem, and have made their cells of the proper shape to hold the greatest possible amount of honey, with the least possible consumption of precious wax in their construction. ... [T]he difficulty is not nearly so great as it at

¹⁹ See Lorraine Daston and Peter Gallison, *Objectivity*, (New York: Zone Books, 2007) ch. 2, "Truth-to-Nature" 55-113.

²⁰ Henry Smeathman, "Some Account of the Termites, Which are Found in Africa and Other Hot Climates. In a Letter from Mr. Henry Smeathman, of Clement's Inn, to Sir Joseph Banks, Bart. P. R. S." *Philosophical Transactions of the Royal Society of London*, 71 (1781) 139-92 at 158-59. RoyalSocietyPublishing.org. No date. March 26, 2015. <<http://rstl.royalsocietypublishing.org/content/71/139.full.pdf>>

²¹ Ibid., 159.

first appears: all this beautiful work can be shown, I think, to follow from a few simple instincts.²²

The idea that simple rules can, taken in the aggregate, produce complex phenomena, is not new. By treating it as though it is, we run the risk of embracing a techno-futuristic organicism, in which cybernetics or chaotic systems models promise a techno-scientific return to what is left of nature by approximating its inhuman operations. What these technologies actually do is produce an image of nature as a supercomputer, whose basic modes of operation we are finally beginning to simulate.

This argument may sound both boring and strange, but it has material consequences in the era of “big data,” which means big commercial databases. For example, massive content licensing firms, in the process of aggregating student papers as check-texts for automated plagiarism detection of student papers, are exposing the limits of an absolutist stance on originality. As one writing and communications researcher puts it in a 2009 interview, “the more papers that are put in the systems, the more chances you have at getting a match. So, you may get nothing back but five or eight different student papers with the same phrases. Thus, you just spent a lot of money to find out that students across the country write using similar words about similar topics. Big surprise there.”²³ The above contemporary authors’ indifference to history is simply an index of human history’s relative indifference to everything, a fact that is becoming palpable in the massive databases of digitized literary history. But this problem, of coming up against

²² Darwin, *On the Origin of the Species by Means of Natural Selection, Or, the Preservation of Favoured Races in the Struggle for Life* (London: John Murray, 1859) 224.

²³ “Researchers Say Plagiarism Programs Don’t Pass Grade,” *Texas Tech Today*, March 31, 2009. March 26, 2015. <<http://today.ttu.edu/2009/03/plagiarism-research>>. For the full study, see Gillis, Lang, Norris, and Palmer, “Electronic Plagiarism Checkers: Barriers to Developing an Academic Voice,” *The WAC Journal*, 20 (Nov. 2009) 51-62.

the wall of a properly human history, does not only produce indifference; as Timothy Morton has argued, it also creates massive eruptions of difference (e.g., superstorms under global warming). And it is this sense of radical difference inherent in the Romantic period's engagement with the abstract and quantitative sciences that I will turn towards next.

b. Difference, or estrangement

The eighteenth-century surgeon, John Hunter, gathered and organized over the course of his decades-long career a massive collection of animal specimens. A curio cabinet that broke the genre from within, his collection's very scale turned it, in Richard Holmes's words, into an "intellectual time-bomb":

Hunter had established a sophisticated collection of comparative anatomy specimens. After his death in 1793 they were purchased by the state, and in 1800 entrusted to the newly established Royal College of Surgeons in Lincoln's Inn Fields. ... In a way the collection was an intellectual time-bomb, for, sequentially displayed, the specimens visibly demonstrated, to anybody who cared to examine them, how directly and evidently man's skeletal structures (skull, hands, feet) and internal organs (heart, liver, lungs) had evolved from 'lower' animal forms. They were compelling proof of a certain kind of continuous physiological 'evolution', and they

clearly suggested that man had developed directly from the animal kingdom, and was not a unique 'creation'.²⁴

The notion of "sequence" at first seems to beg the evolutionary question, until we realize that any principle of organization applied across a specimen collection of this scale will yield unexpected results. Holmes's point is that by organizing the vertebrate collection by specimen size, with a few tweaks here and there to keep humans on top, one accidentally makes it possible to read the whole story backwards; you can empirically demonstrate human superiority, but at the cost of shrinking the gap between ourselves and the larger primates to a razor thin margin. To put this a little more clearly: witnesses of the collection were not encountering a cross-section of a pre-existing natural biology, but a meticulously-produced index of global mass murder²⁵ that did in fact put humanity on top, by virtue of killing and dissecting countless humans and human-like creatures.

²⁴ Holmes, 308-09.

²⁵ It is difficult to separate the impulse driving the global retrieval and ordering of animal specimens from the extinctions deliberately pursued by white settlers against perceived monstrosities. For instance, consider the thylacine, a Tasmanian tiger-striped dog that reportedly could stand upright, and was hunted to elimination by paranoid settlers over the course of the nineteenth century; or the early modern example of the Mauritian dodoes, hunted apparently just for their ugliness. Walton Ford's paintings capture the pathology well, as in his "The Island," which pictures an island entirely composed of vicious thylacines, drowning while devouring lambs (see "Man and Beast," *The New Yorker*. January 26, 2009. March 25, 2015. <<http://www.newyorker.com/magazine/2009/01/26/man-and-beast>>). Thomas Pynchon represents the example of the dodoes eloquently: "To some, it made sense. They saw the stumbling birds ill-made to the point of Satanic intervention, so ugly as to embody argument against a Godly creation. Was Mauritius some first poison trickle through the sheltering dikes of Earth? Christians must stem it here, or perish in a second flood, loosed this time not by God but by the Enemy. The act of ramming home the charges into their musketry became for these men a devotional act, one whose symbolism they understood" (Thomas Pynchon, *Gravity's Rainbow* [New York: Penguin, 1973] 110).

Timothy Morton argues that the appropriate affective response to our encounter with the inhuman effects of large-scale human activities is “humiliation.”²⁶ In a tightening of Rousseau’s metaphors, we encounter ourselves as giants before encountering ourselves at all; we discover ourselves to be always-already abstracted. We look at historical temperature plots, and maps in which the Pacific is flooded with radiation from Fukushima, on computers run by a mix of coal-burned and nuclear power. We read about slave-labor conditions in Apple factories on Apple products. In order to come to terms with the massive effects of our collective actions, in other words, it will not do to picture ourselves as organic parts of a whole; rather, we can only actually register our contact with such massively complex systems by first feeling the full weight of our individual insignificance to these systems. I would contend, however, that the rhetoric of humiliation is unnecessarily debilitating, and leaves us experiencing political contradictions such as the above, as though they were fate rather than problems. A more useful affective paradigm than “humiliation” would be that of puzzlement (a version of which I take Morton to embrace under the heading of “mathesis”); I believe the Romantic experiments with abstraction that I explore in this dissertation could rightly be seen to participate in such a paradigm. Saree Makdisi gives us an example of what such puzzlement could produce, in Blake’s encounter with the emergent system of global capitalism:

For Blake, this Universal empire could *only* be understood on a global scale as it redefines all space and time according to its own terms....

Blake’s understanding of the Universal Empire hinges on its status as a world-system, and moreover on his sense that it could only be contested

²⁶ Morton, *Hyperobjects*.

by being first understood and then resisted on a world scale, a process he seeks to begin not only in his retelling of the coming-into-being of this new world in the *Books of Urizen, Ahania, and Los*, but also in his retelling of the global struggle against the Universal Empire in the appropriately named prophecies *America, Europe, Africa, and Asia*....²⁷

Makdisi's Blake, then, is not debilitated by his encounter with "universal empire" but rather spurred to develop new representational strategies capable of bringing humans into contact with a history that humans have made for themselves. There are problems with this heroic Blake, who appears too much in the image of the heroic genius, producing a master-theory of world history; William Keach sums these problems up as the "fiercely phallogentric and heroically individualist qualities in his revolutionary art."²⁸ This is a useful and necessary way to read the masculinist agonism of the Blake of the general formula, "I must Create a System. or be enslav'd by another Mans."²⁹ But as I will argue in Chapter 1, Blake's systematizing impulse is quite frequently more modest, more local, and more abstract, than he is commonly given credit for by both his supporters and critics.

This dissertation, then, assumes that it is worth interrogating, as the humanities wrestle with their relationship to the sciences and as certain vocal elements in the digital humanities attempt to colonize the rest of the humanities with algorithmically produced artifacts that can easily be mistaken as the products of critical thought, how artists during

²⁷ Saree Makdisi, *Romantic Imperialism: Universal Empire and the Culture of Modernity* (New York: University of Cambridge Press, 1998), 19-20.

²⁸ William Keach, *Arbitrary Power: Romanticism, Language, Politics* (Princeton: Princeton University Press, 2004) 144.

²⁹ William Blake, *Jerusalem: The Emanation of the Giant Albion*, ed. Morton D. Paley (Princeton: Princeton University Press, 1991) plate 10.

the period of the emergence of global empire and the industrial revolution experimented with the abstraction of their representational schemata, in order to be able to experience the inhuman effects of this human-made world. I have attempted to pursue this line of inquiry in coordinated readings of Romantic artists and scientists in such a way as to maintain a sense of estranged fascination necessary to feeling the full force of their works. This is not the estrangement demanded by the previous generation's historicist scholarship (e.g., McGann), which promises the dialectical production of political imagination in the encounter with the historical other;³⁰ we have already seen that what we are encountering is our own uncanny reflection. Instead, the estranged fascination I attempt to evoke holds for the Romantics as well as ourselves. Their experiments with abstract (by which I mean iterated formal) representation produce effects that exceed individual experience. Specifically, these aesthetic experiments seek to provoke what Kant sees as the subreptive moment not as an ethical problem for the individual (establishing boundaries) or a political problem for the socius (establishing a common taste) but before both of these as an ontological problem for representation: anything can be quantified, or formalized, but it is necessary to consider what the long-term consequences of such a project could be. The humanities, today, are much better-equipped than the sciences to undertake this kind of critical inquiry.

To choose one example, from the second chapter of the dissertation, Dorothy Wordsworth provides the perfect example of representational abstraction in the collision of two populations, namely rural women and beautiful flowers:

³⁰ Jerome McGann, *The Romantic Ideology* (Chicago: University of Chicago Press, 1985).

On Thursday morning Miss Hudson of Workington called. She said ‘O! I love flowers! I sow flowers in the Parks several miles from home & my mother & I visit them & watch them how they grow.’ This may show that Botanists may be often deceived when they find rare flowers growing far from houses. This was a very ordinary young woman, such as in any town in the North of England one may find a score.³¹

This is clearly a rebuke to the botanist figure’s naive empiricism: he naturalizes the landscape instead of seeing it as a complexly inhabited environment. And yet she does not supersede this with an educated empiricism, for instance in the form of an anthropology that could give a sense of why and perhaps even where women would be most likely to plant these flowers. Instead, she discusses the landscape and the women in terms of a dynamic system of aesthetic exchange, in which the flowers attract the women, and the women put these flowers in attractive places. Natural beauty, here, is de-natured and presented as an emergent property of the aggregation of basic formal decisions: what would look nice where. Dorothy makes the argument in quick, general strokes, and in doing so categorizes both the flowers, and the women, as populations of an indeterminately large size, with an indeterminate history, drifting across the terrain with one another according to logics that an empirical botany could only come into contact with by adopting rigorous procedures and scaling up to become more like a census than a walk in the woods.

³¹ Dorothy Wordsworth, “June 19, 1802,” *The Grasmere Journals*, ed. Pamela Woof (New York: Oxford University Press, 2002) 111-12.

2. Chapters Overview

Not all the examples I consider are as pleasant and humorous as Dorothy's good-natured ribbing of natural scientists. As I stated above, my goal of taking seriously the notion of a Romantic aesthetics of abstraction requires a coordination with sciences not typically thought of in conjunction with the literature of imagination and sublimity. Where previous interdisciplinary scholarship has tended to examine thematic or metaphoric overlap between the period's literature and science, I have considered what the quantitative and abstract sciences' representational concerns might illuminate for us about some of the period's stranger representational experiments in the arts, and vice versa.

I begin by considering the general problem of the formalization of sensation in its particular application to the domain of the visible, namely geometry. In a long engagement with Blake and Kant, I put our critical rhetoric of figuration directly into dialogue with the figures of geometry, as it were; that is to say, I consider how geometric figuration operates at once as a sort of basic example and a site of radical excess. This is historically and critically significant because Kant has often been accused of datedness in respect to the sciences as a result of his perceived stance against non-Euclidean geometries that were first being developed in the Romantic period. As we will see, the picture is more complicated than a mere opposition to an innovative form of abstraction; specifically, Kant uses these abstract figures, and figures of abstraction, as a way of helping us to be able to apprehend our roles in constructing and structuring our own experience. It is this intuition of construction that Blake takes up, but with the more

radical purpose of showing how we can push these abstract techniques to their breaking points, and come to see them *as techniques* rather than as immutable laws. To do this is to reconsider Kant's theory of spatiality as much stranger than has generally been admitted, and Blake's as much more rule-based than current accounts allow for.

Having explored some of the empirical effects of experimentation with abstract representation, I turn to the Wordsworth household as a way of considering the economic dimension of such experimentation from the perspective of production. Specifically, I frame the connection between their working relationship and their poetic project in quasi-industrial terms. I argue that Dorothy Wordsworth's journals represent not a faithful or sentimental recording of domestic life and nature, but rather a rigorous attempt to make the Wordsworths' poetic project look like the most natural thing in the world. What has commonly been observed as the apparent authorlessness of Dorothy's work, from this perspective, is not so much a consequence of repression on William's part, as her own attempt to abstract her intellectual labor, and make its products unproblematically claimable by a brother who needed such materials to look like raw materials in order for his appropriations of these not to look expropriative. In order to draw out these processes by which intellectual labor is abstracted in the service of industrial-scale intellectual production, I compare Dorothy Wordsworth to Caroline Herschel, the sister of William Herschel. This sibling pair effectively invented cosmology as a result their large-scale sky surveys and Caroline's impressive data management skills, but recent recuperations of her have tended to represent her as a repressed observer, a stifled talent. By attending to the ways in which these women abstracted their intellectual labor in order to enable their brothers' "genius" works, we gain a clearer picture not only of the work they

actually did (as opposed to focusing on what they did not do) but also the ways in which they changed knowledge work in general. It is my hope that readers who have worked in “creative” or “knowledge” industries will find this articulation of intellectual labor relevant to their own experience.

From the question of industrial intellectual production, I move to the question of consumption, and the quantification of pleasure. In some senses, this is an attempt to think through how our reading experience of Romantic literature must change when we attend to its mode of intellectual production. To do this is to in some senses as scandalous as it is critical, and so it is appropriate that De Quincey, the great scandalizer of the Wordsworths, will be our guide. The structure of this chapter is somewhat different than the others. Where chapters one and two pair off scientists with artists, this last should be read as an attempt to pair De Quincey off with himself; specifically, I attempt to put his 1821 *Confessions of an English Opium-Eater*, a confessional autobiography, into productive conversation with his 1844 *Logic of Political Economy*, a book-length intervention in debates over Ricardian economics. My discussion centers on De Quincey’s redefinition of the notion of utility, within the quantified framework of political economy, and the consequences of this for both economics and our sense of what literature’s uses can be. In doing so, I give what I believe is the most detailed account to date of the contextual significance of De Quincey’s intervention in Ricardian economics; I also make what I hope is a strong case for re-opening the debate over utilitarian accounts of literary value that was effectively shut in the early 1990’s, namely with John Guillory’s devastating attack on Barbara Herrnstein-Smith.

Chapter 1

Fearful symmetry

“[T]here are two kinds of symmetry,” Northop Frye argues in his 1947 Swinburnean essay on Blake: “the living symmetry of the organism and the dead symmetry of the diagram. Art should be an organic unit of living symmetries, and to the vivid or lively imagination trees become nymphs and the sun an Apollo.”¹ This organic rhetoric, of course, aligns form with will: a thing’s shape is organic if it gives that shape itself, prior to any abstract representation of it. This is, in other words, what Robert Mitchell reminds us is the vitalist principle of individuation as articulated by Coleridge: “[T]o be on the lookout for individuation meant to look beyond, or behind, those differences between beings and toward the process of expansion and intensification that produced *new* kinds of ‘individuals’: individuation as a power of emergence, rather than of distinction.”² The opposite of this “organic” symmetry, for Frye, is a geometric symmetry, that of the “diagram,” articulated according to formal rules in empty, flat Cartesian space. Such a geometric symmetry, in which we already know what constitutes order when we begin to examine our experience, forecloses on the possibility of the emergence of new forms.

But for W. J. T. Mitchell, it is precisely this geometric symmetry, in the phenomenal domain, that draws the reader in and excites the imagination.

¹ Frye, Northrop. *Fearful Symmetry: A study of William Blake* (Princeton: Princeton University Press, 1947) 104.

² Robert Mitchell, *Experimental Life: Vitalism in Romantic Science and Literature* (Baltimore: Johns Hopkins University Press) 92.

Psychologically, a symmetrical form is more susceptible to ambiguity. Slight adjustments of visual cues can change the thrust (in, up, down, across, motionless) of a design, and hence its meaning. Many designs [in *Urizen*] seem almost like inkblots or mandalas, inviting the reader to contribute a wide range of associations, and the binary structure of symmetry invites dualistic, divided, contrary, dialectical reflections. Most important, the necessary frontality of symmetrical forms poses an almost threatening address to the viewer. ... The ultimate effect of Blake's symmetry, in other words, is to draw the reader into it, or what is the same thing, invite the reader to incorporate the pictures into himself.³

Mitchell's reading suggests to us interlocking dialectical encounters. We experience moments of contradictory movement (left-right, up-down), and begin to reflect on our own position with relation to the image (in-out). A three-dimensional space of viewing is articulated by the viewed object's two-dimensional articulation of viewed space. And yet, this pragmatist account is not wholly divorced from Frye's organicism. If the symmetry draws us in, it is the asymmetrical bias or swerve of "[s]light adjustments," or the complexity of "inkblots or mandalas," that interests us.

Coleridge, in a brief 1818 meditation on shape in the visual arts and perhaps despite himself, expresses sentiments quite similar to Mitchell's on the beautiful balance between symmetry and asymmetry, empiricism and formalism, the interesting and the uninteresting:

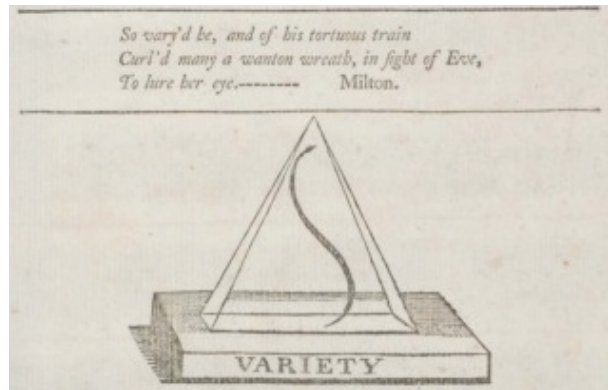
³ W. J. T. Mitchell, *Blake's Composite Art: A Study of the Illuminated Poetry* (Princeton: Princeton University Press, 1978) 139-40.

As to lines, the rectilineal are in themselves the lifeless, the determined *ab extra*, but still in immediate union with the cycloidal, which are expressive of function. The curve line is a modification of the force from without by the force from within, or the spontaneous. They are not arbitrary symbols, but the language of nature, universal and intuitive, by virtue of the law by which man is impelled to explain visible motions by imaginary causative powers analogous to his own acts, as the Dryads, Hamadryads, Naiads, &c.⁴

The “spontaneous” “curve line” interests us in its recognizable departure from its geometric counterparts, the “lifeless” “rectilineal” and the “function[al]” “cycloidal” lines. Coleridge, that is, explicitly embraces in this 1818 fragment precisely the sort of vitalist thrust towards individuation that R. Mitchell identifies in him and which certainly applies to Frye’s neo-Romantic organicism; but he seems only to be able to articulate the spontaneity of this curve in reference to the more classically geometric forms to which it is opposed.

Blake scholar Peter Otto points us towards the perfect illustration of this necessarily oppositional self-evidence of organic form in his discussion of Hogarth’s 1753 *Analysis of Beauty*.

⁴ Coleridge, “Fragment of an Essay on Beauty (1818)”, in *Biographia Literaria*, v. 2, ed. J. Shawcross (London: Oxford University Press, 1965) 250-51.



As Otto observes, Hogarth “drew ‘the triangle of the Holy Trinity’, ... but he replaced the Tetragrammaton ... with a serpentine line, complete with a snake’s head, standing upright,” and that this upright serpent’s head “point[s] to lines from ... Satan’s temptation of Eve.... Rather than invoking the timeless truths propagated by priest and king, this design places the truths of sensory perception at the center of religion.”⁶ Alan Liu makes a similar argument about the erotics of the serpentine form in a discussion of picturesque “intricacy”: “In innocent form, it is the winding pathway that teases the wistful gaze in Wordsworth’s noon. Less demurely, ... it is the serpentine tree limb that seduces the eye in a picturesque painting only to hide under the skirts of foliage.”⁷ Otto’s purpose here is to establish a progressive visual genealogy from Hogarth’s sensory rebellion to Blake’s embrace of the sexually “promiscuous” and politically riotous and “coarse” winding

⁵ William Hogarth, “Title-page”, *The Analysis of Beauty. Written with a view of fixing the fluctuating Ideas of Taste* (London: J. Reeves, 1753). Reprinted in Peter Otto, “Politics, aesthetics, and Blake’s ‘bounding line’”, *Word & Image: A Journal of Verbal/Visual Enquiry*, 26:2, 172-85 at 178, figure 3.

⁶ Peter Otto, “Politics, Aesthetics, and Blake’s Bounding Line,” *Word & Image: A Journal of Verbal/Visual Enquiry*, 26:2, 177-185, at 177-78.

⁷ Alan Liu, *Wordsworth and the Sense of History* (Stanford: Stanford University Press, 1989) 63.

line,⁸ but it is worth noting just how orderly Hogarth's Satanic rebellion looks, not just for its containment within a rectilinear pyramid, but also its clean, sinusoidal curves.

Blake's illustrations of visionary transformation could likewise be quite orderly. The image of trees transformed into nymphs, common to both Coleridge and Frye in their attempts to imaginatively reject geometrical symmetry, seems profoundly Blakean in its embrace of human creative vision. The image sequence and its narration with which *Songs of Experience* opens, however, presents a beautifully symmetrical and plural example of just such a humanizing transformation. The frontispiece shows an unwinged cherub hovering over the Arcadian poet, a shepherd with a flute. They are framed by two trees, whose trunks are individually twisted around themselves; the backdrop is pastoral, with a forest and a herd of sheep. In the introductory poem that follows, a narrator who is presumably the pastoral flautist, recounts a scene of mutual inspiration, in which "a child" "on a cloud" takes joy in his flute-playing, but encourages him to give his music a theme, into a "song about a Lamb", then to add lyrics and "drop thy pipe thy happy pipe" in order to sing, and finally to set these lyrics down as the written word, capable of mass distribution that "Every child may joy to hear." This progression is articulated by moments of apparent privation: piping with a theme causes the child to cry; singing requires that the pipe is dropped; as the poet begins to write, the child "vanish'd from my sight"; and the writing process itself is problematically framed in terms of "stain[ing] the water clear," presumably to make ink.

⁸ Otto, "Blake's Bounding Line," 177.



As the speaker and his inspiring audience dissolve into text, the frontispiece's framing trees are both undone and reshaped to display a series of eight imagined scenes, most of these displaying human activities. W. J. T. Mitchell's implicit pragmatism that sees Blake experimenting both formally and empirically is indispensable here, as the symmetrical frame, itself constituted by a symmetrical series of symmetrical frames, must be read as an interplay of these frames and their contents, which reciprocally articulate the border's space. Moreover, the ironic interplay of the industrial and the pastoral in the speaker's imagined printing process of having "stain'd the water clear" is deeper than a mere corruption of nature in the turn from oral to written history; the line's paratactic reversibility, like the reversibility of its pictorial symmetry, forces us to consider that the poet has not only made inks (clear water, stained) but also has somehow clarified nature

⁹ William Blake, *Songs of Innocence and Experience*, copy B, objects 2, 4. *BlakeArchive.org*. 2003. March 7, 2015. <
<http://www.blakearchive.org/exist/blake/archive/object.xq?objectid=songsie.b.illbk.02&java=no>> <
<http://www.blakearchive.org/exist/blake/archive/object.xq?objectid=songsie.b.illbk.04&java=no>>.

through this intervention (the water, stained into clarity). The point is not to prove that formal abstraction, like the principle of symmetry, somehow absolutely determines meaning, but rather to take account of Blake's oftentimes non-oppositional experimentations with such abstraction. Such a reading is at odds with readings of Blake that present him as anti-rationalist, and specifically, as opposed to the mathematization of the physical sciences whose exemplary figure was Newton. Donald Ault gives the still-authoritative account of Blake's relationship to Newtonian science:

Blake's intellectual analysis of Newton focuses on (1) his power to generate a compellingly attractive system which consolidates all preceding anti-imaginative forces and, at the same time, effectively neutralizes imaginative or critical insights by turning them outward into experiment; and (2) his almost subconscious drive to provide intuitively satisfying and even "visualizable" metaphorical bases for his systematic account of reality.¹⁰

My ultimate goal in this chapter is to demonstrate that Blake is just as interested as Newton is in generating attractive systems through visual experimentations with abstract representation. More generally speaking, this reading also addresses some of the experiential consequences of the Romantic realization of the "formalization of perception," as Frances Ferguson has called it.¹¹ And to do this, we will have to engage with somewhat more fully with the question of abstraction than even the formalist W. J. T. Mitchell, in order to see just how productive and even self-differentiating abstraction

¹⁰ Donald Ault, *Visionary Physics: Blake's Response to Newton* (Chicago: The University of Chicago Press, 1977).

¹¹ Frances Ferguson, *Solitude and the Sublime: Romanticism and the Aesthetics of Individuation* (New York: Routledge, 1992), 99. Hereafter cited as *SS*.

can be, in what ways, and why this is significant for the practices of reading we take for granted when we read Blake.

There are, in other words, more than two kinds of symmetry, and it is in the “dead” symmetry of the geometric figure that we find a proliferation of these kinds. I borrow here from Marvin Jay Greenberg’s 1972 *Euclidean and Non-Euclidean Geometries*: a “symmetry,” in geometry, is just an “*isometry*,”¹² or distance-preserving rule for transforming an object, when the application of that rule leaves the object unchanged. A given shape has a “symmetry group,” which is to say the set of all such applicable procedures, and that group can have zero, one, or many members:

Given a plane figure S , the motions that leave S invariant (i.e., that map S onto itself) are called *symmetries of S* ; clearly the symmetries of S form a group. Intuitively, the larger a group is, the more symmetrical the figure.

For example, a circle γ is highly symmetric. Its symmetry group consists of all rotations about the center O of γ and all reflections across lines through O¹³

A shape is symmetrical, then, if a rule applied to its parts, that preserves the relations between its parts, reproduces the whole. Symmetry is therefore related to the property of congruence, which describes any two shapes that can be isomorphically transformed into one another, for instance by rotating or sliding them.

¹² Marvin Jay Greenberg, *Euclidean and Non-Euclidean Geometries: Development and History* (New York: W. H. Freeman and Company, 1980) 262.

¹³ Greenberg, 298.

If this sounds unnecessarily abstract or pedantic, consider that it allows us to see something unintuitive in the apparently intuitive concept of symmetry, namely that symmetry does not always depend on congruence in the parts. Take the idealized human body, viewed face-on: its left and right halves together form a symmetrical whole, but these halves cannot be transformed into one another without putting a negative sign on their set of relations, which is to say, without reflecting them through a mirror. In his 2003 book on the phenomenology of space and time, Robin Le Poidevin provides a helpful, simpler example of the problem using triangles:

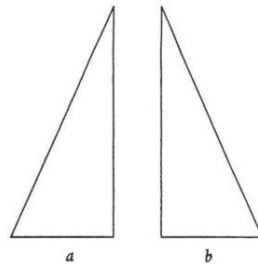


Fig. 4. Incongruent counterparts

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The two mirror-image triangles are called “incongruent counterparts,” and we can see how their structured asymmetry would allow us to place *a* and *b* together, to form a symmetrical isosceles triangle. This visual play between symmetry and asymmetry, apparent resemblance and fundamental difference, should suspend at least momentarily our sense of the geometrical intuitiveness of symmetry.

At least, such a suspension is crucial to Kant's argument, in his use of the example of incongruent counterparts in an early 1768 essay, “Concerning the ultimate ground of

¹⁴ Robin Le Poidevin, *Travels in Four Dimensions: The Enigmas of Space and Time* (New York: Oxford University Press, 2003) 67, fig. 4. Poidevin's fourth chapter provides a helpful primer on non-Euclidean geometry and Kant's treatment of incongruent counterparts, but from a different perspective than my own. Thanks to Jeremy Powell's "New Temporalities" Mellon seminar, in 2012, which introduced me to the Kantian spatiality problem.

the differentiation of directions in space."¹⁵ This essay was a foundational move in his turn towards a representation-based critical philosophy, and the example of the incongruent counterparts appears several other times in his corpus. Such geometrical experiments in Kant have until recently also served analytic philosophers as a convenient index for his critique's datedness, insofar as it seems to ground his theory of representation in the flat space appropriate to Euclidean geometry, which was in the process of being relativized by non-Euclidean geometries even in his lifetime. This narrative regarding Kant's scientific datedness in other words ironically resonates with the Nietzschean stereotype of Kant the metaphysician, as the philosopher who in an act of absurd heroism rescued a system from its own obsolescence. It is also resonant with Ault's characterization of Blake's Newton, who consolidates the error of mathematics, which mistakes itself for truth, into a deceptively attractive and seemingly self-evident system.¹⁶

More recent developments in analytic philosophy have contextualized Kant's theory of spatiality in ways that temper claims about Euclidean dogmatism and recast his geometric examples as manifestations of our representational capacity's constructive role in shaping experience. Without taking sides in this debate, I begin this essay with a treatment of the versatile role played by geometric figuration in Kant's general theory of figuration. In doing so, I hope to advance a conversation begun by Frances Ferguson when she argued of Kant's aesthetics, that they are as mathematical as they are rhetorical

¹⁵ Immanuel Kant, "Concerning the ultimate ground of the differentiation of directions in space" in *The Cambridge Edition of the Works of Immanuel Kant: Theoretical Philosophy, 1755-1770*, trans. David Walford (New York: Cambridge University Press, 2002 [1768] 365-62 [2:377-83]. Hereafter cited as "Directions in Space".

¹⁶ Ault, *Visionary Physics*, 52-4.

(SS, 16-32). As I hope to show, this has (in my opinion positive) implications for literary theory's ongoing reliance on the critical potential of the category of aesthetic judgment inherited from Kant, and our ability to participate in debates about abstract representation. Having made a case for the critical potential of figuration in post-Kantian aesthetics, I return to William Blake's visual figures by way of his fascination of the visual effects of symmetry. By taking seriously (but I hope somewhat fancifully) the importance of rule-based formalism to any critical aesthesis, I engage in what I believe is an original exposition on the geometry of Blake's compositions, and in doing so attempt to move beyond previous readings of Blake that on the one hand stage an agonistic encounter between reader and text that privileges transcendence, and on the other, more recently, attempt to recuperate a non-individualistic immanence in an ill-defined category of "materiality" or the "bodily".

1. Kant: On the One Hand

Space, for Kant, is productive of structured difference. As a form of intuition, it is not in itself perceptible, but one can come rather close in exhibitions of its general rules of representation, in what he calls "schemata," or "[the] representation of a general procedure of the imagination for providing a concept with its image," or even, more loosely, "the representation of a method for representing."¹⁷ Schemata, then, allow the bridging of the general and the particular, in a way that allows empirically-determined

¹⁷ Kant. *Critique of Pure Reason*. Trans. and edited by David Walford in coll. with Ralf Meerbote. (Cambridge: Cambridge University Press, 1998) 273 [A140/B179]. Hereafter referred to as *CR*.

images to be thought in terms of *a priori* concepts; to take one of Kant's examples, it allows you to think of a plate as being circular in shape. These are representations, but they are *motivated* representations, "monogram[s] of pure *a priori* imagination" (CR, 273 [A140/B179]), which he classifies as "hypotypeses, i.e., exhibitions (*exhibitiones*), not mere *characterizations*, i.e., designations of concepts by accompanying sensible signs."¹⁸ The content (the concept) is given directly by the form (the rule governing the presentation of the concept).

Of course, as De Man has argued, these representations only seem to be motivated. Against the self-evident naturalness of correspondences such as that between a round plate and the concept of a circle, De Man observes a hesitation in Kant, as to "how such a decision can be made, whether it is in the nature of things or whether it is merely assumed (*unterlegt*)".¹⁹ De Man, in other words, privileges in his reading of Kant an apprehension of the fundamental metaphoricity of language, a necessary aporia in the power of judgment, that he calls "rigor" and Rei Terada calls modesty:

De Man's suggestion is ... that because Kant leaves a question mark at the most important place in his system, the transcendental philosophy has not been something so substantial as to have produced debris, but rather a plan for a system that never got finished and never produced anything. One can

¹⁸ Kant. *Critique of Judgment*. Trans. Werner S. Pluhar (Indianapolis, Indiana: Hackett, 1987) 227 [352]. Hereafter referred to as *CJ*.

¹⁹ De Man, "The Epistemology of Metaphor," in *Aesthetic Ideology*, ed. Andrzej Warminski (Minneapolis: University of Minnesota Press, 1996) 15.

keep trying to revise and finish it, but that makes sense only if you wish it worked.²⁰

Amongst those whom Terada charges with wishing for such transcendental epistemic closure, is Frances Ferguson.²¹ This is appropriate enough, returning like for like: Ferguson's critique of De Man accuses him of a "crypto-empiricism" (SS, ix, 169) in his insistence that Kant's dynamic sublime allows representation to come into contact with its own implicit formal limitations; Terada is essentially accusing Ferguson of being a crypto-transcendentalist. What follows is intended as something of a negotiation between these two positions.

Ferguson's objection to De Man's account of Kant is that it does not admit just how mathematical his theory of representation is. Kant's mathematical sublime, she argues, allows "Kant to argue that the finite and infinite are not related as is a part to an inapprehensible whole but rather as are two distinct but converging systems" (SS, 27). Thus, where De Man wants to see representational systems brought to an encounter with their limits, as an absolute "gap" between one way of seeing the world and that which lies outside of it, Ferguson wants present this encounter as an "interval" (SS, 169). between systems, implicitly bridgeable if always imperfectly so. It is important, as we will see, to take this perspective of a bridgeable distance into account when understanding Kant's use of figuration in his articulation of spatiality, and what his use of geometrical figures can tell us about figuration in general. We can start by observing that the structured difference of space is, for Kant, given by the structuring difference of number, which is

²⁰ Rei Terada, "Seeing is Reading," in *Legacies of Paul De Man*, ed. Marc Redfield (New York: Fordham University Press, 2007) 162-78 at 173.

²¹ *Ibid.*, 164.

its schema: for both, the common rule is the “successive addition of one (homogeneous) unit to another” (*CR*, 274 [A142/B182]). This structuring difference, Ferguson argues, is structured in a way more consistent with the notion of the “interval” than with that of the “gap”:

The principles of numerical succession and heritability make the extension of the series rely on intension; being able to supply the missing element of a series becomes possible through a formal registration of intention in which the system does not need empirical corroboration. You never need to count anything to supply 2 after 0, 1, or to supply a missing 5 between 4 and 6. (*SS*, 162)

What the example of the numerical series provides to Ferguson is our ability to bring the rules that structure our experience into the domain of representation.

In other words, we have returned to the question of hypotyposis. And so it is telling that for Ferguson’s liberal position, the exemplary form of the “formal registration of intention” is an easily-communicable game of counting, or, later in her argument, the form of conversation between two people having a hard time understanding one another.²² For De Man, it is the failure of a representational system when pursued rigorously to its limits: “[I]t turns out to be impossible to maintain a clear line of distinction between rhetoric, abstraction, symbol, and all other forms of language. ... [T]he resulting undecidability is due to the asymmetry of the binary model that opposes the figural to the proper meaning of the figure.”²³ The figure for undecidability, and the excess of a (here formal) materialism that provokes it, is the symmetry-breaking

²² I refer to Ferguson’s reading of Wordsworth’s “We Are Seven” (166-69).

²³ De Man, *Aesthetic Ideology*, 16.

eccentricity or bias of judgment. What I hope to show in this section is that Kant's use of spatiality is both more critical than Terada or De Man give him credit for, and more normative than Ferguson admits. Such a conclusion should prompt us to revisit the question of what work "figuration" does in our critical discourse, and to meditate more on what we do when we draw the line between the formal and the empirical. I will pursue this not in the strictly numerical form proposed by Ferguson, nor in the radical asymmetry favored by De Man, but rather in the structured asymmetry that appears everywhere in Kant's visual figurations. Kant has a penchant for the visually figural, as in his appeal to the triangular form in his exposition on the intuition of space; and beyond the series, he gives us what we might call a more fundamental schema for (specifically Newtonian) space in what we will see is for him the dis-figured figure of chirality.

The curious figure of chirality, or handedness, appears in Kant's pre-critical 1768 essay, "Concerning the ultimate ground of the differentiation of directions in space," and again in his 1783 *Prolegomena*.²⁴ In both cases, the example serves as a powerful, mathematical defense of the Newtonian conception of space as an absolute, a backdrop to experience, as opposed to the Leibnizian account, which presented space as articulated relationally, in the network of relative distances within and among things.²⁵ His proof proceeds by counterexample, as a demonstration that relationality cannot tell the difference between similarity and congruence; things that are alike in all their parts are

²⁴ It also appears in his *Inaugural dissertation*, in which he argues that "*space is an absolutely first formal principle of the sensible world.*" Kant, *Inaugural Dissertation*, in *Theoretical Philosophy*, 377-416 [2:385-419], at 398 [2:405].

²⁵ Again, see Le Poidevin's treatment for a clear analytic-philosophic presentation of Kant's figure of handedness.

not necessarily translatable into one another by rigid transformations. From the *Prolegomena*:

If two things are fully the same (in all determinations belonging to magnitude and quality) in all the parts of each that can always be cognized by itself alone, it should indeed then follow that one, in all cases and respects, can be put in the place of the other, without this exchange causing the least recognizable difference.

...

What indeed can be more similar to, and in all parts more equal to, my hand or my ear than its image in the mirror? And yet I cannot put such a hand as is seen in the mirror in the place of its original; for if the one was a right hand, then the other in the mirror is a left, and the image of the right ear is a left one, which can never take the place of the former.²⁶

Were space merely a question of relative position, as Leibniz claimed, then any two objects similar in shape and equal in size would be congruent; but hands, oppositely-threaded screws, and seashells that spiral in opposing clockwise/counterclockwise directions--or, to put it differently, the originals and the mirror images of hands and ears--are identical in the internal relations of their respective parts but irreconcilable in some other, hard-to-define way that Kant calls "directionality."

The difference between left and right hands that we call chirality or handedness, then, is the sensible effect of a super-sensible principle (directionality). This link between the sensible and the super-sensible plays the differential roles we would expect, between

²⁶ Kant. *Prolegomena to Any Future Metaphysics*. Revised edition. Trans. and edited by Gary Hatfield. (Cambridge: Cambridge University Press, 2004) 37 [4:286].

the pre-critical 1768 essay and the critical 1783 *Prolegomena*: namely that in the latter, the representation/object relation is explicitly folded back into the domain of representation, to use Beatrice Longuenesse's formulation of Kant's critical turn.²⁷ But the 1768 essay is with good reason frequently held up as resting on the threshold of the critical turn: "[O]ur considerations make the following point clear: absolute space is not an object of outer sensation; it is rather a fundamental concept which first of all makes possible all such outer sensation."²⁸ This example of handedness that bridges Kant's pre-critical and critical stages, in both cases bridges the sensible with the super-sensible in a way that is hard not to see as motivated. Handedness, as the exhibition of the principle of directionality, is the schema for a Newtonian spatiality, and its strange effects (hands being identical-yet-different) and stranger causes (what, after all, is directionality as such) make the connection between the two seem perfectly natural. After all, neither handedness (understood, as we will see below, as a property shared by screws, seashells, and spherically-inscribed triangles) nor directionality have anything recognizably human about them, so what reason would we have to call the connection arbitrary?

To put this another way, the difference between left and right hands is more powerful than the difference between 1 and 2, because it is so hard to pin down: our hands would seem to be much more alike than integers are. Kant's argument, in fact,

²⁷ "While the [1772] Letter to Hertz presents the relation between a representation and its object as a causal relation between two heterogeneous entities, the representation that is 'within' the mind and the object which is 'outside' it, the [1781] *Critique* internalizes the relation between the representation and the object *within representation itself*, so that the problem assumes a new meaning" Longuenesse, *Kant and the Power to Judge: Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason* (Princeton: Princeton University Press, 2001) 17. Thanks to Kevin McLaughlin's 2010 *Poetry After Kant* seminar for introducing me to her work.

²⁸ "Directions," 371 [2:382].

relies on this fact for its particular narrative drama: “What indeed can be more similar to, and in all parts more equal to, my hand or my ear than its image in the mirror? And yet I cannot put such a hand as is seen in the mirror in the place of its original....”²⁹ This difference, apparently, can only be made apprehensible through presentational showmanship, in which the scales are made to fall from our eyes and we see difference where there had been identity. And yet it is a difficult difference to maintain. After all, it is a structured, reversible difference: one type of symmetry (congruence) is broken and replaced with another (chirality). We can easily see the cognitive difficulty involved in the maintenance of this difference in Kant’s 1768 exposition:

I shall call a body which is exactly equal and similar to another, but which cannot be enclosed in the same limits as that other, its *incongruent counterpart*. Now, in order to demonstrate the possibility of such a thing, let a body be taken consisting, not of two halves which are symmetrically arranged relatively to a single intersecting plane, but rather, say, a *human hand*. From all the points on this surface let perpendicular lines be extended to a plane surface set up opposite to it; and let these lines be extended the same distance behind the plane surface, as the points on the surface of the hand are in front of it; the ends of the lines, thus extended, constitute, when connected together, the surface of a corporeal form. That form is the incongruent counterpart of the first. In other words, if the hand

²⁹ *Prolegomena*, 37 [4:286].

in question is a right hand, then its counterpart is a left hand. The

reflection of an object in a mirror rests upon exactly the same principles.³⁰

It is easier to mistake right and left hand for one another than to recognize them on the fly. And this is perhaps why in his 1768 paper Kant supplements his counterexample with something like a *reductio ad absurdum*, in which asks us to imagine a hand without this property of handedness:

[T]here is no difference in the relation of the of the parts of the hand to each other ... whether it be a right hand or a left hand; it would therefore follow that the hand would be completely indeterminate with respect of such a property. In other words, the hand would fit equally well on either side of the human body; but that is impossible.³¹

This argument is as much about aesthetics as it is about geometry. For Kant it is not impossible, but rather unpleasant, to imagine an unhanded hand as "fit" for a body.

Leibnizian spatiality, for Kant, is literally monstrous, and Kant threatens the reader with a loss of order if they fail to reject this image that is "completely indeterminate with respect of such a property."

I have argued above that this new symmetry of handedness is a schema for Kant's Newtonian spatiality; and as with any schema, we have seen that the apparently natural, motivated connection between the symbol and the rule it exhibits ends up relying on an arbitrary (here aesthetic) judgment. However, this arbitrary judgment has none of the character of an absolute gap between symbol and referent. The structured difference that is Kant's chirality is not simply the product of a principle (directionality) that is

³⁰ "Directions," 370 [2:382].

³¹ "Directions," 371 [2:383].

impossible to cognize directly, but more than this it is difficult to maintain even in its empirical effects; but it is precisely for this reason that Kant provides a supplementary figure which, despite its apparent dis-figuration, differs in only measurable ways from a “normal,” hand, possessed of handedness. The extent to which we can picture a hand with two palms or two backs is the extent to which we can measure the distance between a "monstrous" and a "normal" hand; this figure then marks a local interval, not a gap, between Kant's Newton's system of spatiality and Leibniz's. There is much to be critiqued in Kant's spatial normativity, resting as it does on a biological normativity that, for instance in the post-thalidomide era, we would recognize as ableism. But what interests me here is just how abstract his abstraction becomes, and just how strange the visuospatial normativity he constructs from it can be.

The Newton/Leibniz debate, in opposing absolute to relative space, was essentially a debate over priority; namely, whether space exists prior to the objects that fill it, or whether it is defined in the relations between things. Kant's framing of the problem, by resituating it as a representational question, instead asked which gave form to which; namely, whether space structured things, or whether things defined the contours of space. Kant's recourse to an abstract principle of directionality of course favored the former, precisely because directionality seems too abstract to derive from empirical objects. And yet, this abstract ground, if we can call it that, makes it difficult to say what kind of forms we can expect to find in this new visual world. Kant arrays a few examples beyond the hand and ear, but these seem to be arranged no more systematically than items in a curio cabinet.

The thread of a screw which winds round its pin from left to right will never fit a nut of which the thread runs from right to left. ... A spherical triangle can be exactly equal and similar to another such triangle, and yet still not coincide with it. But the most common and clearest example is furnished by the limbs of the human body, which are symmetrically arranged relative to the vertical plane of the body. The right hand is similar and equal to the left hand. (“Directions,” 369-70 [2:381])

Aesthetically, this collection presents to us the curious diversity of objects that an abstract, in-itself-unvisualizable principle can produce. Indeed, analytic philosophy has under-appreciated just how significant Kant’s rigorous abstraction and relatively sparse treatment of spatiality is for the potential phenomenological diversity of his aesthetics. The blame for this in part lies with Kant, namely in his explicit rejections of non-Euclidean geometries, and in part with a tendency towards a rigid interpretation of that rejection.

In the *Critique of Pure Reason*’s “Doctrine of Method,” Kant divides the uses of the power of reason into two classes: the philosophical and the mathematical. He then goes on to subdivide mathematics into geometry, and everything else. For Kant, all mathematics are axiological, which is to say that they proceed through the systematic application of fundamental rules. Geometry, however, stands out among mathematical disciplines, in that as it progresses it automatically generates, or “constructs,” sensible evidence of its proofs as it goes along:

[T]he geometer ... begins at once to construct a triangle. Since he knows that two right angles together are exactly equal to all of the adjacent angles

that can be drawn at once point on a straight line, he extends one side of the triangle, and obtains two adjacent angles that together are equal to two right ones. Now he divides the external one of these angles by drawing a line parallel to the opposite side of the triangle, and sees that here there arises an external adjacent angle which is equal to an internal one, etc. In such a way, through a chain of inferences that is always guided by intuition, he arrives at a fully illuminating and at the same time general solution to the question. (*CR*, 632 [A716-17/B744-45])

Kant goes on to differentiate this from the rest of mathematics. Where philosophy addresses itself to the conditions of possible existence, mathematics only restricts itself to the rigorous playing out of formal games.

There is, to be sure, a transcendental synthesis from concepts alone, with which in turn only the philosopher can succeed, but which never concerns more than a thing in general, with regard to the conditions under which its perception could belong to possible experience. But in mathematical problems the question is not about this nor about existence as such at all, but about the properties of the objects in themselves, solely insofar as these are combined with the concept of them. (*CR*, 632-33 [A718-19/B746-7])

As a result, “the mathematician can build nothing in philosophy except houses of cards, while by means of his method the philosopher can produce nothing in mathematics but idle chatter” (*CR*, 637 [A727-28/B755-56]). However, the two meet in geometry, which

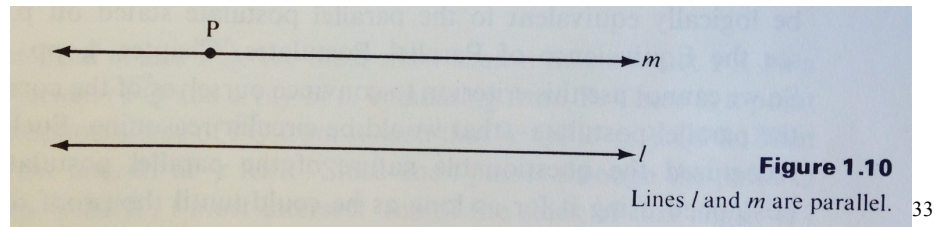
plays out formal games according to the structure of our spatial intuition, and in doing so is concerned with the possible determinations of perception that we call shapes:

Space is not a discursive or, as is said, general concept of relations of things in general, but a pure intuition. ... It is essentially single; the manifold in it, thus also the general concept of spaces in general, rests merely on limitations. From this it follows that in respect to it an *a priori* intuition (which is not empirical) grounds all concepts of them. Thus also all geometrical principles, e.g., that in a triangle two sides together are always greater than the third, are never derived from general concepts of line and triangle, but rather are derived from intuition and indeed derived *a priori* with apodictic certainty. (*CR*, 158 [A25/B39])

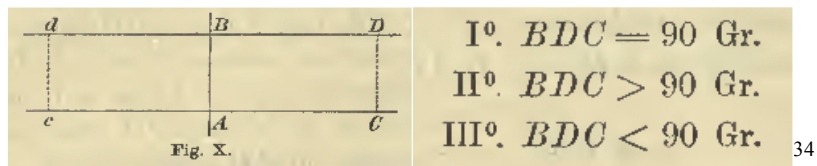
Kant's geometrical examples from the first *Critique*'s Transcendental Aesthetic have generated an incredible amount of heat over the feasibility of Kant's philosophy in the world of post-Newtonian physics and non-Euclidean geometries. These arguments require some contextualization in order to flesh out what is aesthetically fascinating in Kant's uses of geometry.

Briefly, the transition from Euclidean geometry to non-Euclidean geometries involves a slow, fitful process of abandoning Euclid's famous fifth postulate involving parallel lines: "For every line *l*, and for every point P that does not lie on *l* there exists a unique line *m* through P that is parallel to [i.e., does not intersect with] *l*."³²

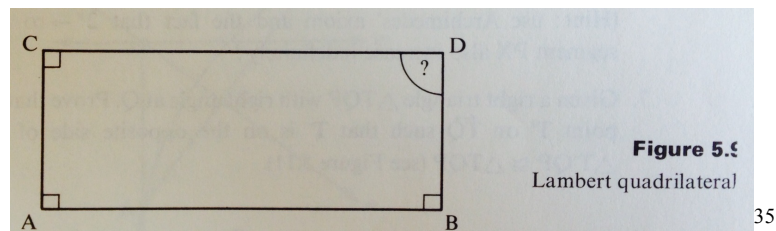
³² Greenberg, 17.



This theorem turns out to be a mere assumption, and it is the abandonment of it that leads to non-Euclidean geometries. In his 1786 *Theorie der Parallel-Linien*, Kan't long-time correspondent, Johann Lambert indirectly argued (building on the work of Gerolamo Saccheri [1667-1733]) that one did not have to assume the problematic claim that two parallel lines cannot intersect. His proof involved assuming a rectangle with three right angles and leaving the fourth variable:



Below, we see a rigorous illustration of the Lambert quadrilateral, with its unknown fourth angle:



Rather than proving Euclid correct, however, Lambert instead came up with some very strange results. As Richard Faber describes the respective consequences of these

³³ Ibid., 17, fig. 1.10.

³⁴ Lambert. *Theorie der Parallelinien*, F. Engel and P. Stäckel (eds.), *Urkunden zur Geschichte der Nichteuclidischen Geometrie*, Leipzig, 1895 [1786], 152-208 at 180. <<http://www.kuttaka.org/~JHL/L1786a.html>>

³⁵ Greenberg, 131, figure 5.9.

hypotheses, “The hypothesis of the right angle led to Euclidean geometry. The hypothesis of the obtuse angle quickly led to a contradiction. Assuming the hypothesis of the acute angle, Lambert made some astonishing discoveries of its implications, in particular, analogies between the resulting geometry and that of a sphere.”³⁶ Lambert did not declare that he had overturned Euclidean geometry, but neither did he reject his problematic conclusions out of hand.

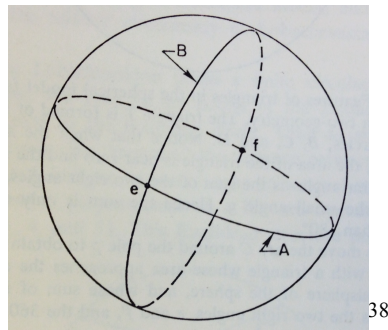
Kant, however, embraced the parallel postulate, and with an enthusiasm that has been used by analytic philosophers to justify claims about his dogmatism and irrelevance in a post-Newtonian world. For instance, in making a case about the necessarily visualizable results of geometric speculation (again in the first critique), he offers up what looks like an absurd example:

For whence will one derive the character of the possibility of an object that is thought by means of a synthetic *a priori* concept, if not from the synthesis that constitutes the form of the empirical cognition of objects? That in such a concept no contradiction must be contained is, to be sure, a necessary logical condition; but it is far from sufficient for the objective reality of the concept, i.e., for the possibility of such an object as is thought through the concept. Thus in the concept of a figure that is enclosed between two straight lines there is no contradiction, for the concepts of two straight lines and their intersection contain no negation of a figure; rather the impossibility rests not on the concept in itself, but on its construction in space, i.e., on the conditions of space and its

³⁶ Richard Faber, *Foundations of Euclidean and Non-Euclidean Geometry* (New York: Marcel Dekker, Inc., 1983) 148.

determinations; but these in turn have their objective reality, i.e., they pertain to possible things, because they contain in themselves *a priori* the form of experience in general. (CR, 322-23 [A220-21/B267-68])³⁷

The concept of two straight lines enclosing a space might be formally expressible, but never visualizable; this is because two lines meeting twice would involve an extreme bending of the space in which those two lines were drawn, or, to put it differently, this is an extreme violation of Euclid's parallel postulate. But this "impossible" example, of two lines intersecting twice, appears in the "elliptic" geometry of the two-dimensional non-Euclidean space defined by Bernhard Riemann (1826-66). Here, it is not only possible but *necessary* for "straightest" lines to intersect twice (eliminating the possibility of any parallels amongst "straightest" lines):



This exclusion of non-Euclidean geometries has understandably been taken as a dogmatic slip in Kant's project. Lawrence Sklar, from whose classic *Space, Time, and Spacetime* the above diagram is taken, repeats a common condemnation against Kant, that his

³⁷ Cited in Ronald Calinger, "Kant and Newtonian Science: The Pre-Critical Period", *Isis*, 70:3 (September, 1979) 348-62 at 357, fn. 32.

³⁸ Lawrence Sklar, *Space, Time, and Spacetime* (Berkeley: University of California Press, 1974) 21, fig. 1. Sklar's caption: "'Straight lines' in the spherical model for Riemannian two-geometry. *A* and *B* are two great circles on the sphere. They are 'maximally extended straightest lines' of our model for Riemannian two-geometry. *e* and *f* are the two points of intersection of these great circles. Since all fully-extended great circles meet each other in two antipodal points, no two straightest lines are parallel to each other."

dogmatism (or at least that of his followers) stunted the development of non-Euclidean geometry: "Gauss, ... in an act which reflects rather badly on philosophers, hesitated to publish his non-Euclidean thoughts for fear of the resentment it would arouse in the disciples of Kant."³⁹ Even Michael Friedman, whose much more sympathetic treatment traces out the Kantian inheritances of the twentieth-century positivism that claimed a radical break with the philosopher, fairly uncritically accepts their condemnation of his embrace of a "Euclidean-Newtonian picture of a space-time framework or 'container' filled with matter (content) obeying deterministic laws of motion. Here, according to the early positivists, the Kantian view is limited by its too intimate connection with outmoded mathematics and physics."⁴⁰

Ronald Calinger went so far as to argue in a 1979 essay that the critical turn's Euclideanism is a backsliding of sorts, given an earlier open-mindedness towards the possible structures of space:

At first, he regarded these other geometries to be based primarily on exercises in logic.... Later, when he saw that the foundations of non-Euclidean geometries rested not only on logic but also on constructions in space, his ideas changed. His belief in the centrality of constructions in geometry evolved from his *Monadologia physica* (1752) (Prop. III) through his 1763 Prize Essay and his correspondence with Lambert. By the 1770s Kant indicated that a non-Euclidean geometry could not be devised whose truths apply to the phenomenal world, in part because he

³⁹ Sklar, 85.

⁴⁰ Friedman, *Foundations of Space-Time Theories: Relativistic Physics and Philosophy of Science* (Princeton: Princeton University Press, 1983) 7.

thought that no universal standard of measure existed in such geometries.⁴¹

Calinger, in other words, has identified a profound irony, that it is in his correspondence with Lambert that Kant is convinced of the impossibility of the non-Euclidean geometries that Lambert's own work would later gesture towards.⁴² Indeed, Calinger goes on to note that "[i]t is somewhat ironic that Kant, who established closure for pure reason, failed to understand that the same principle was required in geometry."⁴³

Such a position, however, leaves the domain of the ironic and enters that of the puzzling. Apart from Kant's correspondence with Lambert, the challenges to Euclidean geometry, especially on the grounds of the fifth postulate, were piling up quickly and publicly in Kant's lifetime. In 1763, Greenberg recounts, the mathematician G. S. Klügel "was able to submit a doctoral thesis finding the flaws in 28 different supposed proofs of the parallel postulate, expressing doubt that it could be proved."⁴⁴ The notion that Kant, who as we have seen in fact defined mathematics on the basis of its axiological method, would ground his argument about the a priori nature of space on such shaky ground is difficult to understand, and yet this narrative was routinely been deployed by twentieth-

⁴¹ Calinger, "Kant and Newtonian Science", 358.

⁴² Calinger cites Lambert's Feb. 3, 1766 letter to Kant, presumably for the following passage indicating the usefulness of spatial representation in geometric proofs: "I agree entirely that a genuine method [in philosophy] commends itself most effectively when displayed in actual examples, since one can then illustrate it with individual cases, whereas it might well be too abstract when expressed logically. But once the examples are there, logical remarks about them become highly serviceable. Examples perform the same job that figures do in geometry, for the latter, too, are actually examples or special cases" (Lambert to Kant, Feb. 3, 1776, *Kant's Philosophical Correspondence, 1759-99*, trans., ed. Arnulf Zweig [Chicago: University of Chicago Press, 1967] 53. Cited in Calinger, 358, fn. 36.)

⁴³ Calinger, 358.

⁴⁴ Greenberg, 127.

century analytic philosophers attempting to mark out a distance between themselves and Kant.

Alternative interpretations of the significance of geometry to Kant's philosophy have in recent years begun to emerge. These take different approaches, but share the basic premise that arguments such as Calinger's are fundamentally misguided insofar as Kant did, in fact, restrict the domain of applicability for his Newtonian-Euclidean spatiality. Most prominently, Lisa Shabel takes issue with the traditional reading of Kant's theory of space, which sees his uses of Euclidean geometry as providing shaky, dogmatic, and tragically untimely evidence for that theory. Against the accusation that Kant has idealized Euclidean geometry, which argues that the first *Critique's* use of geometrical examples not only grounds the a prioricity of spatial intuition but ultimately justifies the procedures of transcendental idealism as a whole, Shabel argues in just the opposite direction that the transcendental aesthetic grounds geometry as the pure science of space. We should not, she says,

... read Kant's argument in the "Transcendental Exposition" as primarily a transcendental argument toward the conclusion that space is a pure intuition, but rather as an explanation of the role of space as pure intuition in our practice of geometry. If this explanation provides further evidence that we have a pure intuition of space, then so much the better for Kant's theory of space.⁴⁵

From a disciplinary perspective, in other words, Kant is not founding his philosophy on mathematics (we have discussed the divergences between philosophy and mathematics

⁴⁵ Lisa Shabel, "Kant's 'Argument from Geometry'", *Journal of the History of Philosophy*, 42:2 (April 2004) 195-215 at 214.

above), but is showing the utility of his philosophy for setting geometry on a firm ground. Reoriented in such a way, geometry does not justify his transcendental aesthetic, but rather “builds a philosophical bridge from his theory of space to his doctrine of transcendental idealism.”⁴⁶ Specifically, Kant’s geometrical argument “mov[es] synthetically from our *a priori* representation of space [as a pure intuition] through our *a priori* knowledge of the science of space [i.e., geometry] to the empirical reality and transcendental ideality of space.”⁴⁷ This is to say that *once* geometry is proved to be a pure science of space, it provides the perfect example for how *a priori* concepts can produce empirical effects (thinking about the concept of a triangle produces one in the visual imagination) and so justifies the claims of transcendental idealism. A fascinating consequence of this argument is that it limits Kant’s speculations on spatiality to experiential space, thereby allowing for alternative spaces and their attendant geometries.⁴⁸ This revised argument can be taken quite far, with the implication that Kant restricted his theory of spatiality *in order* to leave room open for the non-Euclidean geometries that Calinger’s declension narrative sees him abandoning in his critical turn. But even without taking it this far – and Shabel does not – we travel a good distance towards resolving the epistemological problems with how Kant uses geometrical examples in his philosophical expositions.

However, Shabel’s argument would seem to me to raise the stakes of the aesthetic problematic, even as it resolves some of the epistemological questions. If we accept that geometry can produce sensible effects from *a priori* concepts, it is still unclear how we

⁴⁶ Ibid., 196.

⁴⁷ Ibid., 207.

⁴⁸ Ibid., 215, fn. 53.

go about settling on, or discovering, these concepts. This is important because intuition complements reason with a rapidity that creates problems for (and perhaps in) judgment. Specifically, Kant says that mathematics “cannot do anything with the mere concepts but hurries immediately into intuition, in which it considers the concept *in concreto*, although not empirically, but rather solely as one which it has exhibited *a priori*, i.e., constructed...” (CR, 631 [A715-16/B744-45]). As we have seen in our discussion of Kantian geometry above, its reliance on visuospatial representation means that this tendency of reason to “hurr[y] immediately into intuition” will end up with visualizable figures being generated right alongside axiological reasoning. The problem this creates for judgment is that sometimes reason takes an irrational turn, and we need a means of identifying such errors. As we saw with the example of chirality, this yardstick is aesthetic judgment: Kant needs to take for granted the general rejection in his audience of the possibility that a hand could fit equally well on either side of our body. To make this judgment, we have to in some sense have seen, or at least think we have seen, such an image. A similar procedure is at work in Kant’s defense of Euclidean geometry. We can suspend the axiologically indefensible parallel postulate, but then parallel lines will start to bend towards one another before and behind us, and right angles will warp out of perspective. The problem is that we seem to need this moment of (erroneous, or even illusory) disorientation in order to value the principles structuring our experience. For instance, this is a more intuitive (if less rigorous) illustration of the Lambert quadrilateral:



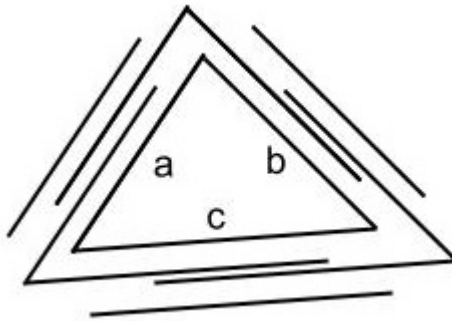
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His retraction of the principle of directionality is meant to feel like the bones are sliding out of our bodies, and his retraction of Euclid's parallel postulate is meant to feel like we are going crosseyed.

My argument here is not epistemological but aesthetic. I am relatively unconcerned with whether Kant purposely left open room for the development of non-Euclidean geometries, or dogmatically refused to admit their possible existence. I am instead concerned with the task set before judgment, as to whether an example is suitable to a concept, and the consequences this has for the relationship between invention and communicability. If we return to Kant's foundational figure of figuration, with a sense of just how closely the possibility of mistakenly rational disfiguration attends spatial reasoning, we see how reason's "hurr[ying] immediately into intuition" forces a similarly immediate determination of judgment to coordinate example and concept: "[A]ll geometrical principles, e.g., that in a triangle two sides together are always greater than the third, are never derived from general concepts of line and triangle, but rather are derived from intuition and indeed derived *a priori* with apodictic certainty" (*CR*, 158 [A25/B39]). The concept of geometric principles in general is exemplified by Euclid's twentieth proposition here. But Kant takes care to remind us that the "a triangle" and the "sides" are not "general concepts of line and triangle"; instead they are specific figures

⁴⁹ "Lambert Quadrilateral," *Wikipedia*. 2006. March 7, 2015. <
http://upload.wikimedia.org/wikipedia/commons/8/84/Lambert_quadrilateral.svg >

constructed in the proof. Our construction does exhibit a property of triangles in general, but the generalizable content is procedural; it is what it is we do when we draw two lines together, and then a third connecting them. Put otherwise, our triangular figure maintains the delicate balance between empirical specificity and the exhibition of a generally applicable rule by presenting itself as a set of tense, mutually checking compositions. The conclusion of a direct proof for proposition 20, after all, has to end with three sets of comparisons: $AB + BC > CA$, $BC + CA > AB$, $CA + AB > BC$.



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We experience this figure not merely as a stable unity of three correctly-proportioned sides in a triangle, but also as a set of overlapping constructions always producing its completion. Without judgment to maintain the coordination of these constructions, that is, to suspend us on the brink of reason's unreasonable "hurr[ying] immediately into intuition," we would not be able to evaluate the general applicability of our empirical example. It would be the easiest thing for us to get a step in the proof wrong, and to compound our mistake by accidentally building our proof off the slightly erroneous empirical figure. We might think we were actually seeing a rectangle with an asymptotic corner, or two lines actually touching twice, or a hand without handedness.

⁵⁰ My own illustration.

This is a highly normative version of shape, and it is worth reiterating the way in which it assumes a universal and automatic revulsion from deformity. But what interests me is the fact that it is a formalized normativity that allows for the possibility of talking in a meaningful way about the oddity of all shapes. The internal relations of a hand could be communicated, but without this set's formal relation to directionality, the recipient wouldn't know how to attach it to the figure of a human body; more than this, there wouldn't be a left and right, a front and back, to the body we wish to attach it to. Kant's method insists on making such an apprehension of difference communicable: we see a hand, we see its handedness, and useful examples of handedness begin to present themselves everywhere. That is to say that Kant's things do in a sense give their own space; but because this activity is routed through a principle of abstraction, a space is never given without being given to multiple things. We see in Kant's geometrical things a exhibiting not a formless-but-forming Coleridgean vitalism, but rather a versatile range of communicable formal principles. This difference is important to underscore, because what we might term formal exhibitionism can easily be mistaken for a shape giving forth its own space. I believe this is the trap that Arthur Melnick's 2001 essay, "Kant vs. Lambert and Trendelenburg on the Ideality of Time," falls into, when he proposes that Kant's theory of geometric construction is reconcilable to relativistic physics because it shows shapes as giving their own spatial frames of reference:

The character of Kant's theory of space is, I believe, parallel to ...

[Melnick's previously given] characterization of relativistic space time.

There are canonical basic motions (constructions of the subject) that are intrinsic, in that they are governed only by (the internal "force" of) rules

for constructing apart from extrinsic mechanical forces. Thus, when I draw a line my hand is governed by a rule of construction undisturbed by extrinsic pushes or pulls. The structure of space itself then is just the structure of the full possibility of such canonical intrinsic motions. Secondly, and empirically, there may be relatively cosmic reference frames or spatial systems that arise from how matter is situated in terms of the canonical motions, which frames “simulate” relational space, and allow for attributions of extrinsic motion (change of relations relative to such frames).⁵¹

From my frame of reference, Kant’s response to this would be that judgment has been suspended and reason allowed to go too far. We see rules being developed in a hyper-local fashion that allows for diversity without any regulative concept of communicability. What I am arguing is that things cannot be shaped before they communicate their shapes, as a sort of formal exhibitionism; hands cannot be incorporated until they are handed.

Keeping this formal exhibitionism in mind, we can return to De Man’s discussion of hypotyposis, by way of one of his most famous examples, Kant’s aestheticized human body:

“The like is to be said of the sublime and the beautiful in the human body. We must not regard as the determining grounds of our judgment the concepts of the purposes which all our limbs serve ... and we must not allow this unity of purpose to influence our aesthetic judgment (for then it would no longer be pure). . . .” We must, in short, consider our limbs,

⁵¹ Arthur Melnick, “Kant vs. Lambert and Trendelenburg on the Ideality of Time,” *History of Philosophy Quarterly*, 18:1 (January 2001) 79-90, at 87.

hands, toes, breasts, or what Montaigne so cheerfully referred to as “Monsieur ma partie,” in themselves, severed from the organic unity of the body, the way the poets look at the oceans severed from their geographical place on earth. We must, in other words, disarticulate, mutilate the body in a way that is much closer to Kleist than Winckelmann, though close enough to the violent end that happened to befall both of them.⁵²

For De Man, this disarticulation marks the supersession of an organic aesthetics that seeks unity, with a formal aesthetics attentive to its own constructedness and internal fissures; we therefore find aesthetic judgment refusing to allow the body to integrate by refusing each part to relate to the whole via reference to a determinate purpose. But we can read the body's strange disarticulation spatially as well. If we recall our discussion of handedness above, we will note that the only way that a body could be fit together properly is if the parts are always differentiating themselves from each other: we need to know which hand is left and which is right to put them on the correct arm. We might also recall our example of the disarticulated triangle: unless we are willing to embrace an organicist spatial aesthetics, in which empirical objects give their own unique spaces, Kant's strategy would seem to be the only way to give us a communicable concept of the human body, or for that matter any shape.

De Man, in other words, identifies this disarticulated image of the human body as judgment's exhibition of its own necessary error, in which we shuttle back and forth over a representational chasm. But the spatiality of our figures for figuration allows us to see

⁵² De Man, *Aesthetic Ideology*, 55.

how this disarticulation of limbs also operates as what Frances Ferguson calls a "coordination" (SS, 169). Like a tailor's pattern for the sleeves, breast, and collar of a jacket laid out on a table, the parts must be arranged in order to fit, and the judgment that presents us with these formal rules also provides us the means for the iterative exploration of experimental suspensions and modifications of these rules. At the same time, it is necessary to point out that "coordination" does not quite capture the affective force of this image. The dis-membered body is on the verge of being pieced together or torn apart, like Frankenstein's monster. I would argue that this is implicitly a threat against too much experimentation with the formal rules for visual experimentation. If the body is not disarticulated, by being held apart, then it cannot be properly articulated, with the appropriate hands/arms/feet/legs going on the appropriate sides. Rather like the example of the hand that loses its shape if we ignore directionality, we see that if judgment does not do its work *in accordance with purely formal rules*, then the body will not fit together; and these "monstrous" results are all-too-visualizable for Kant.

To think of experiments in spatial experience as experiments with and in rules provided by judgment is in principle to leave open the possibility that such rules might change, or be developed upon. However, I am less willing than others to believe that Kant saw the perception of non-Euclidean geometries as a reasonable possibility. To be clear on that point before moving on, it seems that he saw the temporary suspension of Euclidean geometry as productive of what to him were fascinating, absurd, and sometimes awful dis-figurations, but that any systematic examination of its possibilities would have to take place outside the visual imagination, and so they would not be geometry but simply pure mathematics. This does not force him to discount such shapes'

possibility outright, as Calinger's declension narrative would have it, but rather that the common ground of spatial experience would be unsettled if some people claimed to be able to see complex universes inaccessible to others; and on some level, this is a fair point, insofar as it is an open question in the cognitive sciences as to whether humans can in fact cognize spaces not governed by Euclidean geometry in the visuospatial imagination.⁵³ The problematic Kant has set up for us in geometry is mathematical reason's ability to produce rigorous abstractions and to rush these into experience. On the one extreme, reason reproduces sameness ad nauseum, as in an infinite series of parallel lines; and on the other, this same power veers off into mad terrain unchecked when it makes a mistake. Pitted against both of these extremes is our aesthetic judgment, which both regulates the application of these rules and, indeed, seems capable of generating its own for experimental application.

2. Blake: Frames and Figures

This conflict between an irrational reason and a reasonable judgment seems to me to be what is at stake in much of Blake's formal experimentation. As we will see, he is much more willing than Kant to entertain the utility of wild forms, and elaborates these not as examples of the monstrosity that lurks outside normative representation. At the same time, he is aware of just how easily abstraction can self-replicate to the detriment of the diversity of experience. As we have seen in our introduction and in Kant's construction of

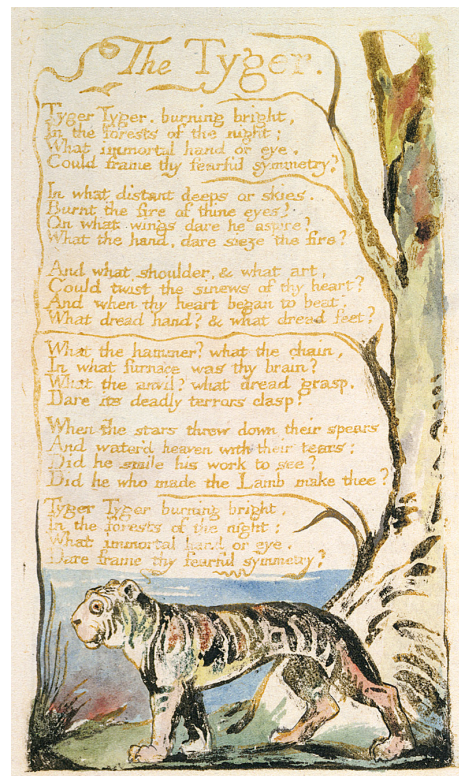
⁵³ See John O'Keefe, "Kant and the sea-Horse: An essay in the neurophilosophy of space," in *Spatial Representation: Problems in Psychology and Philosophy*, eds. N. Eilan, R. McCarthy, and B. Brewer, (Oxford: Blackwell, 1993) 101-42.

the body, the notion of "symmetry" poses precisely this problematic: as a rule for organizing parts into a whole, it is necessary to the construction of certain complex forms; but taken beyond a certain point the rule can exclude anything that does not conform to it, as we attempt to assert a principle of unity that persists through transformations. We will therefore begin with Blake's "The Tyger," his most famous analysis of the dangers of symmetry. The poem's framing stanzas constitute a broken or asymmetrical frame, in their treatment of this very question:

Tyger Tyger. Burning bright,
In the forests of the night;
What immortal hand or eye.
Could frame thy fearful symmetry?

...

Tyger Tyger burning bright,
In the forests of the night:
What immortal hand or eye,
Dare frame thy fearful symmetry?



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Between the first and last stanzas, the tone of the question has shifted, from whether one "could" to whether one "dare" frame the tyger's symmetry; in other words, we have moved from a question of ability to one of attitude. The change is significant: we begin

⁵⁴ Blake, "The Tyger," *Songs*, ll. 1-4, 21-24. *Blake Archive*. 2003. March 7, 2015. <
<http://www.blakearchive.org/exist/blake/archive/object.xq?objectid=songsie.b.illbk.35&java=no>>

with a sense of impotency in the face of an impossible task, and end with a sense of the task's audacity. Using W. J. T. Mitchell's framework for understanding symmetry tilted into asymmetry, we could say that this frame tilts downwards, lending a narrative progression to the poem by way of an ethical change in the reader if perhaps more ambiguously in the speaker.

Such a narrative, however, implicitly values a masculine act of willful self-overcoming as the speaker conquers his irrational fear; the sublime terror of the middle stanzas is turned into a fascinating look into the creator's workshop, whether that creator is Blake or God.

In what distant deeps or skies.

Burnt the fire of thine eyes?

On what wings dare he aspire?

What the hand, dare seize the fire?

And what shoulder, & what art,

Could twist the sinews of thy heart?

And when thy heart began to beat.

What dread hand? & what dread feet?

What the hammer? what the chain,

In what furnace was thy brain?

What the anvil? what dread grasp.

Dare its deadly terrors clasp?

When the stars threw down their spears

And water'd heaven with their tears:

Did he smile his work to see?

Did he who made the lamb make thee?

(5-20)

Indeed, Harold Bloom's classic reading of the poem takes this agonistic logic to its limit, presenting the speaker as ironically unreliable and, ultimately, failing to overcome his own "self-induced fear."⁵⁵ It is not the Tyger's fault that we are terrified, says Bloom, pointing towards the image's "shabby pawn-shop sort of stuffed tiger, more an overgrown house cat, with a confused and rather worried smile on what the text would hold is the fearful symmetry of his countenance."⁵⁶ If we are scared of such a creature, the fault lies in our selves:

[H]is own mortal eye *is* framing the Tyger with darkness, and making its ordering a fearful one. The distant deeps of some hell or the skies of some heaven are not the only possible workshops; the speaker excludes the world he stands in. The orthodox timidity that creates hell and heaven forms also the movement from "could frame" (immortal assumption) to "dare he aspire" (Icarus) and "dare seize the fire" (Prometheus). The hand or eye must be immortal, the speaker implies, for mere man would suffer the fate of Icarus or Prometheus if he dared frame the Tyger.⁵⁷

This reading is as overwrought in its ironic superiority as it is in its ironization of the terrified speaker of being in his terror. While the speaker is certainly wrong to be

⁵⁵ Harold Bloom, *The Visionary Company: A Reading of English Romantic Poetry* (Ithaca: Cornell University Press, 1961) 37.

⁵⁶ *Ibid.*, 35.

⁵⁷ *Ibid.*, 37.

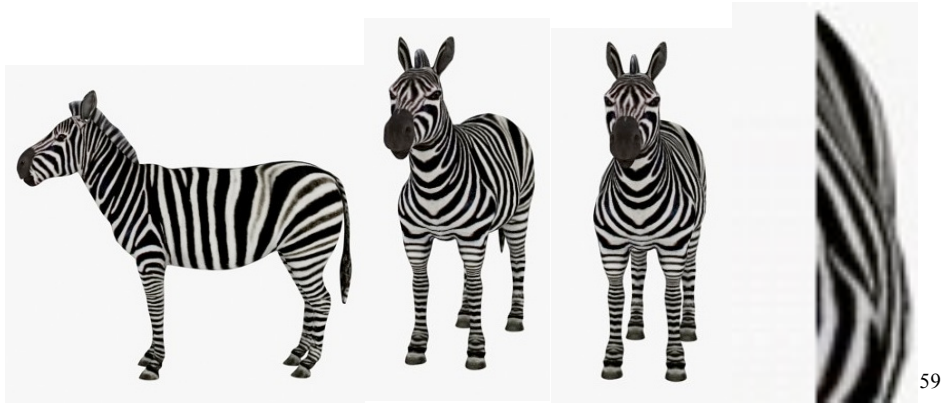
attributing the creation of a Tyger to a divine power and ignoring the world he is standing in, Bloom pushes the matter too far in presenting the problem as a spiritual fight for self-realization, a Jacobean wrestling with the angel for one's own name.

I propose that we bring this poem back down to earth by considering the visuospatial problem of symmetrical framing posed here. Blake is posing a representational problem for his reader/viewer that should register as much practically as philosophically; and viewed through the lens of its practicalities, we can come to see philosophical dimension of the representational problem in terms of a critical pragmatism. Blake's image-text presentation of the Tyger from a profile view does not, as Bloom would have it, resolve the representational problem by dispelling our fears, in our realization that the asymmetrical, poorly-drawn, stuffed-animal of a Tyger is no threat. Rather, the closing line quite literally dares us to frame the Tyger, which on one level we can take to mean visualizing the animal and its bilateral symmetry face-on. This is harder than it sounds, as we can see several plates later, when Blake presents us a partial solution in "The Little Girl Found":

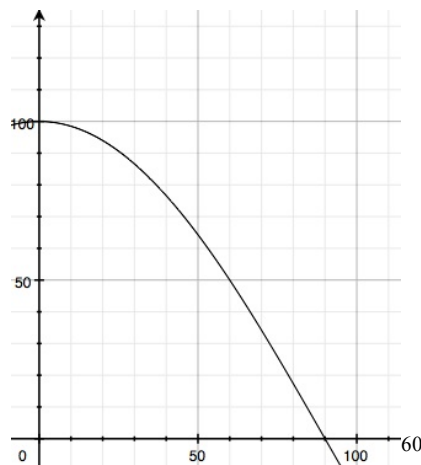


Blake's challenge is at least as spatial as it is spiritual; symmetry presents a problem for framing, which we see an example of if we look closely at this second tiger's lumpy back. Rather than drawing a tiger outline in profile and filling in stripes serially like a barcode, Blake has attempted to give the tiger's outline as at least partially constructed by the stripes. This is because, visually at least, things don't properly have outlines except given by visual contrast against a background; and in the tiger's case, that contrast is defined by the last stripe visible on the animal. What is more, the closer the animal comes to a full frontal presentation, the closer together are packed the stripes on its side and the negative spaces between these stripes, as a result of the two-dimensional imagistic projection of a three-dimensional object. We can see this problem illustrated quite clearly with the below stock model of a zebra, when held against a white (or for that matter black) background:

⁵⁸ Blake, "The Little Girl Lost," in *Songs*. *BlakeArchive.org* (image detail). 2003. March 7, 2015. <
<http://www.blakearchive.org/exist/blake/archive/object.xq?objectid=songsie.b.illbk.41&java=no>>



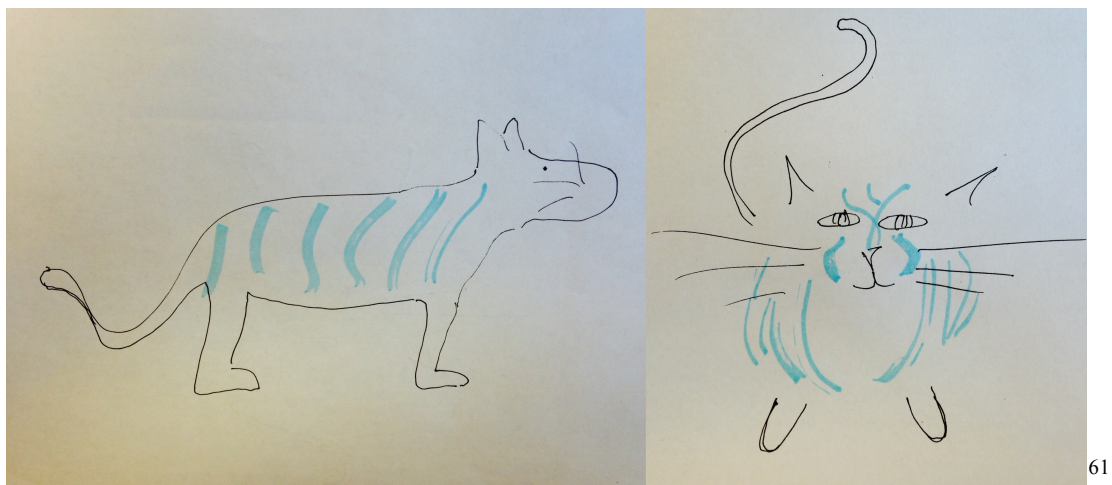
As we see, the stripes become increasingly thinner as the zebra's image becomes more symmetrical, and at the zebra's edges it becomes harder to tell where they end; we can see where the black stripes end, but there is always a chance that the zebra's body extends marginally farther to the left or right, as the white space between black stripes. If we treat any given zebra's stripe as a flat surface, its apparent width decreases in relation to its angle of incidence with our eye line as a simple cosine function: if at zero degrees (the profile view of the zebra) a flat stripe takes up an apparent width of one hundred units, then at sixty degrees it would appear fifty units wide, and at ninety degrees, it would take up an apparent width of zero.



⁵⁹ "3d zebra horses model," *TurboSquid.com* (various screenshots). Feb 12, 2009. March 7, 2015. <<http://www.turbosquid.com/3d-models/3d-zebra-horses-model/444082>>

Bilateral symmetry, in other words, is exceedingly difficult to frame.

And yet this question as to how we would go about framing symmetry essentially answers itself, if only in practice. If the last marginal slice of the tiger's visible body does end up being the space between his stripes, it is not as though we lose the cat by failing to draw that gap, or, we should say, interval. This solution, of presenting the problem of framing as a literal problem of drawing, has been useful to me as a classroom exercise when teaching Blake's "Tyger." I hand out two incomplete views of a tiger, one in profile and one in a frontal view. We add stripes to the profile tiger, swap papers, and discuss, and then do the same to the frontal tiger, swap and discuss:



It's always immediately apparent which of these is more difficult, that is, which of Blake's presentations actually challenges our capacity for visual representation. But it's also apparent to anyone drawing these tigers that the problem can't be solved just by adding more lines; as we fill in the gaps, the tiger takes shape but only to a point, beyond which it begins to lose its shape again. As Nancy Armstrong has argued elsewhere, the

⁶⁰ Basic cosine graph, made using the Mac OSX Grapher application.

⁶¹ Worksheet, and my own drawings.

stripes make the zebra, and not the other way around.⁶² The problem that symmetry poses for framing, in other words, is that it swallows up the frame that is meant to enclose it: we could always add a bounding line around our tiger, or our zebra, but it would either ruin the look of the pattern, or iterate on the pattern and give us a slightly differently-shaped creature.

Clearly, then, Bloom has it backwards when he presents the scene of reading as that of poetic creativity, or readerly poesis, overcoming its own mental limitations. Instead, we see a puzzled audience (and this would have to include Blake) fiddling with a difficult representational problem by provisionally applying various rules and evaluating its outcomes. If we can see that it is a fool's errand to search after the final, definitive "framing" for a tiger's symmetry, we must also recognize that it is only through a process of symmetrical framing that this error is made visible. To return to my classroom example, we make a tiger by adding symmetrical stripes until it looks like a tiger, and then we stop. Our success is measured by comparison either with classmates' drawings, or if we are alone with Blake's tiger in "Little Girl Lost", but ultimately within the domain of representation, based on provisional rules for whether the tiger looks "right". And, as with Kant's hard-to-visualize example of chirality, the only way to determine whether or not someone (be it a classmate or Blake) has drawn a tiger is through a

⁶² Nancy Armstrong, "On Charles Darwin's *The Descent of Man*, 24 February 1871," *BRANCH: Britain, Representation and Nineteenth-Century History*. Ed. Dino Franco Felluga. Extension of *Romanticism and Victorianism on the Net*. <http://www.branchcollective.org/?ps_articles=nancy-armstrong-on-charles-darwins-the-descent-of-man-24-february-1871>. Armstrong's argument relates to Charles Darwin's famous example of the donkey, painted to look like a zebra; this is essentially an argument about "satisficing", though she does not use the term explicitly.

judgment of taste, whose results are necessarily communicable, even if we choose to keep our opinions about our partner's cat-drawing skills to ourselves.

There is a recent strain of Blake scholarship that explores the potential for reading him as a rules-based experimentalist of this sort. Peter Otto's longer study of Blake, his 2000 *Blake's Critique of Transcendence*, attempts a unified reading of the *Four Zoas* as a rigorous, extended immanent critique, contrary to the tendency to read it as an incomplete, fragmentary work. Otto argues that "there are a number of loose, but nevertheless striking correlations between Kant's faculties and Blake's Zoas and Eternals."⁶³ Of course, these are the fallen forms of the human faculties, organized as "a contingent construction rather than a natural form,"⁶⁴ and it is the task of the reader to awaken to this contingency and attempt the reformation of his sensorium as a means of reforming lived experience as a whole. The only viable way forward, for Otto, is an immanent critique of reason, one which is rightly skeptical of uncritical engagements with the bodily, precisely because the organized body is expressive of the system that ordered it. I believe his understanding of Blake's project aligns in many ways with my own, in which Blake's abstractions help us to come to terms with our current systems of representation, and to radically experiment with various rules from various systems in order to see how these might be transformed.

However, Otto's ideal reader and the form in which this critique is articulated creates problems of communicability that are material to the question of formal experimentation at hand. Otto's work participates in a line of Blake criticism going back

⁶³ Otto, *Blake's Critique of Transcendence: Love, Jealousy, and the Sublime in the Four Zoas* (Oxford: Oxford University Press, 2000) 45.

⁶⁴ *Ibid.*, 252, fn. 10.

to Northrop Frye that attempts to unify individual texts, and oftentimes even his entire prophetic series, into an extended work of critical philosophy. Reading these justifications of the architectonic coherence of his project oftentimes mirrors the dizzying confusion of reading his prophetic works themselves, and we are left to wonder what has been gained. What is valuable in formal experimentation, from the perspective advanced in this chapter, is the facility with which it can be adopted and iteratively revised on a broad basis. When we insist that Blake's critique only functions as a coherent whole, we restrict the communicability of his innovative work.

Mike Goode, in a 2012 article for *Representations*, also attempts a reading of Blake as a rules-based experimentalist, but in a manner that directly challenges this architectonic model of reading. Against such readings, which favor a "sublime" Blake who can only be grasped by the heroic efforts of individual readers overcoming their own blindnesses in an agonistic encounter with the difficult-to-unify, contradictory text, Goode proposes that we read for the "beautiful" Blake, who distracts us with his marginalia:

... continually distract their audiences, especially when the tiny images that populate the margins blatantly compete with the text.... In fact, insofar as Blake's diminutive marginal images often depict meandering vines, serpentine flames, and figures paused in aimless flight, they tend to function as emblems of their own powers of interruption, self-reflexive

signs of their own prowess at launching readers' eyes and minds away from the page.⁶⁵

This beautiful Blake, in distracting us, invites us to embrace, rather than resist, his texts' tendency to fragment themselves. For critics who favor the sublime Blake, "such deflections presumably constitute evidence of the reader's failure to 'get' Blake, for the powers of revelation that they attribute to Blake's art depend entirely on a reader able to handle the dynamism of his word-picture integration" (*JL*, 18). This power to distract, he argues, enacts the disruptive power of beauty, whose pleasures exceed the systems that produce them and even the individuals who enjoy them.

At the same time, this refusal to "get" Blake participates in what Goode sees as a sort of anarchic "regulatory power":

[T]he activity of proliferating regulations can itself constitute a mode of radical and emancipatory deregulation, a kind of legislative *reductio ad absurdum* whereby the vastness and heterogeneity of the law, printed and otherwise, moves the world toward infinitude through the culture-wide cacaphony of individuals' own hegemonic inner voices. ... From the perspective of the dominant strain of late eighteenth-century British aesthetic philosophy, which subscribed to a proto-Kantian legislative conception of beauty, there is something positively proverb-like about an image that circulates because people find it beautiful. (*JL*, 25)

Pitched against the architectonic Blake, this proverbial Blake does look rather emancipating. And yet we find in this model of freely-legislating Blake consumers a

⁶⁵ Mike Goode, "The Joy of Looking: What Blake's Pictures Want," *Representations* 119:1 (Summer 2012) 1-36 at 17-18. Hereafter cited as *JL*.

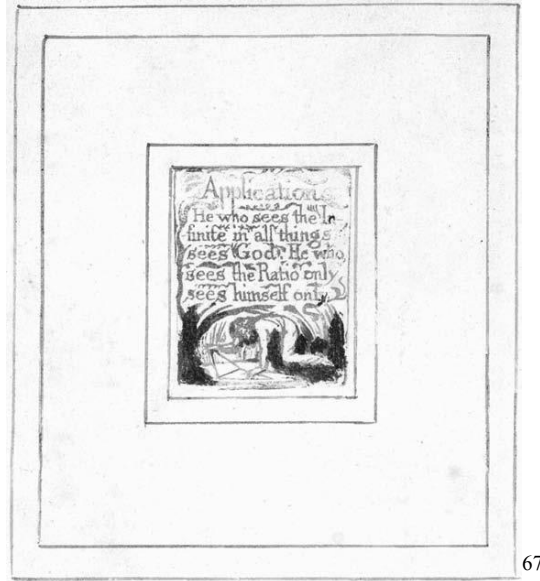
mirror image of Otto's problem with communicability. Goode's stated intentions are to resist the individualism of the agonistic readerly experience in order to think "about ways in which his art might want to do political work apart from the understanding of any individual reader or kind of reader" (*JL*, 19). But proposing a sea of liberated, self-regulating individuals, far from overcoming the problem of individualism, simply renders individual legislation immune to any critique. Where Otto proposes a system so intricate that we begin to doubt our ability to communicate it, Goode proposes an indeterminate field of elective affinities in which conscious communication seems irrelevant, or even detrimental to the appropriate functioning of the text.

If the stated political goal of this reading is to radicalize Blake's texts under the heading of pleasure, in which elective affinities distract us and draw us away from our learned impulse to rigidly systematize Blake under the heading of psychology, history, geography, etc., it effectively re-instantiates an organicist aesthetics renovated for the consumer economy. Goode's good Blakean readers "conceive of the illuminated books less as objects created for individuals than as agents in their own right, as viral life-forms with their own, encoded historicity" (*JL*, 29). In spite of the apparent rejection of individualism, this is an uncritical embrace of the related rhetorics of internet marketing ("going viral") and the informationalist geneticism of Richard Dawkins ("the selfish gene"), both of which take as their standard of measurement the ability of "memes" to colonize systems through self-replication. The consensuality of communities of readers here is perversely guaranteed by the fact that they sign on unconsciously; they are serendipitously grouped by virtue of their constitutional responses to Blake's strangely beautiful attractors, in the same way that Netflix users are grouped according to their

expressed preferences. Groups form according to pre-linguistic preferences, articulated in the micro-decisions of distraction to which critique has no access; this is the dream of free-market voluntarism that mistakes choice for freedom, the result of which is an updated version of Schiller's organic state, in which the parts know their places not because the artwork organizes them, but rather because it allows them to "deregulate" (*JL*, 24) their sensoria of external voices in favor of an unconscious self-regulation (*JL*, 23). We will return to the dangers of abandoning critique in favor of capitalism's naturalized discourse of impulse and choice in the final chapter on De Quincey, but here it is enough to gesture towards William Keach's work, which argues that the conflation of liberation and the arbitrary power of signification implicit in a nominally unregulated aesthesis disables the potential for a critique of revolutionary violence.⁶⁶

Attempting to work between Otto and Goode, I will close by making a practical case for the value of "getting it" with Blake, in the pursuit of formal experimentation. This does not need to take place as a psychodramatic struggle for meaning between lonely readers and encrypted texts; as we saw above, it can be pursued as a group activity, and even in the limited company of one, it can be undertaken with stakes as low as judging how well one is doing at picturing something. I remain with Goode not to undermine an argument whose motives and general thrust I agree with, but because the artefacts that interest him interest me, and I hope to show that Blakean critique has more than the two alternative endings he establishes, as ruled either philosopher-priests or anarcho-capitalists. Goode's exemplary figure for the sublime Blake of contradiction and heroically individual readership the tenth plate from *There is No Natural Religion*:

⁶⁶ William Keach, "The Language of Revolutionary Violence," in *Arbitrary Power: Romanticism, Language, Politics* (Princeton: Princeton University Press, 2004) 123-58.



His reading of this plate is that it both demands we cleanse our perception, and subtly points out how difficult this is. It gestures towards the infinite, but it splits “In-/finite” between two lines, and, geometrically, it calls attention to its own participation in a repressive framework: the “border of concentric geometric boxes surrounding its own call to see the infinite in everything also echoes its depiction of Newtonian constraint and blindness, thus implicitly acknowledging his art’s constraint by the Newtonian universe” (*JL*, 12). A competent reader of this sublime Blake will be roused to the recognition of his own narrow-mindedness by seeing his own participation in the apparatuses of framing containment.

It is odd, however, to find so egocentric a purpose as the primary motivation of a plate that ends by decrying the sort of reader who not only “sees the Ratio only” but who also, as a result, “sees himself only.” It is worth asking what, beyond the ratio, we are meant to see, what beyond ourselves, and what these have to do with one another. We could begin by noting that in the plate from *No Natural Religion*, Blake is counseling

⁶⁷ *JL*, 12, figure 1.

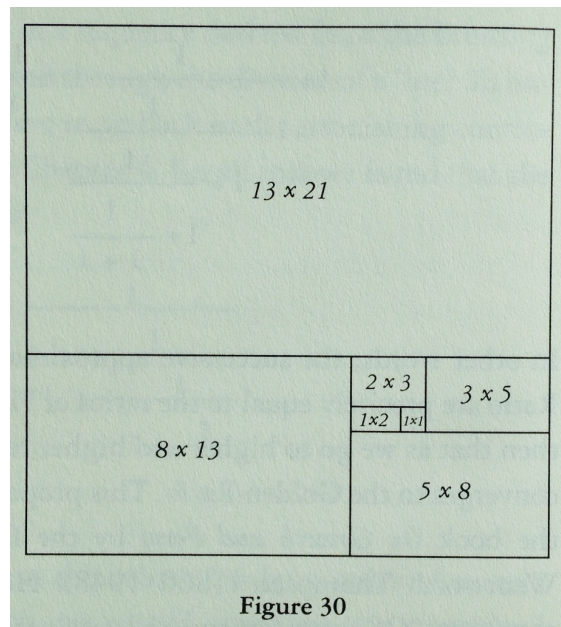
against seeing “the Ratio *only*,” not against mathematics or even ratios as such. And if we consider the compositional of this plate, we find that its framing devices conform to classical geometrical ratios generative of fractal patterns. Based on my rough measurements (pixel counts) on the online Blake Archive’s high-resolution scans of the plate, I have determined that Blake’s framing, bounding lines conform to two classical geometric ratios, the so-called “golden” and “silver” ratios. First, the so-called “golden ratio”: based on my measurement, the large inner frame that contains the blanks space has a width of ratio 1.60 to the height of the next-smallest frame. This is almost exactly the golden ratio, of $1 + \frac{\sqrt{5}}{2}$ (Wikipedia gives the decimal approximation as 1.6180339887; it is now commonly designated by the Greek letter φ).⁶⁸ This ratio appears in Euclid, as the "extreme and mean ratio," and his construction of this ratio containing an irrational number is geometrical.⁶⁹

But it was in the early-modern period that this irrational ratio came to be used in the production of complex geometric forms, based on the work of Leonardo Fibonacci. Mario Livio's history of the ratio illustrates how it can be used recursively to generate nested rectangles: starting with a "golden" rectangle (i.e., of proportions 1:1.618), subtract a square from this rectangle and you will be left with another, smaller golden

⁶⁸ "Golden Ratio," *Wikipedia.org*. February 22, 2015. March 7, 2015.

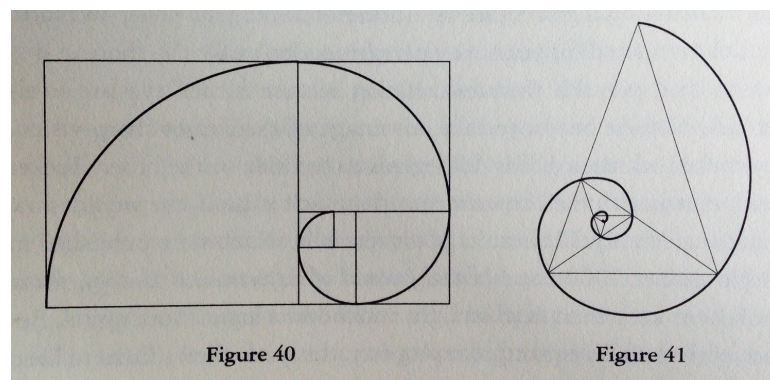
⁶⁹ I borrow from Mario Livio's 2002 history, *The Golden Ratio* (New York: Broadway Books, 2002). If a line AB is split into segments with an intermediate point C, those segments conform to the golden ratio if $AC:CB::AB:AC$. "[L]ine AB is certainly longer than the segment AC; at the same time, the segment AC is longer than CB. If the ratio of the length of AC to that of CB is the same as the ratio of AB to AC, then the line has been cut in extreme and mean ratio, or in a Golden Ratio" (3).

rectangle.⁷⁰ Or, working from the inside out, one can generate one golden rectangle after another, based on the Fibonacci progression (1,1,2,3,5,8,13,21...).



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If we inscribe a curve according to the intersections of these nested, alternating rectangles and squares we construct a spiral whose radius grows logarithmically,⁷² and is commonly referred to as a Fibonacci spiral:



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⁷⁰ Livio, 85.

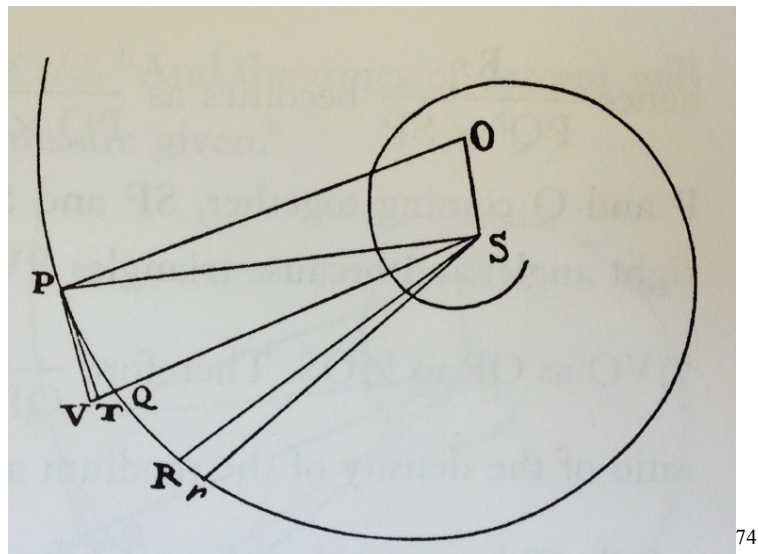
⁷¹ Livio, 104, figure 30.

⁷² Ibid., 116-17.

⁷³ Ibid., 119, figures 40-1.

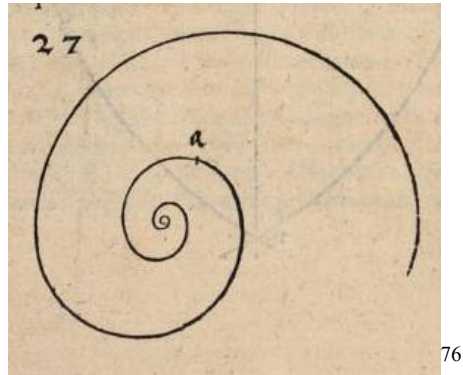
Livio identifies the popularization of the golden ratio not to Fibonacci, but to Luca Pacioli, whose 1509 *Divina Proportione* and its illustrations by Leonardo Da Vinci, he argues, made procedures of geometrical construction available to artists generally. I have found the history of the experimentation with and transmission of fractally-generated spirals to be very difficult to trace, and so my historical picture is admittedly incomplete. However, I have identified two points of possible intersection between Blake and people constructing these spirals *without* the fractal nesting of rectangles.

These spirals are in general referred to as "logarithmic" or "equiangular", because their radii grow logarithmically, and the angle between any given radius and the spiral's tangent at that point is always the same. In Book 4, Section 2, we do find Newton using these equiangular spirals as one way of thinking about the gravitational force's rapidly decreasing pull as distance from the source increases, and the motion of a body through mediums with varying resistance:



⁷⁴ Isaac Newton, *Principia: Mathematical Principles of Natural Philosophy*, trans., ed. Cohen and Anne Whitman (Berkeley, Los Angeles: University of California Press, 1999) 681.

Less rigorously, and perhaps less decisively, we find another potential point of contact in the geometrical experiments of Albrecht Dürer, a favorite of Blake's.⁷⁵ In his 1605 *Institutionum Geometricum*, which drew heavily on the *Divina Proportione*, we find Dürer, at the end of a lengthy discussion of different types of curves, constructing what looks like a logarithmic spiral freehand:



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This is all meant by way of recontextualizing Blake's argument that we should not see the ratio *only*, but also what it can be used to build. As we can see, there is a hard-to-trace but very real history of irrational ratios being used to generate apparently organic forms.

If we return to Blake's *No Natural Religion* and overlay nested golden rectangles on it, we can see these are being used to construct the distances between the inner frames to the distance to the outer frames. I have highlighted red the edges in the geometrical construction that intersect with the edges of Blake's frames:

⁷⁵ I was unaware of Durer's treatise on applied geometry before reading Livio, 137-42.

⁷⁶ Alberti Durero, *Institutionum Geometricarum* (1605). *Google Books*. March 13, 2012. March 7, 2015. <<https://books.google.com/books?id=0h1QAAAcAAJ>>



If we apply this construction to the framed image, we find Blake using the inscribed "Fibonacci" spiral to produce the tree bough that protects the geometer. Specifically, if we begin constructing these spirals in a counter-clockwise manner outwards from the point at which the geometer's compass touches the triangle's base on the right, we see that three spirals conform closely to the edges of the bough and one of its offshooting limbs.

⁷⁷ Constructed by modifying Wikipedia's vector image of golden rectangles. "Fibonacci Spiral". *Wikipedia.org*. March 17 2008. 7 March 2015. <
http://en.wikipedia.org/wiki/Golden_ratio#mediaviewer/File:Fibonacci_spiral_34.svg
 >. Overlaid on Blake, *There is No Natural Religion, Copy L, c. 1795*. (object 10)
BlakeArchive.org. 2004. March 7, 2015. <
<http://www.blakearchive.org/exist/blake/archive/object.xq?objectid=nnr.l.illbk.10&java=no>
 no>



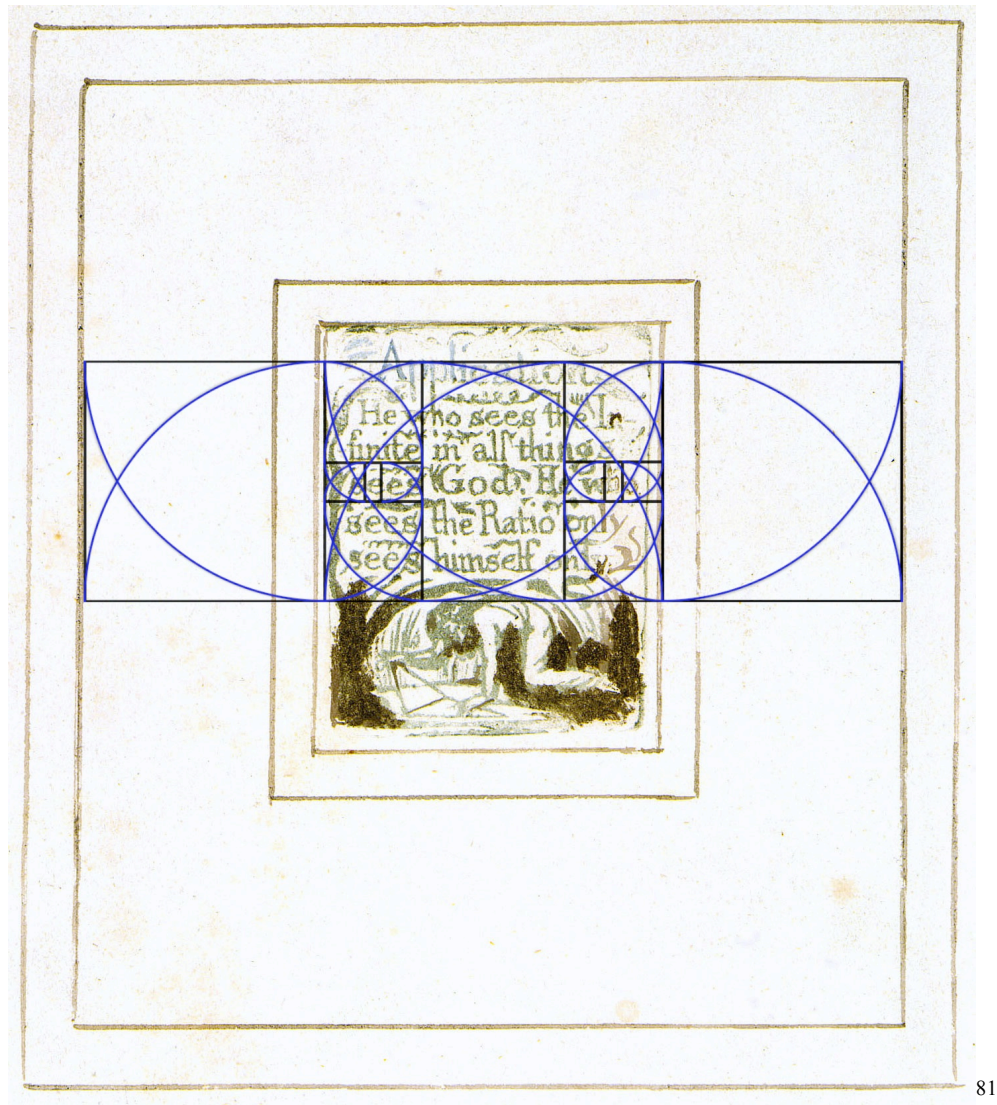
But more exciting, to my mind, is Blake's compositional experimentation with the so-called "silver ratio".⁷⁹ The large internal frame containing the blank space has a width that I measure at 1.42 times the width of the small inner frame, which contains the image-text proper; Wikipedia gives the proper ratio as 2.4142135623, an approximation of $1 + \sqrt{2}$.⁸⁰ The silver ratio can also be used to generate fractal spirals by nesting rectangles based on these dimensions. Overlaying root 2--or "silver"--rectangles and their correspondent curves on Blake's image, we find that the interfering pattern at various points match closely the curling branches that climb up the left-hand frame. In the image below, I chosen what I feel is the best alignment, though it should be noted that I have also shifted the rectangles horizontally somewhat, to align their edges with what on close inspection looks like an informal, fifth frame marking a gap between the image proper and the innermost straight-edge frame. Doing so brings the match between the spirals and

⁷⁸ Ibid.

⁷⁹ I have been unable to find a good history of root 2 rectangles, but extensive practical instructions for the constructions of figures based on this proportion (and others) can be found in Kimberly Elam, *Geometry of Design: Studies in Proportion and Composition* (New York: Princeton Architectural Press, 2001), 34-42.

⁸⁰ "Silver ratio". *Wikipedia.org*. January 27, 2015. March 7, 2015. <
http://en.wikipedia.org/wiki/Silver_ratio>

the branches into clearer focus; readers will of course have to judge for themselves whether this adjustment constitutes fudging the math on my part (or perhaps on Blake's), and whether they find convincing in any case the fit between the branches and the curves.

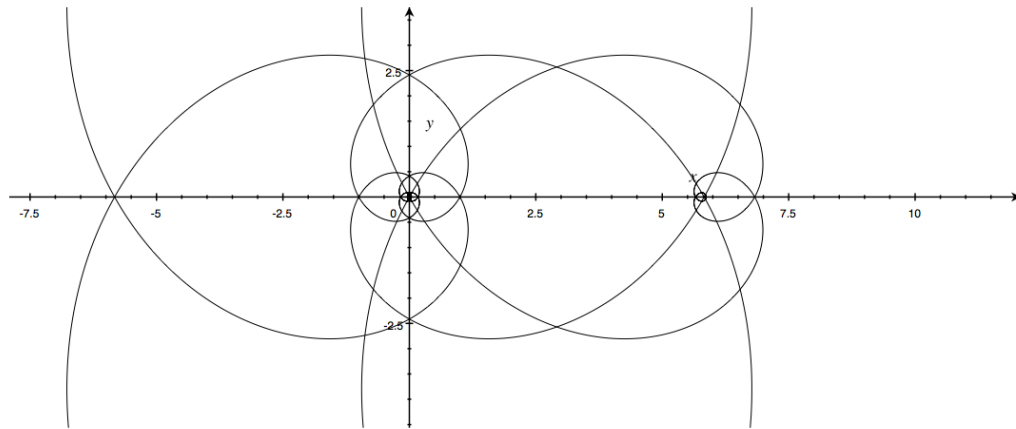


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⁸¹ I drew/generated the pattern using a simple image editor, modifying Wikipedia's vector image of silver ratio. "Silver rectangle". *Wikipedia.org*. January 12, 2015. http://en.wikipedia.org/wiki/Silver_ratio#mediaviewer/File:Silver_rectangle.svg. Overlaid on *There is No Natural Religion*, object 10.



It is worth noting that these curves are somewhat imprecise, being my own approximations using ellipses; a precise plot of the same pattern looks like this:



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Blake certainly does condemn the dull ratio, but he seems to think there are some exciting ratios as well.

Blake is clearly qualifying his critiques of Enlightenment rationalism by showing that he can geometrize with the best of them, and that such geometric constructions can produce beautiful forms. The “marginal figures” and “meandering vines” that Goode presents as participating in an aesthetics of beautiful distraction rather than of a sublime concentration also seem to participate in a rule-based system for the generation of apparently organic forms. This potential for the geometric generation of beauty in a careful reading of Blake’s texts should therefore force a reconsideration of the terms that Goode establishes as a way beyond the Blake of the sublimely creative readerly encounter. Simple fractal forms are not a mystical secret, but actually quite easy to

⁸² Constructed on the Mac OSX Grapher application. The above shows six curves given by variations on the parametric equations:

$$\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -e^{\left(\frac{\ln(1+\sqrt{2})}{2}\right)t} \cos(t) \\ -e^{\left(\frac{\ln(1+\sqrt{2})}{2}\right)t} \sin(t) \end{bmatrix}, t = -10 \dots 10.$$

My starting point for these equations was "Logarithmic Spiral". *Wikipedia.org*. October 14, 2014. March 23, 2015.

<http://en.wikipedia.org/wiki/Logarithmic_spiral>

approximate given a few basic rules, and a compass. Rather than ironically distancing ourselves from the pictured geometer, we might instead take him as an example, and begin sketching and fiddling with the image to see if anything interesting comes out. In this particular case, I found the silver and golden ratios operative in this image by measuring every line in the picture, and using a spreadsheet to calculate all the ratios between all of these. This may seem less thoughtful an approach to the exercise than Blake would like, but I want to highlight geometry's necessarily programmatic nature, whether one uses a computer or a compass. The point is that however much he is challenging us to look beyond what he is showing us, he is also giving us the tools we need and even showing us how to construct what it is that we are seeing. This begins to look less like a spiritual fight and more like a middle-schooler's workbook, or a book of puzzles in which the procedures and solutions are easily communicable, but it's no fun to have answers simply given to you.

Of course, I am not arguing that there is a single right way to understand Blake, or even to trace his designs. These geometric sketches are meant to remind us of the potential for readerly experimentation with Blake's image-texts, while keeping in mind that these experiments are *only* communicable as formal experiments, that is to say as more or less simple sets of rules for producing different experiences. And from this perspective, the problem with rationalism ends up being not the impulse towards axiomatization or mathematization in the natural sciences, but the tendency to see such formalization as underlying laws rather than as sets of rules for producing empirical effects. In fact, if I am right that Blake's response to the apparent formalizability of experience is to engage in proliferating formal experiments, then we should see him

embracing mathematics, not as a totalizing system but as a treasure trove of resources for thinking through different representational possibilities. To read Blake in this way would not be to subordinate his art to a rigid set of underlying mathematical principles but just the reverse. It would show his engagement with the mathematized sciences as potentially transformative of those sciences; his experimentations with their forms could be seen as resisting their tendency to value systemic closure, precisely by exploring these forms' generative potential. This establishes Blake's artistic relationship to the Newtonian sciences as one of critical recuperation, in which the scientist's capacity for abstraction is reconceptualized as an ability to produce complex effects through the rigorous application of a few basic rules. We will finish, then, by gesturing towards the potential for a reconsideration of Blake's relationship to Newton by way of attending to his explicit use of geometric figuration in his 1795 portrait, *Newton*.

The painting itself seems to be a development of his geometrician figure from *No Natural Religion*; it depicts a profile view of a nude, muscular Newton hunched over, with his back to the coral reef on his left that he is sitting on, and facing to his right a roll of parchment with a geometrical figure that he seems to be measuring with a golden compass. This left-to-right progression has traditionally been narrated as a declension from the strange beauty of nature to what Blake infamously called "Single vision & Newtons sleep," namely the experiential and moral blindness (what the Greeks called *scopia*) of rationalism.



W. J. T. Mitchell's 1995 essay on Newton, "Chaosthetics: Blake's Sense of Form," is still the best account of the painting's visual peculiarities and the problems this poses for our understanding of the artist's relationship to the question of abstraction.⁸⁴ Mitchell's neologism "chaosthetics" gestures towards the possibility of a robust account of Blake's minute particulars, namely empirical reality's ability to exceed representational systems nominally imposed on them from without. This concept allows Mitchell to plumb to a greater profundity Blake's ironization of the famous physicist/mathematician. Not only is Blake turning his back on the beauty of nature, Mitchell argues, but he is turning his back on a part of himself; the cleanliness of the geometrical figures is a direct product of his

⁸³ Blake, "William Blake - Isaac Newton." *Wikipedia.org*. June 13, 2011. March 7, 2015. <<http://upload.wikimedia.org/wikipedia/commons/0/0e/Newton-WilliamBlake.jpg>>

⁸⁴ W. J. T. Mitchell, "Chaosthetics: Blake's Sense of Form," *Huntington Library Quarterly*, 58:3 (1995) 441-58.

rejection of the reef's messiness. In doing so, he effectively revises the dialectical account with which Ault opens his book, namely that Newton

... is constructing a limited, fixed, and unchanging model of his fundamental bodily experiences to stave off the sense of the dissolving quality of the outer world. Yet ... it is this very act of constructing the model that separates the world into inner and outer, definite and indefinite, action and background, symmetry and asymmetry. The background is both the cause and the effect of the central action.⁸⁵

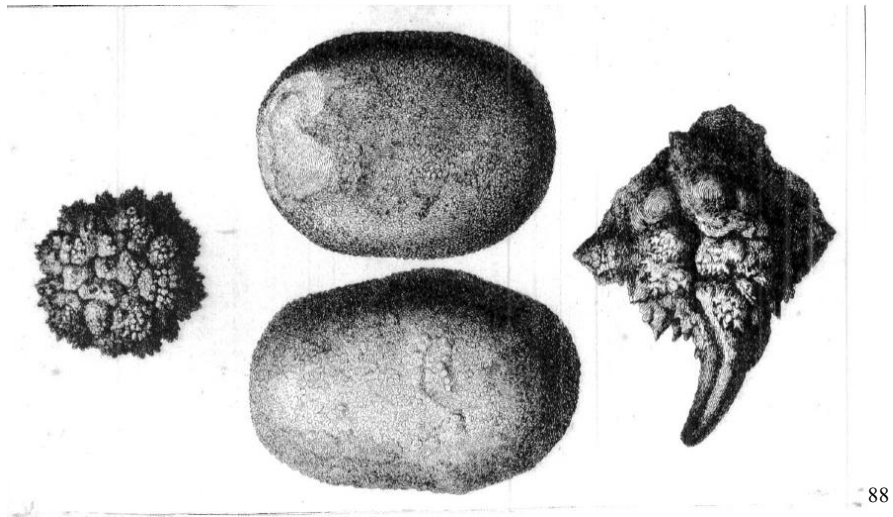
In this account, the fear of chaos and the obsession with order both, ultimately, produce an impoverished, undifferentiated experience. Mitchell's implicit critique, then, is that even if Newton can't unite these visions of order and disorder, this isn't catastrophic, because we can by imagining what their relation might be. The relation he proposes relies on a compelling historicization of the painting's visual cues; Mitchell reminding us that the Romantic period saw a redefinition of coral from a plant to an animal organism, and also, and also for reefs, as being accumulations not simply of skeletons or dead corals, but also of the excrement of these animals.⁸⁶ Newton, in other words, is sitting on a pile of his own shit; the visual messiness of the reef is, in this sense, a physical messiness.

This visual messiness is indispensable to Mitchell's "chaosthetics." On the one hand, he argues that Blake's process for producing "these color effects is also the direct antithesis of the linear drawing procedures that produced the figure of Newton. This sort of color printing involved the application of colors to a piece of millboard that was then pressed against the paper and pulled away, leaving an unpredictable and random pattern

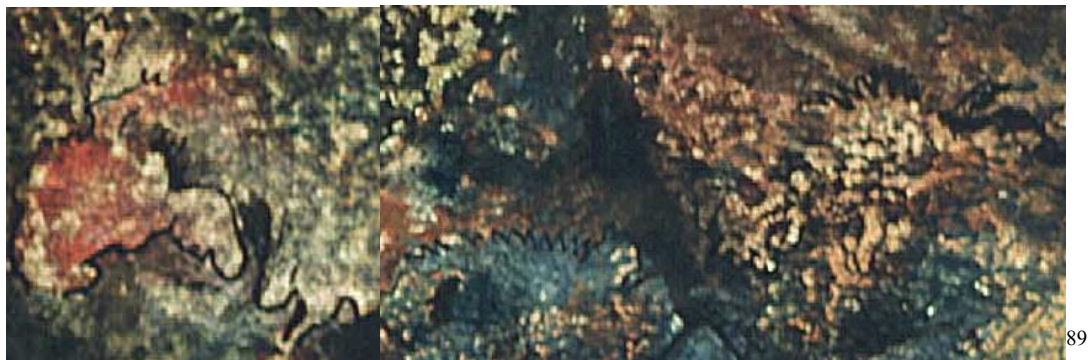
⁸⁵ Ault, *Visionary Physics*, 4.

⁸⁶ Mitchell, "Chaosthetics", 457-8.

of mottled impressions.”⁸⁷ And on the other hand, he underscores his scatological argument by drawing on an observation made by Robert Essick, about the visual similarities between Blake’s drawings of coral and his 1793 engravings of passed kidney stones for a medical manual:



Mitchell, then, gives us Newton, the producer of beautiful geometry and more beautiful shit. But Blake’s chaos is not quite as chaotic as Mitchell makes it out to be. For one thing, his coral’s random mottling needs to be sculpted on a minute level in order to look like coral at all:



⁸⁷ Ibid., 456.

⁸⁸ Robert N. Essick, *William Blake’s Commercial Book Illustrations* (Oxford: Clarendon Press, 1991) plate 123, taken from James Earle, *Practical Observations on the Operation for the Stone* (London: J. Johnson, 1793, 1796, 1803).

In some places (see left-hand detail), jet black outlines both trace and obscure color gradients in order to give sharp contrasts where otherwise there would be mush. We see, in such instances, an apparently “organic” or “chaotic” geometry in the artist’s ink, as he follows and annihilates a zone of problematic indeterminacy along its semi-random path. In other places (see right-hand detail), we see a recognizably shapely flourish, where the pen’s squiggles and spikes are repetitive enough to be experienced by the too-observant viewer as intentional patterning. On the micro and macro scale, the reef is produced by Blake’s dark excisions of explosive color, as he sculpts the noisy landscape into its shape; and even shit has a shape.

And yet it would be a mischaracterization to say that this observation, that Blake’s randomness is only pseudorandom, somehow contradicts Mitchell’s argument. His discussion of chaos is in fact informed by a notion of subtractive representational order; the essay is headed by two epigraphs, one a quote of Derrida’s, making the rather Kantian assertion that we cannot experience pure randomness.⁹⁰ In that vein Mitchell finds Newton’s mistake to be the perfectly human one of abstraction; this sense of the necessity of the evils of representation allows us to see that Newton is being ennobled as much as he is being ironized: “[T]he beauty and dignity of Newton is ultimately deepened, not defaced, by Blake’s rendering of the contradiction between his cerebral, formal abstractions and the absorption of his body in the chaotic materiality of nature.”⁹¹ But it is worth remembering that in Kant, this unavoidable mistake we make, of sliding

⁸⁹ Blake, *Newton* (image enlargement).

⁹⁰ “One Cannot in fact conceive of an unorganized structure.” (Mitchell, “Chaosthetics”, 441, quoting Jacques Derrida, *Writing and Difference*, Trans. Alan Bass [Chicago, 1978], 278.)

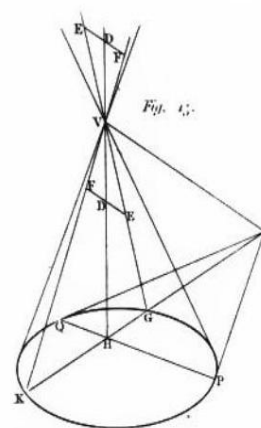
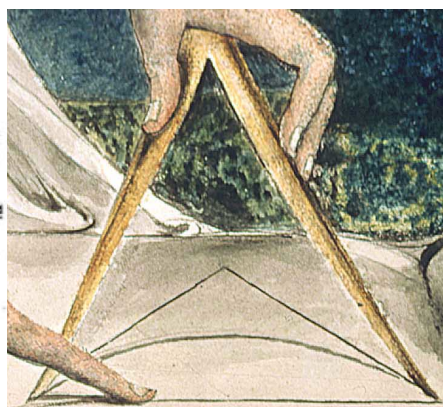
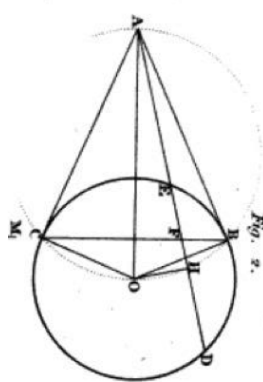
⁹¹ Mitchell, “Chaosthetics”, 458

from subjectivity to objectivity in aesthetic judgments, of believing that when we call a thing beautiful that beauty is a property in the object itself, is always made for the purpose of ensuring the communicability of these judgments: "[I]t must be the universal communicability of the mental state, in the given presentation, which underlies the judgment of taste as its subjective condition, and the pleasure in the object must be its consequence" (*CJ*, 217 [344]).⁹² For both Kant and Mitchell, our erroneous representational attributions of qualities to the real world are meant to serve as a starting point for coming to terms with that which lies outside our representational capacities. For Kant, this outside is defined other people and their opinions; aesthetic judgments act as training wheels for determinations of morality, insofar as our embrace of universal communicability gestures towards the possibility of universal assent. For Mitchell, it is the bottomless contingency of material existence; the irrepressible mismatch between our necessary model and the riotous existence it points towards forces us to produce new ways of seeing and thinking. But if Kant's model is problematically normative, Mitchell's lacks a good account of what this subtractive, or abstracting representation looks like, and how one would go about communicating it. As a result, representation is ironically impoverished just at the moment we need it to be robust, communicable, and as a result iterable.

Blake provides us with a richer account of abstract representation than has been, to my knowledge, appreciated. Mitchell (again drawing on Essick) in fact gives us our cue, by suggesting that Blake probably received his biological and visual ideas about coral from Abraham Rees's 1820 *Cyclopedia*, for which he was contracted to provide

⁹² We will revisit the question of this necessary mistake, which Kant calls "subreption," in section 0 of chapter 3.

illustrations on sculpture. If we look in the sections on geometry in the encyclopedia, we find a long entry on conic sections, or “conics,” the rather difficult three-dimensional geometry used since the Greeks to produce ellipsoids, hyperbolas, and parabolas, which is to say irrational geometric curves that resisted formal expression until the development of the calculus, or mathematics of the infinitesimal, by Leibniz and Newton.⁹³ As it turns out, the figure Newton is measuring, or taking the ratio of, with his compass, is not a simple triangle with a curve inscribed within it, but just the other way around, it is an isosceles triangle generated by tangents to a circle. More: his compass is not (simply) measuring the base of this triangle but itself standing as the triangle formed by the projection of this (from our perspective) equilateral triangle onto a cone whose base is the same circle to which the visible triangle is tangent:

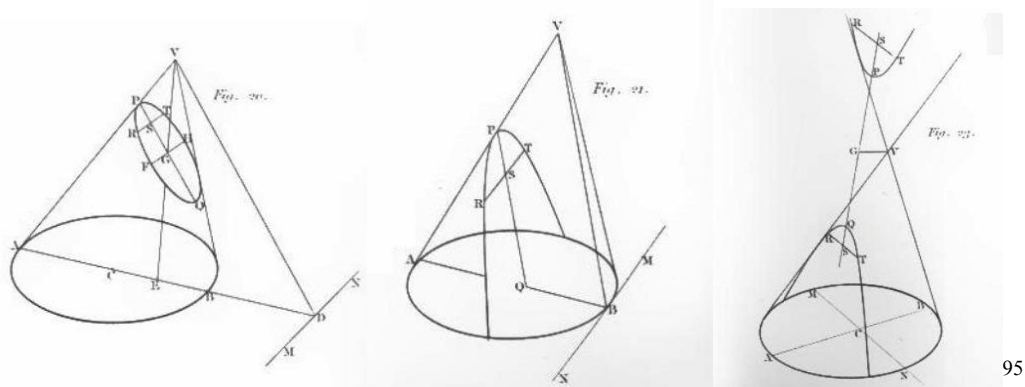


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⁹³ See Niccolo Guicciardini, "'Gigantic implements of war': images of Newton as a mathematician," in *The Oxford Handbook of the History of Mathematics*, eds. Eleanor Robson and Jacqueline Stedall (New York: Oxford University Press, 2009) 707-733, at 714-15.

⁹⁴ Center: *Newton* (image enlargement). Left and right: Abraham Rees, *Cyclopedia*, vol. 43, “Conics,” Plate II, figures 2 and 15. It is worth noting some compositional ghost lines in Blake’s drawing of the figure. The vertex of his compass is (perspectively?) imperfectly centered over the vertex of the drawn triangle, but there is a faint line moving up and to the right that, if extended, would center the compass properly. There is also a line moving up and to the left from the center of the figure’s base, which intersects with

The figure on the left is an early step ("fig. 2") in a proof for constructing conic sections; the figure on the right is in the latter stages ("fig. 15"), just before the curves are generated. Blake's diagram of a triangle drawn as the tangent to a circle is the first step in this complex geometrical proof; and the inclusion of his compass in the image bridges the early and latter stages. Just a few steps on from the right-most figure above, the proof in Reese's encyclopedia illustrates these curves for us:



Newton is certainly turning his back on the particolored beauty of the natural world, but his construction is not without its own beauty. When we see this painting, we are meant to see Newton constructing the foundational curves of calculus in his visual imagination, and it seems as though it would be a productive thing if the viewer were to participate in these constructions.

I should clarify here that Blake could not have taken these conic section demonstration diagrams from the *Cyclopedia*. In correspondence with me in early March 2015, Robert Essick helpfully corrected me by observing that the relevant plates are dated

the triangle right angles. These lines do not, as far as I can tell, allow for the construction of anything other than conic sections. However, in the actually-drawn triangle, the ratio of the right side to the base, by my estimate, comes out at 0.59, which is very close to $1/\phi \approx 0.618$; the significance of this, is that (by my observational testing) a golden spiral can be drawn roughly to intersect all three vertices.

⁹⁵ Rees, *Cyclopedia*, vol. 43, "Conics," Plate III, figures 20, 21, 23 (ellipsoid, parabola, hyperbola).

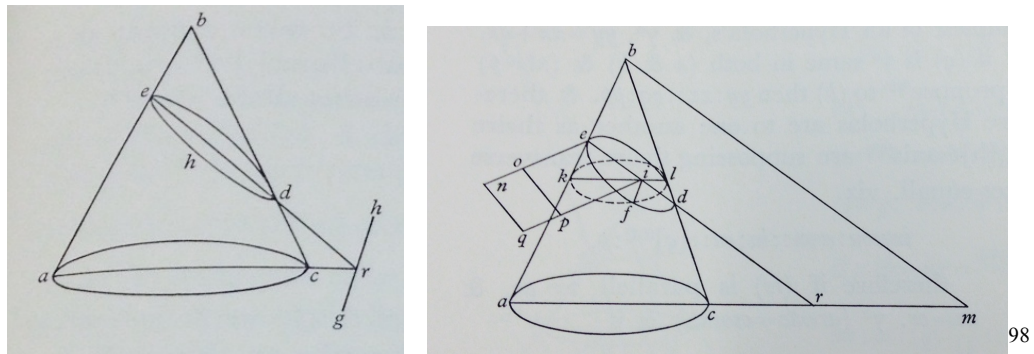
1807, too late for a direct influence on *Newton*, which cannot be dated after 1805. I use the above diagrams because they are the clearest, and most contemporary with Blake; but this particular demonstration of the conic sections does appear in print prior to the *Cylopaedia*, specifically in James Milnes' 1702 *Sectionum conicarum elementa nova methodo demonstrata*.⁹⁶ The connection to Newton is fascinating. Newton's *Principia* does not itself contain a proof on conic sections; he takes it for granted, in fact, that the reader understands the principles. But, as I. Bernard Cohen observes in his 1999 *Guide to the Principia*, Milnes is part of a long line of Newtonian geometers who supplemented this gap for the uninitiated:

In the eighteenth and nineteenth centuries, when Newton's treatise was still being read in British universities, authors of books on 'conic sections'—for example, W. H. Besant, W. H. Drew, Isaac Milnes [*sic*]—supplied a proof of this particular theorem [i.e., on ellipses from conics] in order to help readers of the *Principia* who might be baffled by the problem of finding a proof. They even chose to designate points on the diagram so that the final result would appear in exactly the same form as in the *Principia*.⁹⁷

⁹⁶ James Milnes. *Sectionum conicarum elementa nova methodo demonstrata*. Authore Jacobo Milnes, rectore de Ingestre in Agro Staffordiensi (Oxoniae, 1702) Eighteenth Century Collections Online. Gale. Rice University. March 17, 2015 .
 <<http://find.galegroup.com.ezproxy.rice.edu/ecco/infomark.do?&source=gale&prodId=ECCO&userGroupName=txshracd2542&tabID=T001&docId=CB128011551&type=multi page&contentSet=ECCOArticles&version=1.0&docLevel=FASCIMILE>>.

⁹⁷ I. Bernard Cohen, *A Guide to Newton's Principia*, in Isaac Newton, *Principia: Mathematical Principles of Natural Philosophy*, trans., ed. Cohen and Anne Whitman (Berkeley, Los Angeles: University of California Press, 1999) 1-370 at 330.

We should not be surprised, then, to find a similar (though not identical) diagram in one of Newton's unpublished, early notebooks:



This particular diagram is to be found in numerous eighteenth-century treatises on conics, but it is James Milnes' work that gives us the step-by-step construction that we find Blake's Newton alluding to and which appears several years afterwards in the *Cyclopædia*. My argument is not that Blake necessarily read Milnes, but that Milnes' method of demonstration was in circulation at the time when Blake might have encountered conics (Essick in the same correspondence suggested Bonnycastle's popular *Mensuration* as the most likely candidate, given that he produced the frontispiece illustration for it).⁹⁹ It is hard to imagine Blake not experimenting with reconstructions of these.

⁹⁸ These appear in Newton's "Fitzwilliam Pocket-Book," whose entries date between 1665-68. The editor's note observes that Newton's proof is a "simplification from [Frans] Schooten's *Commentarii in Librum II*," though I have not been able to obtain a copy of this book (Isaac Newton, *The Mathematical Papers of Isaac Newton*, vol. 1, ed. D. T. Whiteside [Cambridge: Cambridge University Press, 1967] 31 fn. 21, 44).

⁹⁹ See John Bonnycastle, *An Introduction to Mensuration, and Practical Geometry* (London: J. Johnson, 1787). Eighteenth Century Collections Online. Gale. Rice University. March 23, 2015.

<<http://find.galegroup.com.ezproxy.rice.edu/ecco/infomark.do?&source=gale&prodId=ECCO&userGroupName=txshracd2542&tabID=T001&docId=CW3310116618&type=multipage&contentSet=ECCOArticles&version=1.0&docLevel=FASCIMILE>>

In other words, in the same way that I proposed a revaluation of our readerly relationship to the geometer from *No Natural Religion*, I am proposing here that we are meant to non-ironically, or at least not-completely-ironically, identify with this Newton, who is capable of generating incredibly complex forms in his mind that in their own way rival the complexity of the coral and the winding paths that Blake carved through it in order to give it its shape. What is missing from Mitchell's argument about *Newton*, then, is a full appreciation for Blake's appreciation of Newton. I take Eduardo Paolozzi's *Newton After Blake*, both in its most famous form as a sculpture for the British Library and in several of its variations, to be offering a corrective to the oppositional reading of the relationship between the poet and the scientist. The British Library's sculpture depicts Newton with his compass, hunched over his work (though we cannot see what this work is).¹⁰⁰ His coral reef, however, has been replaced with a simple geometric slab upon which he sits, and his body is adorned with what look like screws or bolts on his joints, and metal bands on his waist and thighs as though to hold him in place:

¹⁰⁰ In fact, while a lengthy search on Google Images in March 2015 produced dozens of professional and amateur photos of this statue, none were taken from such a perspective as to show what, exactly, Newton is measuring, though most come tantalizingly close. It is my suspicion that this is a bit of a joke on the artist's part, in line with what I have been arguing. If we laugh at Newton for measuring a dull ratio without actually seeing what he's drawing, the joke is on us.



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The editor of one anthology of Paolozzi's work, Robin Spencer, begins with the standard opposition, but ends up somewhere interesting in spite of the painting, or perhaps in spite of herself: "Blake was no admirer of Newton and meant this work to be a critical assessment of the scientist's preoccupations. The work says different things to me. Here we have the work of two British geniuses presenting to us simultaneously nature and science--welded, interconnecting, interdependent."¹⁰² This sense that Paolozzi's statue could be read as "welding" "two British geniuses" together is at odds both with Mitchell's sense that the geometry and the reef must be opposed, as well as Goode's sense that radical appropriations of Blake's work must necessarily refuse to "get it."¹⁰³

¹⁰¹ Judith Collins, *Eduardo Paolozzi* (Surrey, UK: Lund Humphries, 2014).

¹⁰² Eduardo Paolozzi, *Writings and Interviews*, ed. Robin Spencer (Oxford: Oxford University Press, 2000).

¹⁰³ Goode uses this Newton sculpture specifically as an example of an appropriation that Blakean readers of the sublime would necessarily have to chafe at: "[W]hen such critics encounter Blake's words or pictures in fragments in their everyday lives—be it while browsing a website that sells Blake tarot cards, reading graphic novels by Allan Moore or Peter Kuper, or walking past Eduardo Paolozzi's quietly mocking statue of Blake's



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In these two sculptures, we find Newton's setting and his body much more subject to geometric abstraction, even to the point that he begins to look not so much restrained by these forms as constructed out of them. More interesting yet are Newton's calipers, which have been replaced with properly geometrical figures, specifically upright triangles.

Newton on their way into the British Library—they must to some extent experience these fragments as travesties (figs. 5 and 6)."

¹⁰⁴ Paolozzi, "After Blake's Newton", *ArtValue.com*. nd. March 7, 2015.

<<http://www.artvalue.com/photos/auction/0/35/35616/paolozzi-eduardo-1924-2005-uni-after-blake-s-newton-1119892.jpg>>

¹⁰⁵ Paolozzi, "Master of the Universe", *National Galleries Scotland*. 2004. March 7, 2015. <<https://www.nationalgalleries.org/collection/artists-a-z/p/artist/eduardo-paolozzi/object/master-of-the-universe-gma-3580>>

Newton's process of geometrical measurement has been blurred with a process of geometrical construction. Paolozzi, it seems, “got it” with respect to Blake, and we can say this without claiming one way or the other that he “got” the reference to conic sections (although I’m inclined to believe he did).

We might consider, then, the question of what it means to read Newton “after” Blake. This sculpture’s posteriority suggests both a meaningful interpretation, and an irrevocable change performed by that interpretation. We see a similar effect in Paolozzi’s *Newton After Watt*, in which the physicist’s head is expanded according to rigid Cartesian transformations based on Watt’s own experiments as a student with mechanical tools for scaling sculptures:



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¹⁰⁶ Paolozzi, "Head of Invention". *Wikipedia.org*. November 2007. March 7, 2015. <http://commons.wikimedia.org/wiki/File:Head_of_Invention_2007.jpg>. "[W]hat Paolozzi had discovered in the James Watt workshop set up in the Science Museum during his Slade School days was Watt's preoccupation with inventing machines to enlarge and reduce the size of portrait busts. This memory has a part to play in the conception and execution of this large head" (Collins, *Eduardo Paolozzi*).

There is certainly an after-ness to the Newton of Paolozzi's various *Newton*'s, in that the figure has been changed from what we take to be a natural human form; but he has been changed in a way that looks rather Newtonian to us, which is more or less to say away from what we frequently take to be the naturalness of Blake's form. Blake's *Newton* seems to have done what all caricature aspires to, namely the eclipse of the original with the satirist's image; but he seems also to have done too well by half, in eclipsing our sense of his own engagement with this new Newton. We have a hard time considering how such a figure might be used by such a poet as Blake, and it seems to me that this is for the same reason that we have had a hard time actually seeing the use of geometrical figurations in Blake at all.

An robustly alternative reading of Blake's relation to abstraction, then, would recognize that the ability of new ways of doing things to articulate themselves *as ways* relies on repetition in practice, and we would see an embrace of form as a point of common departure for both himself and Kant, as a means of balancing between novelty and communicability. It can be argued, and I have leaned in that direction, that Kant went rather too far towards insisting on a potentially universal normativity in his aesthetics that results in him expressing his sense of form oppositionally to actually existing, or at the least, for him, actually imaginable human deformities. There is more to be said about the aesthetics of abstraction, especially with reference to Blake's poetic style; but in order to do this we will need to reconsider his relationship to figures, genres, and movements against which we have continued to pit him. He has been useful as an unreconstructed exemplar of the Romantic rebellion against the Enlightenment, against rationalism, against abstraction, and against empire. But even if we largely maintain our

understanding of his radical politics (a position I tend to agree with), we should recognize that meaningful departures from the norm take their meaningfulness only on the condition of their iterability, which is to say that on some level we need to “get it” to be able to make the most of—or, for that matter, anything of—Blake.

This chapter has dealt with the question of the abstraction of representation in visuo-spatial experience. Unfortunately, related questions of patterning and the programmatic nature of anti-organic compositional form pertaining to Blake’s innovative meter, the abstract historical logic of his prophetic books, and the topology of his understanding of urban space, exceed the scope of what can be dealt with in the time and space I have at my disposal. We will now turn to a more properly literary problematic of the relationship between innovation and communication, and the role as arbitrary arbiter played by form in allowing new forms to be meaningful, and meaning to become new. The Wordsworths will supplement what has been lacking here in our discussion of the capitalist ideological underpinnings of the problem we have been exploring; and the end of the dissertation will then interrogate what these formal experiments have to do with questions of value in literature and economics, in ways that still inform our current understanding of the problematic relationship between art and lived experience.

Chapter 2

“Her Information Various”: Knowledge Work in the Wordsworth and Herschel Households

In a September 1800 letter from their new house at Grasmere, Dorothy Wordsworth gives the following account of her household’s routine to her friend Jane Pollard, herself married to the industrialist John Marshall:

With respect to passing our time I can [not?] tell you how we pass it because though our employ[ments] are not very various yet they are irregular. ... William writes verses, John goes a fishing, and we read the books we have and such as we can procure. I read German, partly as preparatory to translating, but I am unfit for the task alone, and William is better employed so I do not know when it will turn to much account. If Wms name rises amongst the Booksellers we shall have no occasion for it.¹

The scene is simultaneously idyllic and capitalist, pastoral and commercial. On the one hand, Dorothy naturalizes the household division of labor, as resting on a gendered difference in intellectual and physical capabilities: William writes, Dorothy prepares to write, and John fishes. On the other hand, she renders this naturalized, gendered difference quantifiable: she will not ask William for help because his time is worth more than hers. Indeed, the editor’s suggested correction, uncertain as to whether the household’s collective occupations lend themselves to epistolary description, expresses

¹ Dorothy Wordsworth to Mrs. John Marshall, 10-12 September 1800, *The Letters of Dorothy Wordsworth*, ed. Alan G. Hill (Oxford: Clarendon Press, 1985) 46.

the historical-aesthetic problem that Dorothy poses to critics: to what extent can we, or should we, read her work through lenses different than those applied to her brother's?

Margaret Homans attempted to square this circle by defining new, counter-traditional standards by which Dorothy's work might be read. Homans saw her poetry driven by "a principle of not appropriating nature"²: "Nature is respected by not supposing that language can or should grasp it, while at the same time Dorothy eschews investigations or assertions of the self. She prefers to have nature be the poet, if the poet is the one who diffuses a spirit of unity."³ In the 1980's, critics argued for a more historically-embedded perspective, exemplified by Susan Levin's characterization: "Her writing exists as a positive articulation of a negative situation."⁴ More recently, from a queered perspective, Elizabeth Fay has attempted to undo the gender binary that undergirds these oppositional accounts of the siblings' poetic productions, and instead to read the two as a coherent whole. In Fay's view, the Wordsworth siblings together create a new "performative" aesthetics: it "was a product of both their imaginations working together, ... a team collaboration to which William affixed the name 'Wordsworth' and claimed for his own."⁵

This paper is an attempt to extend Fay's argument by reconsidering Dorothy's journals not as the literary creations of an individual author but as waypoints in a map of the Wordsworthian archive's intensities. In the above letter, we see Dorothy thinking economically, in the strict sense: she considers the use of her time in terms of marginal

² Margaret Homans, *Women Writers and Poetic Identity* (Princeton: Princeton University Press, 1980) 97.

³ Ibid., *Women Writers*, 88.

⁴ Susan Levin, *Dorothy Wordsworth and Romanticism* (New Brunswick: Rutgers, 1987) 4.

⁵ Elizabeth Fay, *Becoming Wordsworthian: A Performative Aesthetics* (Boston: University of Massachusetts Press, 1995) 15.

productivity, and her brother's potential fame in terms of brand value, or long-term earning potential.⁶ Fay's implicitly corporate paradigm will serve as my point of departure, as I work to show that Dorothy's well-documented divergences from her brother's genius-authorial mode of textual production are more productively read as complements to William's writing than as marks of aesthetic resistance: her intended product, I contend, is a singular style, as a ground for the authorial celebrity indispensable to this literary household's survival. In order to draw out this proto-managerial dimension of Dorothy's work and its aesthetic implications, I will be holding the Wordsworth household's operations up for comparison with those of a near-contemporary intellectual sibling pair, working in the field of astronomy: Caroline and William Herschel. Caroline, who managed her brother's northern-hemisphere star survey, which the historian of science Michael Hoskin has called "one of the greatest observing campaigns in the

⁶ This term, which figures in Peter Drucker's twentieth-century management theory, also plays a significant role in Jerome Christensen's recent work on Hollywood production studios, *America's Corporate Art: The Studio Authorship of Hollywood Motion Pictures* (Stanford: Stanford University Press, 2012). There is a case to be made here for the applicability of the two discourses, as perhaps best evidenced by Christensen's evolving interest, from *Byron's Strength*, which treats the poet's persona as a brand, and *America's Industrial Art*, which considers the interrelation between aesthetics and economics in the question of studio brands in Hollywood (Christensen, *Lord Byron's Strength: Romantic Writing and Commercial Society* [Baltimore: The Johns Hopkins University Press, 1993]). It could be possible, however, to treat the question more directly, beginning with with the bald juxtaposition of Peter Drucker's postindustrial "marketing" theory of the corporation, and William Wordsworth's post-contractual theory of experimental poetics. Drucker: "Markets are not created by God, nature or economic forces but by businessmen. ... There may have been no want at all until business action created it—by advertising, by salesmanship, or by inventing something new. In every case it is business action that creates the customer" (Peter F. Drucker, *The Practice of Management* [New York: HarperCollins (1954) 1993] 37).

Wordsworth: "[N]ever forget what I believe was observed to you by Coleridge, that every great and original writer, in proportion as he is great and original, must himself create the taste by which he is to be relished..." (William Wordsworth to Lady Beaumont, 21 May 1807, in *The Letters of William and Dorothy Wordsworth*, 6 vol., ed. Ernest de Selincourt and Mary Moorman [Oxford: Clarendon Press, 1969] 150).

history of astronomy,”⁷ also turned her household into a finely-tuned knowledge-producing machine, and effectively produced her brother’s lasting fame.

This re-evaluation of Dorothy Wordsworth’s work from a corporate or industrial perspective is two-fold in its goals. On the one hand, her journals have recently been claimed by another scientific genre, that of the nature diarist, in such a way that domesticates their strange and unsettling qualities, which has been their primary source of value since Margaret Homans pointed out the terror we sense in her encounters with the natural world. An industrial-scientific reading problematizes such domesticating moves by taking seriously the claim that Dorothy can be seen as an equal partner in the production of the Wordsworthian style: her “nature-diaries,” from this perspective, become tropological, not topological, maps of Grasmere. On the other hand, I hope to come to better terms with the fact that we are so often of two minds about her journals, reading them both as the most natural thing in the world yet at the same time feeling profoundly estranged. The corporate/industrial model of literary production suggests to us that Dorothy had to write entries that were from the first not her own, in order for William to claim them unproblematically. The sense of authorlessness in her prose is a result of her extended encounter with the Wordsworthian archive of lived experience that she and her brother were building in their attempt to unite the domains of life and art: her impersonal prose and its strange deformations record the intensities of elaborating lived experience with unparalleled detail, under the heading of generality. By reconsidering Dorothy’s entries as performances of alienated or abstracted intellectual labor, I believe

⁷ Michael Hoskin, *Discoverers of the Universe: William and Caroline Herschel* (Princeton: Princeton University Press, 2011) 93. Hereafter cited as *DU*.

we find a greater utility in situating its relationship to William's work, as well as its meaning to us, in the era of unequal and routinized institutional knowledge-production.

It needs saying that in arguing that Dorothy Wordsworth and Caroline Herschel produced Wordsworth the poet and Herschel the cosmologist, I will be resituating—not eliding—the machinery of exploitation in these households. In many ways, the men come out of this analysis looking somewhat worse; not simply effacing their sisters' work in the final product, but demanding that the sisters do a good deal of this work of effacement in order for their efforts to be incorporated in the process at all. Dorothy and Caroline develop new forms of managerial control in order to facilitate their brothers' genius statuses; and yet they are the objects of these innovative schemata. As I hope to show in an examination of my subjects' compositional and communicational practices, both sibling pairs reconceptualized the nature of intellectual labor in remarkably similar ways, and the methods of corporate intellectual production they developed had important implications for the coming century's industrialization of science and the business of literature.

1. Biographical Contexts

Caroline Herschel (1750-1848) was the younger sister to the famous astronomer William Herschel (1738-1822). Their father, Isaac, was employed as a musician in the Hanoverian military band, and William (as well as his brothers) all eventually joined as well. The household was a rather well-educated one for its social status, yet unfortunately susceptible to the worst of its culture's sexist mores. Biographers of the family never fail

to recount the anecdotes of William's philosophical precocity, and seldom fail to contrast this to Caroline's physical stuntedness and intellectual constrainedness. Caroline's mother, Anna, forbade that she learn any profitable skills, to the extent that Caroline had to learn sewing and some little music mostly on the sly, and reading only grudgingly, as it was necessary for her religious confirmation. Caroline was also neglected during a period of long and severe illness in her youth: the typhus fever that struck her in 1761, she recounts, "reduced my strength to that degree that for several months after I was obliged to mount the stairs on my hands and feet like an infant." It also left her face scarred and her body hunched; presuming her unfitness to marry, her mother seems to have felt justified in using Caroline as unpaid domestic labor.

At the prodding of his father, William deserted for England in 1757, and after establishing himself as a musician and music instructor to the wealthy in Bath, he returned to Hanover in 1772 to remove his sister from the truly Cinderella-like existence she led in their mother's house. Anna only agreed to the parting after William promised to compensate her on an ongoing basis for the lost labor; Caroline's life with William began with a transaction that was equal parts manumission and lease (though I should say that Caroline did express concern about leaving her mother in the lurch). William did not rescue her into a life of ease in England. From her first day, over breakfast, he was drilling her on mathematics and loading her up with household responsibilities. She learned mathematics and English practically, by managing the family's budget and buying its necessities at market. And in her spare time, she trained to eventually make a living as a singer.

But when William's interests turned to astronomy, she became his assistant at this as well. And when his hobby turned into a full-blown profession, he gave up music for Caroline as well as for himself. This was especially true after his 1781 discovery of Uranus, in his back yard, with a home-built telescope that was somewhere on the order of 50 times more powerful than professionally-made telescopes of the day.⁸ Caroline's astronomical duties involved learning the basics of observing, keeping meticulous notes on her brother's observations and keeping order in his study and mechanical shop, and performing mathematical computations on the data they gathered so as to render it meaningful. And as we will see, she did much more than this. Her brother, in 1787, secured a 50-pound-yearly salary for her from the king, in the process of increasing his own royal stipend. She fell out with her brother over the terms of his (monetarily advantageous) marriage in 1788, which she took as a betrayal, and which did in fact put an end to their large-scale observational work. The final years of Caroline's life were spent remorsefully. When William died in 1822, she left the country abruptly, and seems to have mostly spent her remaining twenty-six years with little to do but regret this decision, and deflect the international praise heaped upon her; she was the first (and until 1996 the last) woman to be awarded the Royal Astronomical Society's gold medal in 1828, and this was followed by honorary degrees and awards, and the visits of the Hanoverian royalty as well as notable scientists and political figures passing through the city.

Dorothy, likewise, was separated from her brother William for years in more or less unfavorable domestic circumstances. Following the death of their mother, Anne, the

⁸ On the stir this caused, see the introduction to Hoskin, *William Herschel and the Construction of the Heavens*, (New York: W. W. Norton & Co., 1963).

children were split up, with Richard (ten years) William (eight), John (five), and Christopher (four) going to boarding school, and Dorothy (six) to live with the Rawsons, friends of the family. Mrs. Rawson provided Caroline with a liberal education, until she went to school at age nine. When her father died two years later, she was unable to afford this tuition, and was left the cold comfort of adoption by her maternal grandparents, who strongly discouraged her creative pursuits. After her uncle extricated her from this situation, and allowed her to pursue her studies and enter in a small way into the teaching profession, William was bequeathed a moderate sum by Raisley Calvert, and with these means he established an independent household with Dorothy. This situation was not without its own difficulties: their unceasing scenic aesthetic ramblings and sibling-bachelor lifestyle aroused local suspicions to the degree of prompting landlord evictions and even government surveillance on the suspicion of espionage; accusations of incest (which may in fact have been true) were a permanent feature of their lives, until William's marriage.

William Wordsworth's brotherly intervention does seem somewhat more laudable, or at least less transactional, than William Herschel's. Dorothy, unlike Caroline, showed no signs of conflictedness about leaving her oppressive guardians to be reunited with her beloved brother; and she associates this change with freedom and a relaxing of the nerves practically at odds with the Herschels' mealtime tutelage. From her journal, Monday, August 25, 1800: "A fine day—walked in the wood in the morning & to the firgrove—walked up to Mr Simpsons in the evening. I staid at home & wrote to Mrs. Rawson & my aunt Cookson— I was ill in the afternoon & lay down— got up restored

by a sound sleep.”⁹ Today, we might mistake this for a vacation. If it is true that the Wordsworths' household is, like the Herschels', also a workhouse, then work will have to mean something broader than product-oriented activity.

2. From Intellectual Labor to Intellectual Property

Since the early 1990s, literary theory has held that there is a fundamental link between the historical emergence of the author as the possessor of a unique, creative mind, and the emergence of the capitalist subject as the possessor of his/her own labor. Nancy Armstrong and Leonard Tennenhouse, in their 1992 study of Milton, *The Imaginary Puritan*, describe the process by which “the symbolic use of the body to individuate the mind both distinguishes mind from body and subordinates the physical body, just as it inevitably subordinates the laboring body to its objectification in writing, money, and goods.”¹⁰ Complex poetry, like Milton’s *Paradise Lost*, demands a literate readership, and when canonized, it helps to produce a nation of such readers educated in a standard idiom. The middle-class subject, then, emerges as the possessor of intellectual labor, which category differentiates him dialectically from the gentry above (who think but do not work) and the artisans below (who are skilled laborers, but work with their hands not their minds).

⁹ Dorothy Wordsworth, *The Grasmere Journals*, ed. Pamela Woof (New York: Oxford University Press, 2002) 18. Hereafter cited as *DWJ*.

¹⁰ Nancy Armstrong and Leonard Tennenhouse, *The Imaginary Puritan: Literature, Intellectual Labor, and the Origins of Personal Life* (Berkeley: University of California Press, 1992), 45.

Thomas Pfau's study of Wordsworthian aesthetics argues that the Romantic era intensifies this logic of class distinction, by locating the link between intellectual labor and the capitalist subject in the commodity form: "the operation of 'modern hedonism' in the self-constructed imaginative experiences facilitated by the poetic commodities of the period ... [specifically] how that poetry reconceives consumption as a form of unself-conscious productivity."¹¹ These Romantic subjects, however, are produced not only for the state, but for the market as well. Unself-conscious productivity is the kind of work that individuates middle-class subjects *from one another* as they differentially realize value in the consumptive act of reading. Indeed, the tense relationship between market value and intellectual labor structures Romantic poetic identity, in which poems must sell to be successful, but must also attain to being "the ultimate aesthetic 'anticommodity'":¹²

[T]o the extent that indigenous labor [in Wordsworth's descriptions of rural life] is being structured, given design, and thus sublated *into* and *as* the professional and virtual discriminations known as poetry and as the aesthetic in particular, such labor yields a different "interest" and generates a distinctive "cultural capital" *for* the reading audience. Indeed, contingent on that audience's approval, such capital will eventually once again revert to the professional poet, who authorizes and produces himself in proportion to the public display of his descriptive skill.¹³

William therefore resolves the tension between intellectual labor as virtue and intellectual labor as profitable activity by naturalizing market forces: writing poems is simply what a

¹¹ Thomas Pfau, *Wordsworth's Profession: Form, Class, and the Logic of Early Romantic Cultural Production* (Stanford: Stanford University Press, 1997), 8.

¹² *Ibid.*, 15.

¹³ *Ibid.*, 96.

poet does, and his audience is defined by being that group of people who will purchase and appreciate these poems—both groups profit almost magically. Dorothy resolves the tension in a complementary manner; in her Grasmere Journal's first entry, she assigns the profits of her work to another: "I resolved to write a journal of the time til W & J return, & I set about keeping my resolve because I will not quarrel with myself, & because I shall give Wm Pleasure by it when he comes home again" (*DWJ*, 1). Dorothy's writing is therapeutic, but only insofar as it allows her to forget her conflicted self; and this impersonal journal allows her to mediate her giving of pleasure to William without indebting him. Dorothy writes, in other words, with an unself-conscious productivity much more selfless than that of William's readers, and as we will see below, the effects are intensified: (stylistic) individuation is both enabled and transformed into an infinite task.

To emphasize the intentionally impersonal productivity of Dorothy's famously centerless prose can open new ways of understanding the function and significance of her journals.¹⁴ Fay's discussion of the Wordsworths' cultivating practices is highly suggestive in this respect. Against the scholarly tendency to read Dorothy's work as the frustration of a talented individual, she considers the siblings' work as a cooperative enterprise: "[T]he Wordsworthian world view was a product of both their imaginations working together, not her subservience to him, or, the opposite, his exploitation of her abilities but a team collaboration to which William affixed the name 'Wordsworth' and claimed for his own."¹⁵ Dorothy does, of course, write her own works, and some of them draw on the journals. But it is worth considering that these journals of daily life show her

¹⁴ On the absence of a central, speaking "I" in Dorothy Wordsworth's journals, see Levin, *Dorothy Wordsworth and Romanticism*, 15-18; and Homans, *Women Writers*, 71-86.

¹⁵ Fay, *Becoming Wordsworthian*, 15.

to spend most of her time making the poet “Wordsworth.” To “give Wm pleasure” is to satisfy the basic precondition for poetic production in the Wordsworth house; William locates genius, of course, in the “spontaneous overflow of powerful feelings ... recollected in tranquillity,”¹⁶ and Dorothy sets as one of her primary tasks the maintenance of that tranquility.

This tranquility-production oftentimes looks more like the management of human capital than an exclusively domestic concern for a loved one’s physical and psychic well-being. William cannot write when he is distempered, and he becomes distempered when he cannot write.¹⁷ Moreover, he frequently overexerts himself, and requires distraction when his work reaches the point of diminishing returns.¹⁸ In February 1807, during an apparently leisurely stay at the Beaumonts’ Hall Farm, Dorothy assures Lady Beaumont that William’s dilettante landscape work does not slow his writing:

¹⁶ William Wordsworth, *‘Lyrical Ballads’ and Other Poems, 1797-1800*, ed. James Butler and Karen Green (Ithaca: Cornell University Press, 1992) 756.

¹⁷ For example, “William worked all the morning at the Sheep-fold but in vain. He lay down in the afternoon till 7 o’clock but could not sleep--I slept. My head better--he unable to work. We did not walk all day” (*DWJ*, 27). Sometimes, Dorothy brings on this writer’s block: “After tea I read to William that account of the little Boys belonging to the tall woman & an unlucky thing it was for he could not escape from those very words, & so he could not write the poem, he left it unfinished & went tired to Bed” (*DWJ*, 77).

¹⁸ In one instance, we are told that William is conscious of his limits: “William had tired himself with working—he resolved to do better” (*DWJ*, 58). In another, we see his work schedule interfering with the entire household’s functioning: “I almost finished writing *The Pedlar*, but poor William wore himself & me out with Labour” (*DWJ*, 67). In yet a third, Dorothy implicitly locates this writerly mind-body problem in the stomach, as dyspepsia: “Wm & I were employed all the morning in writing an addition to the preface. Wm went to bed very ill after working after dinner--Coleridge & I walked to Ambleside after dark with the letter. Returned to tea at 9 o’clock. Wm still in bed & very ill” (*DWJ*, 24).

He is very happy in his employment, and I assure you that you need not give yourself a moment's care about interrupting him in his poetical labours; for those will and must go on when he begins, and any interruption, such as attending to the progress of the workmen and planning the garden, is of the greatest use to him; for after a certain time the progress is by no means proportioned to the labour in composition, and if he is called from it by other thoughts, he returns to it with ten times the pleasure, and his work goes on proportionally more rapidly.¹⁹

Leisure time increases overall productivity, so long as William doesn't spend nine tenths of his time landscaping. The subject-forming teleology that ideology critique has teased out of Romantic and post-Romantic aesthetics is plain to Dorothy, who expresses pleasure in terms of its utility for William's writerly output.

But Dorothy's attentiveness to William's productivity exhibits more than a concern with maximizing output; she also enforces a hierarchy of value in the field of labor when organizing the activities of the household. Above, we saw her subordinate the value of her time relative to William's; this logic, however, is applied to all in the household. In her September 1800 letter to Jane (Pollard) Marshall, she spends a good deal of time on their newly-hired housekeeper in outlining the daily life in Grasmere:

Our servant is an old woman 60 years of age whom we took partly out of charity and partly for convenience. She was very ignorant, very foolish, and very difficult to teach so that I once almost despaired of her, but the goodness of her dispositions and the great convenience we knew we should find if my perseverance was at last successful induced me to go

¹⁹ DW to Lady Beaumont, 15 February, 1807. *Letters of Dorothy Wordsworth*, 84.

on. She has now learned to do everything for us mechanically, except those parts of cooking in which the hands are employed I help to iron at the great washes about once in 5 weeks, and she washes towels stockings, waistcoats petticoats etc once a week such as do not require much ironing. This she does so quietly in a place apart from the house and we know so little about it as makes it very comfortable. ... She is much attached to us and honest and good as ever was a human being.²⁰

She spends weeks, it would seem, training up her housekeeper not in order that they will have food and clean clothes, but with an emphasis on minimizing distractions. Just as it is an indispensable virtue for Dorothy not to interrupt William, the housekeeper's indispensable value is that she cleans quietly enough for the writers to ignore her as they go about their intellectual work. Feminist readings of Dorothy's working life that focus on the question of personal credit tend to suspend class-critical perspectives when arguing that William undervalued her time (or, which amounts to the same thing, talent). In doing so, we obscure not only the ideological work of the discourse of intellectual labor, but also Dorothy's contributions to that discourse's practical application in producing ever-finer-grained social hierarchies. Dorothy, in other words, is not simply doing menial tasks in order to free William up to do his intellectual work. Rather, she is managing the household in order to facilitate the production of intellectual work within it. A significant portion of her work, and what I am arguing is a major determinant of her journals' aesthetics, is the enforcement of a scale of value on which different kinds of work are to be ranked, both between the physical and the intellectual, and within the

²⁰ Dorothy Wordsworth, *The Letters of Dorothy Wordsworth*, ed. Alan G. Hill (Oxford: Clarendon Press, 1985) 41-2.

domain of intellectual labor itself. To say this is to give her a more, not a less, significant role in the Wordsworth Household.

Dorothy's remarkable ability to consider every aspect of her shared life with William in terms of its effects on his productivity marks the Romantic culture of genius's shift away from the discourse of intellectual labor, to one of intellectual property. William Wordsworth was the first English author to speak out in favor of legally-enforced copy rights for authors, and recent scholarship has drawn connections between Wordsworth's conception of a literary legacy and contemporaneous formulations of inheritance and contract law.²¹ Mark Schoenfield has argued that Wordsworth saw his poetry not as a commodity but as a patrimony he could disseminate to the public, with the understanding that they would be (or become) the sort of readership who would buy only authorized works and shun pirated printings.²² Such arguments, however, curiously suspend the complementarity of monetary and ideological considerations when the bonds between these poles are strongest. To the extent that copyright law creates inheritable or otherwise transferrable property out of past intellectual labor, it commodifies the producer's name. Authorial copyright is, in other words, the logical bookend to Dorothy's concern for the value of William's name in London booksellers' circles. The general public's demand for Wordsworthian poetry puts William in a stronger bargaining position vis-à-vis the publishers, when it comes to text he controls (such as new poetry);

²¹ See Peter T. Murphy, *Poetry as an Occupation and Art in Britain, 1760-1830* (New York: Cambridge University Press); and Mark Schoenfield *The Professional Wordsworth: Law, Labor, and the Poetics of Contract* (1996).

²² "By 1838, perhaps contemplating his own death, Wordsworth had lost most of his faith in the ability of the poet to regulate the market, and ... Wordsworth called on the legislature to protect his family's interest in the *Prelude*, as well as his earlier works. This patrimony ... is not a simple gift of monetary value but a property of responsibility" (Schoenfield, *The Professional Wordsworth*, 256).

authorial copyright extends that domain of control to anything bearing the name William Wordsworth. What has been called the ideological in discussions of Wordsworthian authorship appears, from the managerial perspective of Dorothy Wordsworth, to be more a concern about long-term earning potential.

Of course, the production of recognizably Wordsworthian poetry is a precondition for the Wordsworths to extract any patronymic rents. Above, I have attempted to show that Dorothy makes the reliable production of a highly individuated poetry her primary concern; below, I will show how she experimented with the relations of literary production in order to achieve this goal. This investigation will be aided, however, by having a basic framework and vocabulary for knowledge work in the Romantic era. The Herschel observatory provides a useful comparison, because we see a similar tension at work in contemporary recuperations of Caroline Herschel's legacy to the field of astronomy, between a desire to value her contributions, and her reluctance to take credit for her own work. An examination of her household's more recognizably industrial organization, and that organization's production of a similarly internally-differentiated field of intellectual labor, will help to clarify why abstraction and alienation provides a better framework for understanding the writerly subjectivity of Dorothy's journals, than does that of the individual or even interpersonal authorial model that presents her as concerned with a non-impositional, descriptive mode of experiential life-writing.

Best known in her lifetime and in her present-day revival for her own discoveries of several comets, recent re-evaluations of the Herschel legacy have emphasized the lasting impact of their cooperative efforts at a large-scale survey of the Northern hemisphere's deep-space objects. Between 1783 and 1802, at their observatory at Slough,

Caroline and William Herschel together discovered 2,510 new celestial objects, roughly 25 times the number discovered by their near contemporary, Charles Messier (*DU*, 91). Michael Hoskin describes this period as “one of the greatest astronomical campaigns in history” (Ibid.) and his rediscovery of the Herschels with his 1963 *William Herschel and the Construction of the Heavens*, demonstrates how these surveys provided William with the raw data he needed in order to move astronomy beyond the solar system to the discovery of large-scale cosmic structures, effectively inventing cosmology.²³ Working together, with William outdoors observing through his 20-foot reflector and Caroline at a well-lit desk indoors recording his observations, they mapped a huge portion of the Northern hemisphere’s night sky; William’s son, John Herschel, would later finish the job, spending five years in Cape Town mapping the Southern sky.²⁴ Hoskin’s biographies, and his careful reconstruction of these observational sessions, identify three reasons for the campaign’s unprecedented success: the power of William’s telescopes, the keenness of his eye, and Caroline’s untiring organizational work. William’s telescopes were, in fact, unprecedentedly powerful, and Hoskin, giving credence to the astronomer’s braggadocio²⁵ about his observational talent, communicates the shock of the astronomical community at the report of William’s discovery of Uranus: “these observations involved the use of a telescope of an optical perfection barely credible to contemporary opticians

²³ Hoskin, *Construction of the Heavens*.

²⁴ For a detailed account of the Cape expedition, see Steven Ruskin, *Herschel’s Cape Voyage: Private Science, Public Imagintaion and the Ambitions of Empire* (Aldershot: Ashgate, 2004).

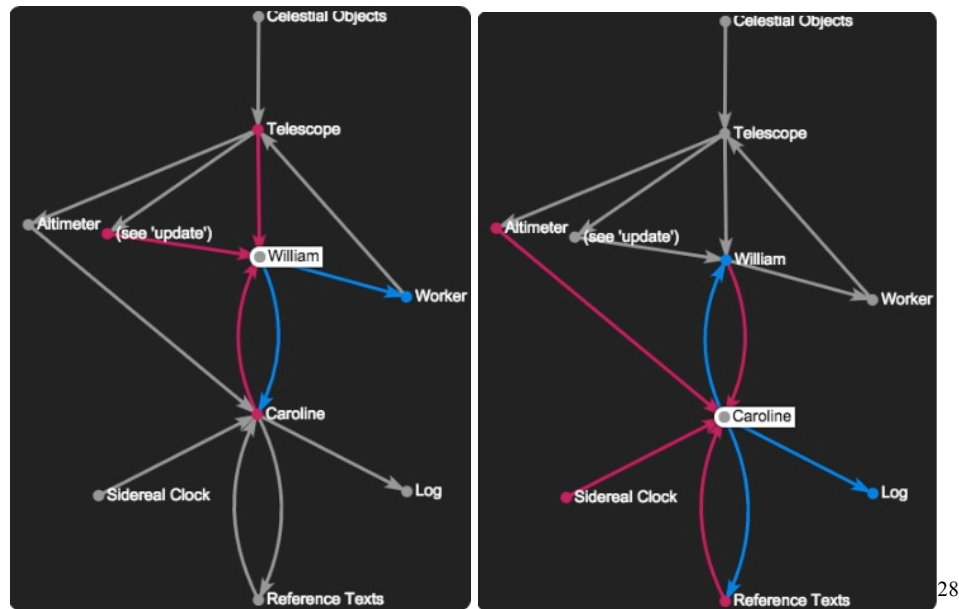
²⁵ “I do not suppose there are many persons who could even find a star with my power of 6450, much less keep it, if they had found it. Seeing is in some respect an art, which must be learnt. To make a person see with such a power is nearly the same as if I were asked to make him play one of Handels fugues upon the organ” (RAS MS., William Herschel to William Watson, 7 Jan 1782, WH.1/1.1, 11).

and astronomers; and, lastly, this instrument was in the hands of an observer of such great experience that he could recognize *at a glance* the difference between Uranus and a star.”²⁶

But it is Caroline’s organizational skill that is determinative for the scale of the decade-long survey; it is, in other words, what transforms William’s observational practices *into* a survey, rather than a unsystematic series of observations. Their observatory was organized in the following manner: the twenty-foot telescope rested on an A-frame mount; William sat on an elevated platform, looking through the eyepiece; a hired man stood at the base of the frame, to control the telescope’s motions, per William’s commands. These commands were given by bell; their normal procedure involved sweeping the telescope vertically between upper and lower boundaries set each night, and so William typically only had to tell the workman to move the telescope down when the sweep was at its peak, and up when it had reached its trough. Caroline remained indoors, seated in a lit room, surrounded by instrumentation, reference materials, and her recording book. Her desk faced a window that opened towards the telescope, through which she shouted information to William as he needed it, and in turn received his observations as he made them.²⁷ The workflow is best illustrated as a network graph, as shown below:

²⁶ Hoskin, *Construction of the Heavens*, 14.

²⁷ This laboratory organization is given in William’s descriptions, and that of visitors to their laboratory, quoted in *DU*, 92-5.



This representation allows us to see the dependencies between the different actors, and to conduct thought experiments about how different communicative scenarios might have played out. The actors' various tasks are well-defined and modular, such that multiple narrative events can be playing out simultaneously in the laboratory, constructed out of these basic building blocks. For instance, William might see a nebula, and ask Caroline to verify that their up-to-date sky atlases register its existence; Caroline, having checked her reference materials and found this nebula, would confirm this to William, and record this observation in their log. At the same time, William or Caroline might, looking at the altimeter, might notice that they had reached the top of their sweep and so should begin sweeping downwards; William would ring his bell, and the workman at the winch would reverse the telescope's direction. There is some ambiguity as to whether or not William,

²⁸ These two network graphs are screenshots from an interactive webpage, built using two open-source Javascript packages. The full interactive graph, as well as further documentation on the source code, is available at <http://www.johncmulligan.com/herschels>.

Caroline, or both had an altimeter on hand.²⁹ I contend that giving any control to William over the movements of the telescope creates an informational bottleneck in the process.

Hoskin reads the Herschels' working relationship cooperatively, much in the same way that Fay reads the Wordsworths'; hence the title of his 2003 book, *The Herschel Partnership: As Viewed by Caroline*.³⁰ In conformity with this partnership paradigm, Hoskin apportions credit for this laboratory setup in the following way: William is given credit for establishing this efficient workflow, which allows him to effectively retrieve information, observe the sky, and record the resulting information accurately, without ever taking his eyes off the stars. Caroline is credited with numerous innovations in William's overall framework, primarily in the domain of increasing efficiency of communication, and overall accuracy. For instance, Caroline turns Flamsteed's star atlas inside out, reducing a beautiful map of the sky into a numerical index, for a sky carved up into a flat grid of equal squares.³¹ This new sky, organized numerically according to Cartesian coordinates rather than visually according to constellations, spoke more directly to her astronomical experience, facing as she did not a starry dome but instruments, tables, and charts. Also, as Hoskin points out, Caroline used this system to plan nightly observations ahead of time, and to prepare lists of expected observed objects, in anticipation of William's later questions.

In other words, William divides the labor and Caroline performs further subdivisions within that framework. The central critical point here is that we take

²⁹ Bennett, "'On the Power of Penetrating into Space': The Telescopes of William Herschel," *Journal for the History of Astronomy*, vol. 7 (1976) 87-8. Thanks to Michael Hoskin to pointing me to this reference, in response to my inquiry on the subject.

³⁰ Michael Hoskin, *The Herschel Partnership: As Viewed by Caroline* (Science History Publications, 2003).

³¹ For a detailed explanation of the construction and uses of this index, see *DU*, 95-7.

seriously this organizational work as a form of intellectual labor that seeks to make itself look natural; from this perspective, William's workflow is an inefficient one, and Caroline's innovations are, in part, correctives. It does not make sense for William to direct the motions of the telescope, whether or not he has instrumentation telling him the telescope's altitude; I would contend that Caroline is in a privileged position to regulate the flow of information in the laboratory, and William can do his job best by simply telling her what he sees and responding to her queries. Indeed, the most efficient setup would minimize the amount of information William would be allowed to communicate to Caroline; we could imagine her making very good use of his keen eyes by primarily asking him "yes/no" questions, as to whether or not he saw a given expected object, or something new. Put differently, we should note a tension in this brilliant laboratory setup, in which on the one hand the observer can best do his job by becoming a camera-like automaton, but on the other the observer's work is ideologically privileged as more technically difficult. It is well beyond the scope of this study, but these are empirically testable questions: by analyzing the Herschel observational records, we should be able to see how much aggregate time (and stars) are lost on those occasions when William has the telescope rotated horizontally in pursuit of an interesting object; and one could even simulate the laboratory setup under different regimes of communicational procedures to see which allow the most efficient flow of information. Even in the absence of such testing, however, one can say that communicative efficiency is the lynchpin of the project: the faster William successfully identifies the objects he is seeing, the faster they can raise and lower the telescope, and the more sky is swept each night. Any loss of efficiency (in my argument, as a result of creating a need for unnecessary

communications or giving William control over the telescope's motions) converts directly into fewer observations per night.

Indeed, on the basis of efficiency, one can make an even stronger case for Caroline's supremacy in the laboratory's principles of organization, than the counterfactual one I have just put forward. The Herschels move the telescope in a very particular way, like a transit instrument; this is to say, they face due South, and swing the telescope almost exclusively vertically, up and down (unless William insists on ill-advised horizontal movements because something has interested him). Caroline began using this method on July 8, 1783: "Note my sweeps will be perpendicular for the future; all those before have been horizontal."³² On December 3, William announces that he has adopted a new method, without making any mention of his sister's previous trials: "I now began to sweep in a different manner, which I find much more convenient, & also better I place the telescope in or near the meridian; then raise and depress it alternately, so as to return in a different tract of stars. By experience I find that my perpendicular sweep may be about 1½ degree about the equator."³³ And uncharacteristically, in her entry for September 25, she reiterates her methodological reasons for sweeping vertically:

I began to sweep at α Aquarii when it was a little past the meridian; and swept as far as ω Piscium & Π Andromeda. without changing my situation. NB. I have adopted this method ever since the 8th of July. finding by experience that the time of sweeping in the meridian answered to the meridian passage of the stars.³⁴

³² RAS MS, C.1/1.1, 11.

³³ RAS MS, W.4/1.5, 467.

³⁴ RAS MS, C.1/1.1, 23.

This is a practical justification of her methodology, which suggests a need to attach a level of intentionality to this adoption. Read in context, this entry can even take on the tone of resentful pre-emption: Caroline might be anticipating William's lifting without credit from her methodological repertoire.

The question of methodological priority is likely unresolvable, in the final analysis. One could, for instance, argue that because William had built the vertically-sweeping telescope that Caroline used, credit for the methodological innovation rests with him. But what is most interesting about the question of influence in this instance of minor methodological experimentation is the resistance to calling it innovation. Hoskin is equivocal on the matter: he suggests that William's earlier, *horizontal* sweeps were a "close imitation" of Caroline's, but her own insistent record with respect to the vertical sweeps goes unremarked upon.³⁵ He is not in the habit of being unfair to Caroline; indeed, he gives her credit for sparking William's interest in a systematic deep-sky survey in the first place. On February 26, 1783, told to search for nebulae instead of comets, Caroline finds two comets not in their sky atlases; Hoskin argues that William is left with the "vivid impression" that "in a couple hours his little sister, with a telescope that was little more than a toy, had added two completely new nebulae to the sixty-eight so far known to science. In the realm of the nebulae there were indeed rich pickings to be had. Accordingly, on March 4 he broke off his search for double stars and "'began to sweep the heavens for nebulas and clusters of stars.'"³⁶ Of course, the problem of credit and influence in the complex interchanges of the laboratory environment reappears:

William had directed her to sweep for nebulae in the first place, and so one could (in

³⁵ Hoskin, "Caroline Herschel as Observer," *Journal for the history of Astronomy*, 125 (2005): 381.

³⁶ Hoskin, *DU*, 84.

spectacularly bad faith) argue that the credit is his. But more fundamentally, the problem with the question of credit is the way that it tends only to be able to register practical innovations in the context of discovery. In a January-February 2014 email exchange with myself and Michael Hoskin, the astronomer Wolfgang Steinicke, in my opinion, recapitulated this problem: granting that Caroline's discoveries inspired William to look for deep-sky objects, he objected to the notion that her vertical sweeping technique could be considered innovative or contributory to William's survey methods, because the realization that the horizontal motion could be had with appropriate timing of the vertical motion was too simple or obvious.³⁷ But as we have seen, both William and Caroline justify the vertical sweeps on precisely this basis. The difficulty that minor methodological experimentation and resultant innovations present to the individual credit model is that they expose the historical contingencies of the products of intellectual labor.

From this perspective, we can see how a focus on the observatory's efficient division of labor undermines the individual credit model from the very beginning. Appropriations of credit under the discovery model, as we have seen, not only make it difficult for historians to recognize the minor methodological innovations that make corporate intellectual labor feasible, but can even (if I am correct about the informational inefficiencies introduced by William's insistence on privileging the observer's work) disrupt that work as it is being done. It is therefore my contention that in order to understand the way that knowledge was produced in the Herschel household, then, we have to presuppose equal attributability between the siblings in the matter of abstracting or industrializing intellectual labor. As I argued above, it was only William's assumption of the centrality of the observer's role that introduced non-alienating (for him) and non-

³⁷ Steinicke, emails to Mulligan, cc Hoskin, Jan 14, 2014 and Feb 6, 2014.

routinizing (for him) elements into the workflow; but in doing so it seems likely that he also introduced gross inefficiencies and increased the need for Caroline to add more corrective, routinized work into her routine. The principle of the efficient division of labor, factory-like in its correlation of time and produced intellectual capital, became paradigmatic for institutional astronomy as practiced in Victorian England. Decades later, when John Herschel took up the prior generation's celestial survey, he adopted a modified, one-person version of their workflow. John exploited astronomy's longstanding exemplarity for exactitude in the natural sciences, in order to position astronomers as exemplaries for the scientist's self-discipline. He achieved this disciplinary coup, for astronomical exactitude and disciplined astronomers, by consistently expressing the work of astronomy with the metaphors of business and finance. As Simon Schaffer informs us, for these men, "astronomical work was fantasized as capitalist enterprise, with prudent ledgers, patient accountants, disciplined observers, well-oiled machinery, and precision values as sources of profit."³⁸ And if knowledge is wealth, then astronomers are perfect capitalist administrators, as W. J. Ashworth has shown in his own study of John Herschel, Francis Baily, and Charles Babbage, whom he calls "'business astronomers'" who "emphasized an astronomy that encompassed and demonstrated their values of vigilance, calculation, precision, and accurate accounting."³⁹

³⁸ Schaffer, "Keeping the Books at Paramatta Observatory," in *The Heavens on Earth: Observatories and Astronomy in Nineteenth-Century Science and Culture*, ed. Aubin, Bigg, and Sibum (Durham: Duke University Press, 2010), 115-45, at 124.

³⁹ William J. Ashworth, "The Calculating Eye: Baily, Herschel, Babbage, and the Business of Astronomy." *The British Journal for the History of Science* 27 (1994), 409-41, at 410.

As an administrator, Caroline is a better candidate than William to be called John's intellectual mentor. Above, we saw the importance she placed on procedures and organization. On a more local level, in the same way that John was obsessed with the appropriate divisions of labor in order to maximize accuracy and efficiency, Caroline performed her own informal experiments with dividing timekeeping and observing activities between astronomers, splitting up the work of watching the clock and watching the stars. On September 11, 1786, Caroline observes that her previous logs for that night "cannot be reckoned so accurate as the passage of η Aquila; where my brother was at the telescope when I took the seconds."⁴⁰ As it turns out, the question of how to effectively subdivide the task of timing observations is an extremely interesting one in the history of astronomy: it became a foundational problem for experimental psychology, and has come to prominence again in the last ten years.⁴¹ Perhaps more compellingly, Caroline also seems to have thought of scientific discovery in monetary terms. When, late in life, Caroline Herschel bequeaths her portfolio to her nephew, she wittily writes on the inside cover of her observation journal that it contains the "Bills & Rec'ds of my Comets."⁴² John Herschel's ideological coupling of capital and astronomical knowledge here is baldly, if somewhat ironically, stated. As a salaried employee of William Herschel's

⁴⁰ RAS MS, Herschel C1/1.1, 44.

⁴¹ The renewed interest in the history of timekeeping and the phenomenology of simultaneity crosses the boundaries between the history of science and the cognitive sciences. For the history of science perspective, see Jimena Canales, *A Tenth of a Second: A History* (Chicago: The University of Chicago Press, 2009). For the cognitive science perspective, see Levitin, MacLean, Mathews, and Chu, "The Perception of Cross-Modal Simultaneity," *AIP Conference Proceedings*, 517 (2000). See also Simon Schaffer's foundational essay, "Astronomers Keep Time: Discipline and the Personal Equation," *Science in Context* 2 (1988).

⁴² RAS MS, Herschel C.1/1.1, ii.

observatory, whose innovations and daily tasks centered around increasing efficiencies in the knowledge-production process, we can see how discoveries might be represented in terms of debits and credits on a ledger. Above, we saw that inefficiencies in the Herschel observatory's workflow reduced William and Caroline's capacity to process information, and translated directly into fewer stars seen. Here, we see that sidereal time is money in the eyes of Caroline and her nephew.

The ironic tone in Caroline's "Bills & Rec'ds" note returns us to the question of intellectual property, here in the context of her non-observational astronomical work. Scientific discoveries, like famous poems, are a sort of non-transferrable intellectual property; Caroline cannot sell to someone else the discovery of her comet. However, Caroline's methodological innovations are matters of organization, and are out of place in the discovery-based model of scientific credit that persists today, as evidenced by the difficulty scholars have in properly attributing these innovations to her. Caroline is therefore unable either to directly profit from her discoveries (of comets) or to claim some of her most important innovations (in organization). Indeed, she is scandalized when John secures for her the Gold Medal in recognition of her years of indispensable computational and assistant's work for William. Proud as she was to be paid for her work by an independent royal salary (rather than simply being a dependent in William's pensioned household),⁴³ her shock at receiving credit suggests that she saw her

⁴³ In Herschel's memoir we see frustration at dependency: "I have been throughout annoyed and hindered in my endeavours at perfecting myself in any branch of knowledge by which I could hope to gain a creditable livelihood" (Caroline Herschel, *Memoir*, 31). We also see pride in financial independence upon the king granting her a salary: "A salary of fifty pounds a year was also settled upon me as an assistant to my brother, and in October I received twelve pounds ten, being the first quarterly payment of my salary, and the first money I ever in all my lifetime thought myself to be at liberty to spend to my own liking" (Ibid., 75-6).

intellectual work in terms of alienable labor-power. Caroline cannot take credit for the products of their long sky surveys because the routinization of her work subordinated it to her brother's apparently creative work. And as we have seen above, her organizational and methodological innovations did a good deal of the work necessary to routinizing her work and rendering her intellectual labor a commodity.

The relations of knowledge production in the Herschel household are therefore more complex than would be suggested by framings that depict these relations in terms of credit attribution or potential. It is not enough to say that William took credit for work he did not do, because he and Caroline intensively planned and experimented to make her work as routine as possible, to the point of it becoming unrecognizable as intellectual. Caroline and William make her work less credit-worthy. Neither can we say that Caroline's talents were wasted at her computational work. Regardless of her role in planning the observatory's communication procedures, her indispensability in executing these is acknowledged in all the contemporary scholarship. We can easily underestimate the value of this organizational work, but we do so at the risk of losing sight of Caroline's legacy, which was to pave the way for the coming century's institutionalization of astronomy and introduction of factory-like procedures into the knowledge-producing enterprise. And just as the coming century's observatories maintained the reputation of the head scientist by devaluing the work of his subordinates,⁴⁴ Caroline worked to enhance her brother's reputation by enabling his work with her own, and then refusing to take credit for the final product. Caroline is not being pathological in refusing credit; she

⁴⁴ John Herschel, for instance, blackballed an assistant astronomer for trying to take credit for work he had done under a superior. See Schaffer, "Keeping the Books," 129.

is simply practicing the procedure of corporate branding which engaged the better part of her brother's life and her own, of building up the international fame of William Herschel.

The recuperative studies of Caroline Herschel the observer (Hoskin's *Caroline Herschel as Observer*), and Dorothy Wordsworth the writer (Woof's *Dorothy Wordsworth, Writer*), stand as powerful responses to the persistent, naturalized gender bias in the domain of intellectual production. However, such approaches are uncomfortably at odds with the corporate or communal readings of these women's work, which identifies their sociality as that which sets them apart from their egoistic brothers. This tension is a result that recuperations of the women as expert intellectual producers make concessions to the liberal image of individual self-determination in such a way that obscures the impersonal nature of work and lived experience in a structured, corporate body. This refusal to critique liberal individual subjectivity in re-examining either of these women would be a pragmatic ideological trade, were it not for the fact that it recapitulates the exploitative structures of institutional knowledge-work. By reconstructing Caroline Herschel as an independent observer who probably spent too much time crunching numbers for her brother, and Dorothy Wordsworth as an independent writer who probably spent too much time reading her brother's work, editing her brother's work, and reading to her brother aloud, we privilege the image of the intellectually creative individual whose worth can be measured in terms of his or her innovative departure from a given milieu. To put it more bluntly, it is striking that for all the complaints of Dorothy Wordsworth's and Caroline Herschel's relegation to menial household labor, nobody makes the case that William Herschel or William Wordsworth should have done their own laundry. Having framed Dorothy Wordsworth's

understanding of intellectual labor in industrial terms allows us to engage with her journals' aesthetics, especially in their descriptions of nature, in such a way that resists their domestication by the scientific discourse of observation in the mode of the nature diarist.

3. Non-Observationalism

Dorothy's descriptions of nature are frequently praised for their what is taken as their self-evident objectivity. William's egoistic projection, and imaginative "re-creation" of nature in his own image, is eschewed in favor of a more respectful attitude. Homans, for instance, reads the journals as respectful of nature, in arguing that Dorothy felt unable to claim mastery over nature in the same way as William.

Dorothy's project in *The Grasmere Journal* is in many ways congruous with the prelapsarian dream of an undivided world, which is traditionally identified with the experience or memory of earliest childhood. Her faith is that her language can and should do no more than name the individual objects of perception. She aspires to an absolute transparency of language. she drawback from the possibility that nature's appearance is altered by the viewer's feelings, even though she clearly knows that these alterations not only occur but also form the basis of ordinary perception.⁴⁵

Woof's account, for example, ties together fidelity of image, attention to detail, and her rapid eye movement (here reproduced by the reader):

⁴⁵ Homans, *Women Writers*, 56.

Dorothy recorded this too because that is how it was. Similarly, her eye on that same day took the big arching rainbow that spanned the lake from the island to the foot of Bainriggs and in the next few words noted the detail of catkins coming out, the alder with its ‘plumb coloured buds’, and the solitary butter flower. These are fractions, not whole compositions. The eye darts from fragment to fragment, and the extended descriptions in the journal are surrounded by the tiny swift impressions.... (DWJ, xx)

In short, “Dorothy evoked things and people, and let them be” (DWJ, xiv).

Recent re-evaluations of Dorothy’s work have capitalized on this non-impositional dimension of her writing in order to read her as a diarist, specifically, a nature diarist. Most notably, Mary Ellen Bellanca’s 2007 *Daybooks of Discovery*, an authoritative history of the evolving and diverse form of the nature journal in the British Romantic period, presents Dorothy’s apparently non-impositional aesthetics in terms of her “apparent fascination with the facticity of nature.”⁴⁶ Dorothy the nature-diarist works within a determinate prose genre different from her brother’s poetic one: “constitute a purposeful genre with its own reasons for being, and as such they display common unifying features. Dorothy Wordsworth, for example, wrote her journals not because she was a frustrated or inferior poet but because she wanted to keep journals, both for herself and for William Wordsworth.”⁴⁷ The appeal of this approach is that it creates an *a priori* generic break between the siblings, which allows each to be doing their own individual work in different modes, which occasionally overlap. Dorothy, from this perspective, emerges as an independent writer (not “a frustrated and inferior poet”) and, what is even

⁴⁶ Mary Ellen Bellanca, *Daybooks of Discovery: Nature Diaries in Britain, 1770-1870* (Charlottesville: University of Virginia Press, 2007) 116.

⁴⁷ Ibid., 12.

more compelling, a public writer: “[R]eading the *Alfoxden* and *Grasmere Journals* as nature diaries with their own agendas calls into question many received notions about their author, such as the supposed spontaneity of her composition or her total sequestration from the public marketplace of letters.”⁴⁸ Dorothy is both influenced by and, in her published work such as *Recollections of a Tour Made in Scotland* (1803), influential of future descriptions of the natural world by both amateur and professional natural scientists.

There are difficulties involved in making Dorothy a master of natural observation, however. Bellanca, as we have just seen, deploys genre in service of a naturalizing tautology (Dorothy “wrote her journals ... because she wanted to keep journals”); Kenneth Cervelli’s (also 2007) ecological reading of the journals opens with the same uncritical gambit: “[Dorothy] is best known for her journals (in a period known for its poetry) and that until relatively recently critics had not really thought of interpreting them *as* journals.”⁴⁹ It is a familiar recuperative move to re-evaluate the worth of a work by challenging a set of standards as non-applicable; its nature-diary application to Dorothy Wordsworth, however, lacks the critical edge of the feminism that it derives from. When we say with Bellanca that the journals’ fragmentary “bits of experience add up to an implied whole in the continuous experience of Dorothy Wordsworth the observer-writer,”⁵⁰ we do precisely what Bellanca would seem to want to avoid, insofar as Dorothy’s entries come to look like beautiful fragments of a *Prelude* that she never

⁴⁸ Ibid., 109.

⁴⁹ Kenneth Cervelli, *Dorothy Wordsworth’s Ecology* (New York: Routledge, 2007) 3.

⁵⁰ Bellanca, *Daybooks*, 125.

wrote.⁵¹ Or, to the extent that we are able to maintain a stable generic difference between the work of the siblings, who are themselves presented as individuals working sometimes independently and sometimes cooperatively, the working relationship between William and Dorothy, for as much as it gains in terms of a collaborative framing, is reduced to a mere fusion of genres, that of imaginative poetry and the more empirical work of the botanist:

As much as they celebrate physical nature as she finds it, of course, Dorothy Wordsworth's journals also express the aesthetic sensibility of a wide-ranging reader with literary gifts who was a working partner in a household enterprise—a cottage industry, one might say—devoted to producing poetry. Even as her journals use natural history conventions, they sometimes embellish and rewrite them, illuminating other facets of the prism that is her total experience of the natural world.⁵²

Natural science, reduced to a non-interventionist observationalism, stands back, records its facts, and awaits the enlivening colors of a responsible creative imagination in the revisionary process. What is most compelling about Dorothy's writing, namely its impersonality, has been re-animated as the innovative style of an individual author who not only "evoke[s] things and people and let[s] them be," but lets them come to life by combining empirical observation with responsible imagination.

⁵¹ We could also look at this problem from the perspective of the odd definition of genre that is at play. Fragmentary nature diaries, like journals, come to look like lived experience because they do not immediately integrate. In this way, they represent a pragmatic understanding of life as a series of semi-random events that we can to a degree guide but which we have the most (and most violent) control over through our human compulsion to narration. Biography, from this perspective, exceeds critical frameworks like a vital force. We will see such arguments about biography at play in the last chapter, on De Quincey's *Confessions*.

⁵² Bellanca, *Daybooks*, 121.

In fact, in her entry of June 19, 1802, Dorothy mocks botanists' tendency to limit their perspectives by naturalizing the objects of their study:

On Thursday morning Miss Hudson of Workington called. She said 'O! I love flowers! I sow flowers in the Parks several miles from home & my mother & I visit them & watch them how they grow.' This may show that Botanists may be often deceived when they find rare flowers growing far from houses. This was a very ordinary young woman, such as in any town in the North of England one may find a score (*DWJ*, 111-12).

This could easily be mistaken to show the reader a natural ecology, a vision of the intertwining of the natural and human worlds. From such a perspective, nature would expand to encompass its human actors, and situate us all in a more or less stable web of interconnectedness; or, which is the same thing in the other direction, natural scientists like Bellanca's Dorothy Wordsworth would imaginatively add a human layer to its object of study. But Dorothy has done something much more unsettling. Geographic locality is virtualized, as one among many signposts in the space of lived experience. Locality indeed takes on a new meaning as we consider the small acts of imagination in Miss Hudson's contributions to botanical drift, with singularly attractive flowers following singular itineraries through the hills to just the right spot, based on their host's sensibilities. And in the last moment, Dorothy turns scientific discourse against itself by asserting the sheer size of this population of women, who seem to have as their hobby the scrambling of local ecologies according to an unspoken aesthetic. The beautiful landscape is not a web peacefully woven by housewives on walks, so much as a map of

intensities in the aesthetic collision between two massive populations, namely flowers and women.

It is worth noting that Dorothy counts herself as a member of this indeterminate community of un-naturalists, planting flowers according to an experimental logic.

Climbing in the hills earlier that year on April 23, 1802, she encounters two visions of nature; the first, she presents in Kantian terms, as the poets see it: “Above rose the Coniston Fells in their own shape & colour—not Man’s hills but all for themselves the sky & the clouds & a few wild creatures.”⁵³ She finds the second when Coleridge, climbing higher, beckons them to join him in a bower. Elizabeth Fay refers to such moments of finding places of comfort, settling in, and cultivating them, as “nesting”:⁵⁴ “Above at the top of the Rock there is another spot—it is scarce a Bower, a little parlour, one not *enclosed* by walls but shaped out for a resting palce by the rocks & the ground rising about it. It had a sweet moss carpet—We resolved to go & plant flowers in both these places tomorrow” (DWJ, 90-1). Dorothy makes a home out of nature in this cranny, but she is for a place that is not for her.

And so quite to the contrary of the non-interventionist standpoint we would expect from an observational scientist, Dorothy participates in the widespread reordering of the botanical terrain, and in insisting on doing this on a mountain’s edge, she would seem to be doing so for the express purpose of presenting nature as something unmoored from a simple geography. I take this production of unmooredness to be the purpose of her well-known journal entry to February 1, 1802:

⁵³ Ibid., 90-1.

⁵⁴ Fay, *Becoming Wordsworthian*, 92-7.

I found a strawberry blossom in a rock. The little slender flower had more courage than the green leaves, for *they* were but half expanded and half grown, but the blossom was spread full out. I uprooted it rashly, and I felt as if I had been committing an outrage, so I planted it again. It will have but a stormy life of it, but let it live if it can.⁵⁵

Susan Levin sees in Dorothy's encounters with nature a "reflection" of "Dorothy's emotional states and her position as a solitary woman seeking definition from those around her," and asserts that this position is a one of "extreme vulnerability" and "fragility."⁵⁶ But even if Dorothy sees in the strawberry blossom a reflection of her vulnerability to arbitrary powers from above, and a lack of rootedness to hold her down from below, this exposure to an uncertain fate is one that she herself has produced through her initial act of deracination. Unlike a non-intervening observer who just lets things be, she has torn it up and left it vulnerable; unlike even a botanist taking a sample, she has placed the blossom back, but in loose soil almost sure to let it blow away. I see in this scene a reflection of her approach to the nature diary's fragment form: like the strawberry plant, her entries present themselves as still situated in their natural environment (and so authorless), but no longer of their natural environment (and so appropriable). As I suggested in the above section, Dorothy is presenting her descriptions as though the observations are not hers – by this, I mean that we have not taken her literalism seriously enough. She intends her descriptive sketches themselves to be the reader's (i.e. William's) naturalized observable object.

⁵⁵ Ibid., 61-2.

⁵⁶ Levin, *Dorothy Wordsworth and Romanticism*, 20.

This, then, is why it is a mistake to read Dorothy's journals as observational records, however imaginative: far from being the hidden material underbelly of a Romantic transcendental poetics (and resistant to it), the journals perform that hiding. Dorothy's journals strive to see with eyes that are not her own but rather the household's. The intertextual resonances of her journals are not attempts to subordinate literature to the demands of an object-world constituted by an empirical or imaginative notion of nature, but rather to present nature as if it were composed of textual fragments, and literary fragments as if they were as natural as bits of moss on a rock, all as a means of laying down markers in a life awash in the surge of literary data that was the lived Wordsworthian archive. Dorothy's fragments are to the Wordsworthian archive what the displaced rare flowers are in the landscape: a map of intertextual intensities easily mistaken as—and intended to be mistaken as—natural serendipities. When we represent her as a nature diarist attempting to capture the natural world in its pure "facticity," we become the gullible botanists, unable to see that those flowers look beautiful where they are most likely because they look beautiful there.

Their daily life is purposively suffused with literature that requires processing to be used, in the same way that the Herschels' household is intentionally awash in data that needs to be kept organized and contextually segmented if the actors are to interact with it in a meaningful way. Sometimes, the women read aloud to the group; sometimes, William reads aloud, but only those choice phrases he wishes his auditors to take note of: "We sate by the fire without work for some time then Mary read a poem of Daniell upon Learning. After tea Wm read Spenser now & then a little aloud to us. We were making is waistcoat" (*DWJ*, 40-1). This entry from November 24, 1801 exhibits a division of labor

which does not neatly break down along gendered lines, between the manual and the intellectual; William's decision to read the women only the lines of his choosing puts them in a position of doing intellectual work as well, namely of training themselves to hear with his ear. When they are well, they read, and usually the same books (Knight, Chaucer, Spenser); they read each other to sleep: On the 16th of March, 1802, "After dinner I read him to sleep—I read Spenser while he leaned upon my shoulder" (*DWJ*, 79), and the next day, "I was tired to death & went to bed before him—he came down to me & read the poem to me in bed..." (*DWJ*, 79-80). They read and write until they cannot, and Dorothy's journals, rare in their complaints, constantly chide William for pushing too hard: "I almost finished writing the Pedlar, but poor William wore himself & me out with Labour," she notes on February 13, 1802 (*DWJ*, 67-8). But this should be understood in the tone not of a nurse but of a manager; what is odd about this entry is that her concern is only worried about his health insofar as it impacts his output. We see this more explicitly, though perhaps with a bit more posturing about the rigors of the artist's life, in a February 1807 letter to Lady Beaumont, as Dorothy justifies the minor diversion of landscape work on a trip:

He is very happy in his employment, and I assure you that you need not give yourself a moment's care about interrupting him in his poetical labours; for those will and must go on when he begins, and any interruption, such as attending to the progress of the workmen and planning the garden, is of the greatest use to him; for after a certain time the progress is by no means proportioned to the labor in composition, and

if he is called from it by other thoughts, he returns to it with ten times the pleasure, and his work goes on proportionally more rapidly.⁵⁷

Leisure time is valued because it increases overall productivity. In this light, we should read her journals' constant attentiveness to his habits and even diet, and her cataloguing of the works they read together and how much they read them, all as a finely-tuned management of human capital more than an exclusively domestic concern for a loved one's physical and psychic well-being. The ultimate purpose in suffusing their lives with literature is to fully orient William's life to his life's work.

Because above all, Dorothy reads William, returning to him again and again: March 5, 1802: "Read the LB, got into sad thoughts, tried at German but could not go on—Read LB.—Blessings on that Brother of mine!" (*DWJ*, 74-5) She knows him by heart, and recites his own words back to him, as on Christmas Eve, 1802: "I have been beside him ever since tea running the heel of a stocking, repeating some of his sonnets to him, listening to his own repeating, reading some of Milton's & the Allegro & Penseroso" (*DWJ*, 134-5). Dorothy recounts him quoting himself to himself and Coleridge, as the two men split off for a walk by the waterfall, on April 22, 1802: "When they returned William was repeating the poem 'I have thoughts that are fed by the Sun'. It had been called to his mind by the dying away of the stunning of the waterfall when he came behind a stone" (*DWJ*, 89-90). She does the same, adopting his well-known peripatetic compositional habits, but with a twist, by repeating *his* poems to herself and others, while walking through the landscape: On April 4, 1802, "We drove in the gig to Water End. I walked down to Coleridge's. Mrs C came to Greta Bank to Tea. Wm

⁵⁷ DW to Lady Beaumont, 15 February, 1807. *Letters of Dorothy Wordsworth*, 84.

walked down with Mrs C. I repeated his verses to them” (*DWJ*, 82). Two weeks later, On April 16th:

When we came to the foot of Brothers water I left William sitting on the Bridge & went along the path on the right side of the Lake through the wood—I was delighted with what I saw—the water under the boughs of the bare old trees, the simplicity of the mountains & the exquisite beauty of the path. There was one grey cottage. I repeated the Glowworm as I walked along—I hung over the gate, & thought I could have stayed for ever. When I returned I found William writing a poem descriptive of the sights & sounds we saw and heard. (*DWJ*, 86-7)

The “I” that breaks off from “William” inhabits the landscape of a Wordsworthian poem. He is presented as doing the descriptive work, and she is presented as experiencing that description. Her observations are not objective, but neither are they creatively imaginative; they are contextually-situated iterations of his past work.

It must be stressed that this is a performance, a writerly practice. Just as Caroline Herschel must do massive amounts of work to be able to have the information William needs at her fingertips, Dorothy must present her journal fragments as though they were objects curiously in nature but not of it, like an uprooted-in-place strawberry blossom, unproblematically appropriable. The consequences, when her writing is too writerly, are disastrous; one month prior, on March 13, Dorothy reads a too-perfect old entry to William and throws off the day’s production:

No letters at Rydale. We drank tea as soon as we reached home. After tea I read to William that account of the little Boys belonging to the tall woman

& an unlucky thing it was for he could not escape from those very words,
& so he could not write the poem, he left it unfinished & went tired to Bed.
In our walk from Rydale he had got warmed with the subject & had half
cast the poem. (*DWJ*, 77)

Elizabeth Fay has explored William's use of this too-close companion figure, in what she calls his "address-to-maiden" form. In the choice of an indeterminately differentiated addressee, William finds an "innovative amelioration of the solitary poet's mythos," specifically:

The sibling does not so much allow the poet to achieve the semblance of a unified self as she provides a correspondent who can help him mediate the terrors of a hostile mother nature by allowing him to cross the self-other divide—for she is both other (that which is addressed) and self (a second, earlier self).⁵⁸

I would only add to this that Dorothy is oftentimes not mediating between William and nature, but rather presenting to him their shared literary life as that which is natural; she is lifting them away from the idea of a stable ground, on a bootstrapped intertextual network, much of it woven out of William's own writing. The closing address to Dorothy in "Tintern Abbey" stages precisely this problem:

For thou art with me, here, upon the banks
Of this fair river; thou, my dearest Friend,
My dear, dear Friend, and in thy voice I catch
The language of my former heart, and read
My former pleasures in the shooting lights

⁵⁸ Fay, *Becoming Wordsworthian*, 35.

Of thy wild eyes. Oh! yet a little while

May I behold in thee what I was once,

My dear, dear sister!⁵⁹

The sister here mediates the present with two pasts, which I do not believe William knows how to choose between: on the one hand, the unmediated experience of nature, and on the other hand, the self of that experience. I have argued in this section that Dorothy does not describe the natural world, but instead attempts to produce fragments that look like Wordsworthian percepts lying about on the side of a country road. To the extent that this is true, we should see her work as pushing William towards the former choice, with a twist: her work, in its iterations of the “language of [his] former heart,” prompts him to further experimentation by presenting his prior experimental work as the most natural thing in the world. This iterative work of Dorothy’s allows for the progressive development of a Wordsworthian poetics by constantly integrating past work into their common life and presenting it as an ever-rising natural ground on which William is able to stand and in whose terrain he can consider the strange forms of life present. But Dorothy’s rigorous practice of impersonal writing and abstracted intellectual labor gives rise to truly strange aesthetic elaborations and divergences from William’s writing; and as the next section will sketch out, this strangeness and these complications are only visible from the perspective of the siblings’ proximity, not their distance. I will pursue this line of inquiry by remaining with the question of visibility, implicitly raised in the discussion of observation: because if Dorothy’s apparently descriptive sketches truly

⁵⁹ W. Wordsworth, “Lines Composed a Few Miles Above Tintern Abbey, on Revisiting the Banks of the Wye During a Tour,” in *The Poetical Works of William Wordsworth*, ed. Ernest de Selincourt (Oxford: Clarendon Press, 1944) 262.

have nothing to do with observation, then what is it that we are seeing when we read them?

4. Half-Seeing What It Creates

James Heffernan argues in 1984 that complexity or, we might say, *noisiness* in imagistic representations, is an occasion for and symbol of the playful operations of the imagination, in its overcoming of the physical eye. Reading the imagery in Coleridge's "Nightingale", Heffernan observes that the poetic-imaginative transformation of sorrow to joy is attended by a complex treatment of dancing lights and shadows:

On moonlight bushes,
Whose dewy leaflets are but half-disclosed,
You may perchance behold them on the twigs,
Their bright, bright eyes, their eyes both bright and full,
Glistening, while many of glow-worm in the shade
Lights up her love-torch

This passage is studded with lights. ... [T]here is nothing simple or predetermined about his chiaroscuro. What we see is rather a cluster of lights: the radiance of many glowworms, the brilliant eyes of the birds, the dewy leaflets catching the light of the moon. ... Turning sorrow into

spontaneous joy, the lights permeate the entire range of living things:

bushes, birds, glowworms, and infants.⁶⁰

What Heffernan sees in this quick play of light and shadow is the Coleridgean creative imagination, attempting to unify a collection of disparate parts into a single image. The transformation of sorrow into joy, in this telling, is managed in the poet's subtle but powerful orchestration of an apparently randomly-flickering lights into an optical symphony.

Galperin offers the most succinct formulation of this Romantic imagination, while complicating it with a contrary moment of dissolution. The raw, visible world is repressed by the creative imagination, which would see the image of its own creativity reflected back to itself. This is essentially McGann's Romantic ideology, as applied to the domain of vision. But, proceeding from a psychoanalytic perspective, Galperin argues that the repressed phenomenal world of the visible returns, in the artist's guilty conscience. Of Constable's illusionistic painting, he argues "[I]t is the function of Western illusionistic painting to domesticate the 'glance'—that bodily activity by which we may perceive the visible—by systematically transposing the visible to the plane of 'vision' and to a more symbolic, more encoded realm."⁶¹ Physical sight shines through the transparent veil of idealism, here, through "the sheer strength of its facticity," a force that we have seen Bellanca's observational Dorothy to be well-acquainted with.⁶² Both these ideological accounts of a Romantic visual imagination, however, beg important

⁶⁰ James A. W. Heffernan, *The Re-Creation of Landscape: A Study of Wordsworth, Coleridge, Constable, and Turner* (Hanover, NH: University Press of New England, 1984) 150-51.

⁶¹ Galperin, *The Return of the Visible in British Romanticism* (Baltimore: Johns Hopkins University Press, 1993) 27.

⁶² Galperin, *Return of the Visible*, 3.

questions. In Heffernan's case, the argument seems to go farther than it intends. The commonest trope for critics of the Romantic visual imagination is prosopopoeia, and the movement from apparently optic imagery to apparently mental imagery, as nature is transformed from a scene of fascinating noise to a luminous, complex order would seem at first to conform to this imposition of the human on the inhuman.

But if Coleridge's nighttime tapestry has a face, it is one crawling with eyes opened and closed; what stares back at us in this imaginative encounter is something other than human. Perhaps the child is convinced by his father's song, but the image of a landscape bristling with eyes is a hard one to shake, once seen. And while Galperin's Freudian model of repetition-compulsion could cover this tension of the human with the inhuman by coding the unsettling image as a form of guilty conscience, it is unclear why this would provide the simplest account of complex poetic description. His explanatory frame, relying as it does on an arbitrary doubling of all imagery into intentional-but-ideal and unintentional-but-real parts, would seem to create more problems than it solves.

A more practical objection to this line of critique, however, is that it is a better fit for Thomas Gray than it is for William Wordsworth or ST Coleridge. In his "Ode on the Spring" (1748), Gray performs precisely the subordination of optical multitude to intellectual unity that his Romantic counterparts have been charged with.

The insect youth are on the wing,
Eager to taste the honied spring,
And float amid the liquid noon:
Some lightly o'er the current skim,
Some shew their gayly-gilded trim

Quick-glancing to the sun.

To contemplation's sober eye

Such is the race of Man:

And they that creep, and they that fly,

Shall end where they began.⁶³

(25-34)

Embodied experience, here, is both beautiful and vain, it is a fluid system of percept in which seeing and being-seen collapse into one “quick-glancing” swarm of insect motion. “Glancing,” in other words, gives us both the oblique reflection of light off the gilded wings of the “insect youth,” and their peers’ distracted perception of that flickering. And yet all this motion, we discover as the visual narrative zooms out, has been contained in the disembodied, intellectual sobriety of mental vision. No longer being-seen, contemplation’s sober eye records their spatially-arrayed flickering in the present, and projects that activity onto (circularly) linear time, spanning between birth and death. Intellectual reflection, represented as visual imagination, has accounted for and exceeded mere optical experience.

If we think there is something distinctively Romantic about the Romantic visual imagination, we will need another framework. Frances Ferguson’s treatment of the picturesque lays the groundwork for an alternative line of inquiry, which has more recently been explored by Rei Terada. In much the same way that I, following Fay, have attempted to move away from an agonistic understanding of the Wordsworth siblings’

⁶³ Thomas Gray, “Ode on the Spring,” in *Eighteenth-Century Poetry: An Anthology*, eds. David Fairer and Christine Gerrard (Malden, MA: Blackwell, 1999) 323-24.

working relationship, this approach to visuality disposes with the simplistic notion of an agonistic encounter between a precariously unitary subject and a problematically multiple object-world by focusing directly on the impersonal dimension of aesthesis, which is to say the mechanics by which experience is formalized. Ferguson, discussing Wordsworth's treatment of necessarily hyper-local optical illusions in his *Guide to the Lakes*, directs our attention to the ways in which the relentless search for a natural scene's minute particulars makes the work of individuation into an automatic process that is at the same time the hardest work in the world:

Nature, by reflecting its own objects, creates its own art.... It takes the same thing (Lyulph's Tower) and makes it look different (like a castle in the lake). Nature, doubling images of objects, produces typicality as more of the same and particularity as the way that sameness always looks like a variation. ... Wordsworth would see as nature sees—would see nature's self-doubling as marking out the only point at which nature identifies its perspective rather than relying on human composition. (*SS*, 142-43)

As I will argue below, Dorothy's journals constitute a tropological map of the Wordsworthian Grasmere, an index to the archive that accelerates the pace at which, in Ferguson's words, the "hiding of the occasioning object" (*Ibid.*, 142), can be achieved without a loss of the sense of this hiding's naturalness.

Terada, in a complementary examination of some of Coleridge's notebook entries, considers his fascination with visual complexity as just the opposite of egoistic imagination that Heffernan and Galperin see in his poetry. Intense colors and sunspots, hallucinations and yet-unresolved optical illusions, all allow Coleridge to (at least

provisionally) free experience from its conceptual determinations in the “suspensive illusion”⁶⁴ that one need not decide on the objective truth or fiction of a perception: “casting a perception as mere appearance ... allows the mind to entertain it without endorsing it, splitting the difference between delusion and the renunciation of enjoyment....”⁶⁵ It is only in the suspension of normal experience, here where the imagination’s typical resources for categorizing and ordering raw sensory data are overwhelmed, that we become apperceptive, capable in this case of seeing ourselves seeing, but in an estranged manner. Specifically, we see ourselves *not* seeing – we start to feel the shadowy edges of what Kant would call our spatial intuition. This impersonal imagination is directly opposed to the intellectualism and egoism of the male gaze typically associated with Romantics like Wordsworth and Coleridge; it prioritizes sensory confusion over cognitive unity as a way of privileging subjective unbecoming over becoming.

Terada’s deterritorializing mode of Romantic visuality is a helpful starting point for understanding Dorothy Wordsworth’s fascination with similarly complex and noisy visual phenomena. Her entry for November 24, 1801 describes, in an astonishing passage that William seems not to have used in his own poetry, a tree “transformed” not through the intervention of her own imagination but through the chance coincidence of heavenly, atmospheric, and spatial relations:

It was very windy, and we heard the wind everywhere about us as we went along the lane, but the walls sheltered us. John Green’s house looked

⁶⁴ Terada. *Looking Away, Phenomenality and Dissatisfaction from Kant to Adorno* (Cambridge, MA: Harvard University Press, 2009) 20.

⁶⁵ *Ibid.*, 51.

pretty under Silver How. As we were going along we were stopped at once, at the distance perhaps of 50 yards from our favourite birch tree. It was yielding to the gusty wind with all its tender twigs. The sun shone upon it, and it glanced in the wind like a flying sunshiny shower. It was a tree in shape, with stem and branches, but it was like a spirit of water. The sun went in, and it resumed its purplish appearance, the twigs yielding to the wind, but not so visibly to us. (*DWJ*, 41)

The birch tree's multitudes of branches and twigs, covered in water, are whipping back and forth in the sunlight. Dorothy provides us two quasi-poetic images of the whole, alternately as "a flying sunshiny shower" and "a spirit of water," both descriptive of something like motion in place, of a localized dynamism. Neither of these provisionally coalesced shower/spirit images, however, fully contain that pre-imagistic participle, "glanced." The broad-brushstroke image of the tree's fluid, sunshiny motion, refracting the rays of the sun, threatens at any moment to resolve into an awareness of the movements of the flashing rain on the individual twigs. I say "threat" because the image is haunted by its linguistic construction; "glanced" is always (implausibly) "glanced," and the landscape, alive with motion, always on the verge of opening its eyes in an act of monstrous prosopopoeia.

This is not Gray's glancing light: its potential for terror or even ecstasy cannot fully be territorialized as optical illusion or identification because Dorothy never insists on the image's realization. We can choose to read it as a mere flickering or flashing, but the burden of the choice is placed on the reader. This is, in fact, the choice that William

makes, when he famously cribs imagery from Dorothy's March 4, 1802 journal entry, to write his "Daffodils" poem (1804). Dorothy:

The wind seized our breath. The lake was rough. ... When we were in the woods beyond Gowbarrow Park we saw a few daffodils close to the water-side. We fancied that the sea had floated the seeds ashore, and that the little colony had so sprung up. But as we went along there were more and yet more; and at last, under the boughs of the trees, we saw that there was a long belt of them along the shore, about the breadth of a country turnpike road. I never saw daffodils so beautiful. They grew among the mossy stones about and above them; some rested their heads upon these stones, as on a pillow, for weariness; and the rest tossed and reeled and danced, and seemed as if they verily laughed with the wind, that blew upon them over the lake; they looked so gay, ever glancing, ever changing. (*DWJ*, 74)

William's 1804 poem makes several important and well-known re-visions on the imagery of Dorothy's entry: it does away with the narrative of increasing knowledge in favor of instantaneous revelation, it turns the highway into an army, it irons over the irregular knots, and of course it does away with Dorothy.

I wandered lonely as a Cloud
That floats on high o'er Vales and Hills,
When all at once I saw a crowd
A host of dancing Daffodils;
Along the Lake, beneath the trees,

Ten thousand dancing in the breeze.

The waves beside them danced, but they

Outdid the sparkling waves in glee: --

A poet could not but be gay

In such a laughing company:

I gazed -- and gazed -- but little thought

What wealth the show to me had brought:

For oft when on my couch I lie

In vacant or in pensive mood,

They flash upon that inward eye

Which is the bliss of solitude,

And then my heart with pleasure fills,

And dances with the Daffodils.⁶⁶

(1804, 1-18)

I would argue, however, that the most significant alteration to Dorothy's daffodils scene, in a poem which Elaine Scarry has powerfully shown to be concerned with the practicalities of visual imagination,⁶⁷ is the elision of Dorothy's polysemous "glancing." That William finds this elision to be significant is apparent in his 1815 revision to the poem, whose new second stanza includes the verb in its infinitive form:

Continuous as the stars that shine

⁶⁶ W. Wordsworth, "I Wandered Lonely as a Cloud," in ed. Selincourt, 216.

⁶⁷ Elaine Scarry, *Dreaming by the Book* (Princeton: Princeton University Press, 2001), 62-5.

And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.
(1815, 7-12)

We can hear an echo of Dorothy's gerundive usage, in the infinitive and prepositional alienation of the verb from the speaker/viewer's subjectivity. This floating "glance" admits of contradictory readings, either as a reterritorialization of Dorothy's landscape of percepts insofar as the "glance" is more closely aligned with the speaker's subjectivity, or as a quiet adoption of her rhetorical excess in the ambiguous possibility that the "glance" may not be the speaker's. But in either case, it would seem reasonable to attribute William's significant revision of the poem to a need to address the problem raised by Dorothy in her usage.

To be specific, the problem Dorothy's journals pose is the degree to which writing can or should participate directly in the aesthetic task of formalizing sensation. In the specific examples we have been looking at, the problem is worked out in the domain of visuality. Yet as we have also seen, this visuality does not privilege an eidetic communication from an original writer to a final reader; rather, it exhibits visuality's subjection to the arbitrariness of signification, which for William makes it undecidable whose glances we are seeing, and for Dorothy makes it undecidable whether we are in fact seeing at all. Perhaps that is going too far, to suggest that the glance form's partial sight might be opposed to sight as such. But it is certainly opposed to the picturesque

mode, and observationalism's related subordination of visibility to Euclidean geometry. More, it is at least archivally defensible to say that Dorothy's glancing or "glancing" challenges the primacy of optically-derived visibility insofar as she seems to be experimenting with a usage that is originally William's, and one which he associates with a form of blindness (or at least anti-picturesque visibility).

William's 1793 *Descriptive Sketches* early on allows his speaker to withdraw from the war-torn French lowlands and the destruction of the Grand Chartreuse, to the peaceful—because—less-accessible alpine lake Como: "No meadows thrown between, the giddy steep's Tower, bare or sylvan, from the narrow deeps" (1793, 82-3).⁶⁸ In the deep folds of the mountains, his speaker loses both perspective and linear motion, becoming a "viewless lingerer" (1793, 92) as he wanders around the lake to its various towns, and up and down the fall line away from and towards the shore. This viewlessness is exhibited in an attempt to deploy the picturesque mode, and that mode's spectacular failure as it shatters into a vision of glancing sunlight and the remainder's vertiginous inversion:

Or stops the solemn mountain-shades to view
Stretch, o'er their pictur'd mirror, broad and blue,
Tracking the yellow sun from steep to steep,
As up the opposing hills, with tortoise foot, they creep.
Here half a village shines, in gold array'd
Bright as the moon, half hides itself in shade.
From the dark sylvan roofs the restless spire

⁶⁸ William Wordsworth, *Descriptive Sketches* [1793, 1836], ed. Eric Birdsall (Ithaca: Cornell University Press, 1984).

Inconstant glancing, mounts like springing fire.

There, all unshaded, blazing forests throw

Rich golden verdure on the waves below.

(1793, 106-11)

This is in one sense an apocalyptic vision of continental war: Switzerland, too, could burn. But for the reader, it is a problem of vision before it is a problem of history -- we have a very hard time understanding what we are seeing and where we are standing. This town's church steeple, this "restless spire, inconstant glancing," is lit either from above by the sun or below by its refraction off the water, that already tinted by what seems to be the opposing shore's treeline. But however much we can reduce the confusion, we and the "viewless lingerer" are lost and blinded, unable spatially to organize our vision fully in this tightly-packed valley.

And yet, by the time of his 1836 edition, William has rationalized this difficult imagery in the manner now familiar to us in his complex engagement with Dorothy's use of "glancing" in the daffodils scene. His speaker seems to have rediscovered his view and his way, merely temporarily suspending his journey as a "loitering traveller" (1836, 89). The image is clarified, sight becomes whole, and again, "glancing" becomes "flashing":

Here, half a village shines, in gold arrayed,

Bright as the moon; half hides itself in shade:

While, from amid the darkened roofs, the spire

Restlessly flashing, seems to mount like fire:

There, all unshaded, blazing forests throw

Rich golden verdure on the lake below.

(1836, 97-102)

Our viewpoint's stabilization allows the image to move about without actually transforming, to flicker or flash without glancing back at us. The picturesque has been re-asserted. If William avoided Dorothy's 1802 problem of partial vision in 1804, and allowed a controlled version of it in 1815, an earlier and overlapping iteration of the problem shows him eliminating it between his 1793 *Sketches* and their 1836 revisions.

This narrow slice of the problem of representing visuality in the Wordsworths' writings implicates several explanatory models of their working relationship. Expropriation models, which read William as stealing Dorothy's work from the journals without any credit, would of course be complicated by the fact that Dorothy seems to be using William's own words from the 1793 *Sketches* in the 1802 journal entry that he cribbs from to write his 1804 and 1815 versions of the Daffodils. Anxiety-of-influence models (a subcategory of the expropriative readings) that uncover William's fear of writing too much like Dorothy would be complicated insofar as the 1804 Daffodils, in avoiding Dorothy's language, is avoiding William's own, and prefiguring his more direct 1836 self-avoidance of the 1793 *Sketches*. And in a similar manner, the generally-accepted model that Dorothy's undeniably strange aesthetics represent a sort of challenge to William's from within would become archivally dizzying in this case: her resistance would take the form of remembering his words just as he was trying to forget them.

I do not present these complications as flip ironies. I actually find the notion of Dorothy deploying an acidic, untimely recollection thrilling, in the way that in *Persuasion*, Anne Elliot's sly recollection of certain remarks made by Captain Wentworth about her appearance, at the moment of his somewhat hypocritical proposal

to her, allows the reader to know that she remains herself.⁶⁹ But that seems to me to be precisely the problem: in some form or other, the various feminist appraisals of Dorothy Wordsworth's work (excepting Elizabeth Fay's) present us an individuated writerly subjectivity whose most interesting aspect is its divergences from William's. There is certainly tension between the two, and William does frequently express a need to fashion an individual self for himself, but his occasional resistance to Dorothy's journal entries would seem better to be explained as a problem internal to the logic of individuation itself than as a problem between two more or less individuated actors. Specifically, the process of individuation, as the work of self-creation through introspection, is endless, and this is even true for influential cultural producers; the more well-known one's work, the more one begins to hear one's words and style in others' work, leaving aside the question of "pirated" editions.

The frustrations that inherently attend individuation are what we hear in the above example. The difficulty of differentiating oneself from others is discovered to be a matter of breaking with one's past self, or at least its social traces. Dorothy, in her capacity as editor and assistant, stands as a representative of memory's oftentimes problematic exactitude. At least, the men express their fascinated uncomfortability with her in terms of a sense that she sees everything; as Susan Levin notes, William, Coleridge, and De Quincey all fixate in one way or another on her "wild" eyes.⁷⁰ Coleridge's rendering in a 1797 letter is the most expressive: "Her information various--her eye watchful in minutest observation of nature--and her taste a perfect electrometer--it bends, protrudes,

⁶⁹ Jane Austen, *Persuasion*, ed. Gillian Beer (New York: Penguin Books, 2003 [1818]) 228.

⁷⁰ Citing De Quincey, Coleridge, and William Wordsworth, Levin observes that "Descriptions of Dorothy Wordsworth inevitably focus on her eyes" (Levin, *Dorothy Wordsworth and Romanticism*, 11).

and draws in, at subtlest beauties & most recondite faults.”⁷¹ Dorothy takes it all in, to the point where she seems to be registering forces insensible to others. By 1817, Coleridge will be certain that his fascination with perfect perception is a form of awe bordering on terror, when in his *Biographia Literaria* he represents total memorial recall as “the dread book of judgement, in whose mysterious hieroglyphics every idle word is recorded!”,⁷² but at this early stage, he is ambivalent, at once praising her refined sensibilities but denigrating the same sensitivity with a metaphor of pure mechanism, that of the scientific instrument.

Dorothy, as household manager, walking companion, editor, part-author, and reciter of the Wordsworthian poetry that her household produced, is for the conflicted men in Grasmere the embodiment of the interminability of the work of individuation. William expresses his fear that this interminable work will in fact end in failure, when he stages his boyhood theft of a boat in the 1799 *Prelude*:

... It was an act of stealth
And troubled pleasure; not without the voice
Of mountain-echoes did my boat move on,
Leaving behind her on either side
Small circles glittering idly in the moon
Until they melted all into one track
Of sparkling light. A Rocky steep uprose
Above the cavern of the willow tree,

⁷¹ Coleridge, *Collected Letters*, ed. Earl Leslie Griggs (Oxford: Clarendon Press, 1956) 330-1.

⁷² Coleridge, *Biographia Literaria*, v. 1, ed. J. Shawcross (Oxford: Oxford University Press, 1965 [1907]), 80.

And now, as suited one who proudly rowed
 With his best skill, I fixed a steady view
 Upon the top of that same craggy ridge,
 The bound of the horizon, for behind
 Was nothing—but the stars and the grey sky.
 —She was an elfin pinnacle; twenty times
 I dipped my oars into the silent lake,
 And, as I rose upon the stroke, my Boat
 Went heaving through the water, like a swan—
 When from behind that rocky steep, till then
 The bound of the horizon, a huge Cliff,
 As if with voluntary power instinct,
 Upreared its head: I struck, and struck again,
 And, growing still in stature, the huge cliff
 Rose up between me and the stars, and still
 With measured motion, like a living thing,
 Strode after me....⁷³

(1799, 90-114)

William's adventure begins with a departure from the shore, which departure
 accumulates into a progressive trajectory, as "idly" "glittering" circles blend into "one
 track/Of sparking light." But this picturesque vision, in which the noisy flashing of lights
 can be aesthetically reterritorialized as the beautiful contingency of past, lived experience

⁷³ William Wordsworth, *The Prelude* [1798-1799], ed. Stephen Parrish (Ithaca: Cornell University Press, 1977).

viewed from the stable present, is shattered when the horizon begins to move like a living thing, chasing him. This growing shape on the horizon, knowable only by its outlines, proliferates in forms of indifferent otherness in his imagination in the days that follow:

... after I had seen

That spectacle, for many days my brain

Worked with a dim and undetermined sense

Of unknown modes of being: in my thoughts

There was a darkness, call it solitude

Or blank desertion; no familiar shapes

Of hourly objects, images of trees,

Of sea or sky, no colours of green fields:

But huge and mighty forms, that do not live

Like living men, moved slowly through my mind

By day, and were the trouble of my dreams.

(119-29)

The trouble with the mountain is that as William moves away from it, it says nothing, and comes closer. It blots out the stars with its indifference. The trouble with the inhuman forms is that for all that they are nothing like him, they seem to stick inseparably to him. His project of individuation (leaving the shore behind) produces a self with a colorful history (the glittering circles coming into focus as a line), but only to a point; beyond which, it generates indifference at an exponential rate.

This indifferent mass that swallows up the stars recalls to us, with a difference, Paul de Man's opposition between Wordsworth and the Kantian poet, the one seeing a human face and a home in nature, and the other experiencing otherness:

Space, in Kant as in Aristotle, is a house in which we dwell more or less safely, or more or less poetically, on this earth. This is also how the sea is perceived or how, according to Kant, poets perceive it: its horizontal expanse is like a floor bounded by the horizon, by the walls of heaven as they close off and delimit the building.

... Wordsworth, ... in the nest-robbing episode in *The Prelude*, evoked the experience of dizziness and absolute fright in the amazing lines: "The sky was not a sky / of earth, and with what motion moved the clouds!" Here, too, the sky is originally conceived as a roof or vault that shelters us, by anchoring us in the world, standing on a horizontal plane, *under* the sky, reassuringly stabilized by the weight of our own gravity. But if the sky suddenly separates from the earth and is no longer, in Wordsworth's terms, a sky *of* earth, we lose all feeling of stability and start to fall, so to speak, skyward, away from gravity.⁷⁴

As in the previous scene of theft, we seem to begin with the assumption of a home, or a world, as Heidegger would put it. But the threat in the disappearance of this sense of being at home would seem to be quite different than that in the egg-stealing scene. Rather than the threat of falling away, of losing our gravitational stability, we feel stuck, as though we have tried to jump and the ground has gently held onto our feet like warm

⁷⁴ De Man, *Aesthetic Ideology*, ed. Andrzej Warminski (Minneapolis: University of Minnesota Press, 1996) 48.

taffy. The difference is striking. The fear in the case of the theft from the birds is that individuation will simply be unchecked, that one will fall away forever.⁷⁵ But the fear in the case of the theft from the boatman is that individuation will produce its opposite, that the ground will rise up with us as we attempt to leap, in the disorienting way that a trampoline can if we time things poorly.

We can explain the difference of the boat scene, in which Wordsworth finds his solitude to produce forms that are both inhuman and yet present in his mind, if we see the first not as a carefully-structured encounter with nature but as an anxious and uncertain encounter with previous literary—and above all one's own literary—attempts to formalize sensation. The to-him indifferent mass that chases his attempts at individuation is the expanding Wordsworthian archive of aestheticized lived experience; Dorothy's journals intensify the expansion of this archive. In the same entry as the tree with the glancing leaves, that of November 24th, 1801, Dorothy recalls an image that had slipped her by two days prior, just after recounting a claustrophobic hallucination of William's:

William walked to John's grove—I went to meet him—moonlight but it rained. I met him before I had got as far as John Batys he had been surprised & terrified by a sudden rushing of winds which seemed to bring earth sky & lake together, as if the whole were going to enclose him in—he was glad that he was in a high road.

In speaking of our walk on Sunday Evening the 22nd November I forgot to notice one most impressive sight—it was the moon & the

⁷⁵ Incidentally, this is the threat that Noel Jackson identifies in Wordsworthian experimentalism: that the desire to change poetry will simply make one incomprehensible to others (Noel Jackson, "Critical Conditions: Coleridge, 'Common Sense,' and the Literature of Self-Experiment," *ELH* 70:1 [Spring, 2003]: 117-149 at 119).

moonlight seen through hurrying driving clouds immediately behind the Stone man upon the top of the hill on the Forest side. Every tooth & every edge of Rock was visible, & the Man stood like a giant watching from the Roof of a lofty Castle. The hill seemed perpendicular from the darkness below it. It was a sight I could call to mind at any time it was so distinct.

We can assume that given the unfortunate choice, William would rather fall away into heaven than be swallowed alive by the world. Dorothy's subsequent recollection is therefore immediately relevant. As Woolf informs us, the hill she refers to is that of Stone Arthur, the peak "given" to William, as recounted in his previous year's (1800) poem on its naming:

... 'Tis in truth

The loneliest place we have among the clouds.

And She who dwells with me, whom I have loved

With such communion, that no place on earth

Can ever be a solitude to me,

Hath to this lonely Summit given my Name.⁷⁶

(12-17)

Dorothy's performance of an eidetic memory of the rocky hill and its too-human inhabitant makes William's status as owner of it a rather uneasy one. Rather than sitting at a comfortable distance, a familiar hike that he can take and never feel lonely on, the mountain and its stone giant's "huge and mighty form" accompany him to the extent that Dorothy does. Dorothy, in other words, has given the Stone man to William in the act of naming, and as if that did not bring it close enough to him, has given it to him again as

⁷⁶ "There is an Eminence," in ed. Selincourt, 115.

under the color of his *Prelude*, in another act of untimely memory. Dorothy's industrial domesticity has made a home out of Grasmere, but without always scaling the valley down: it is a home for William, but also for "huge and mighty forms that do not live / Like living men."

As Robert Mitchell has argued of Wordsworthian experimentalism, the introduction of stylistic differentiation as a principle in poetry invites limitless aesthetic innovation.⁷⁷ Dorothy's journals, by incorporating the household's stylistic innovations into the lived practice of experience, both allows the simple life to be aestheticized and at the same time demands that this aesthesis further develop its technical complexity if it is to be distinguishable from the mere living of rural life. We should see in these women's intellectual work the fact that all experience is in principle formalizable; and that the desire for formal innovation is inseparable from the (one step delayed) desire to communicate this innovation as a replicable form. Perhaps the most innovative work done by both Caroline Herschel and Dorothy Wordsworth is their shared ability to abstract complex processes and make as much intellectual labor look as routine as possible, in order to better set off as creative that done by the producer who is being set forward as the organization's celebrity figure. From the creative worker's point of view, the law of diminishing marginal returns looks like the world coming to swallow one up. We could, of course, imagine this trajectory taking a different turn, in which the journals' strange literary landscapes, and their strange, otherworldly figures, are not innovated on and the products claimed as intellectual property by William. In their rigorous impersonality, they in fact invite a non-proprietary experience that goes well beyond

⁷⁷ Robert Mitchell, *Experimental Life: Vitalism in Romantic Science and Literature* (Baltimore: Johns Hopkins, 2013) 36-8.

the merely interpersonal character often read into her work. Such a reading would attempt to heighten the contradiction in the Wordsworths' mode of poetic production, as outlined above: the more available Dorothy Wordsworth makes her fragments to appropriation, the more William's very act of appropriation looks like a necessary misreading. From this perspective, Dorothy's fragments, in their insistent blindnesses, would be understood as subreption engines, so effective at producing our misinterpretations that they provide a rich environment in which to study, and potentially unlearn, our individual-subjective responses to art. Such an aesthetics, taken to its limit, could even reclaim portions of the Wordsworthian archive according to a sense of common utility. This was not the path taken by the Wordsworths, however, and this chapter will succeed if it is persuasive of the potential for such a re-evaluation. In order more fully to diagnose the problems with a proprietary notion of aesthetic value, and what a turn towards a common—but not universal—utility would look like, we will now turn to Thomas De Quincey, and his encounter with the economics and aesthetics of consumption.

Chapter 3

Thomas De Quincey's Confessional Economy

Thomas De Quincey's autobiographical persona, the English Opium-Eater, is presented to us as the unexpected consequence of a steadily-worsening toothache. Unable to cope with "excruciating rheumatic pains of the head and face,"¹ he is recommended opium by a friend; and the opium-eater is born in the discovery that not only has his toothache disappeared, but "happiness might now be bought for a penny, and carried in the waistcoat pocket: portable ecstasies might be had corked up in a pint bottle: and peace of mind could be sent down in gallons by the mail coach" (*OE*, 39). Excessive pain can be not only negated, but transformed into excessive pleasure, by conspicuously manageable quantities: pennies, pockets, bottles, gallons at most. Suffering the pains of withdrawal, the Opium-Eater's visions are inhuman as often for their theoretical countability as for their infinitude: "I ran into pagodas: and was fixed, for centuries, at the summit, or in secret rooms" (*OE*, 73), and "the sea appeared paved with innumerable faces, upturned to the heavens: face, imploring, wrathful, despairing, surged upwards by the thousands, by myriads, by generations, by centuries:--my agitation was infinite..." (*OE*, 71-2). De Quincey slips back and forth here, between practical and theoretical impossibilities in representation, as these human "generations" straddle the border

¹ Thomas De Quincey, *Confessions of an English Opium-Eater, and Other Writings*, ed. Robert Morrison (Oxford: Clarendon Press, [2013] 1821) 38. Hereafter cited as *OE*.

between actual infinity and a superhuman finitude; his feeling seems to exceed the represented series, but as a result of the series exceeding his representational capacities.²

J. Hillis Miller's famous diagnosis of De Quincey's representational problematic is half-right, then: it is not quite that De Quincey "can never stop,"³ but that (in his early work) he cannot find a principle (specifically, integral calculus) that would programmatically turn his infinite series into finite quantities, however massive--he has been given no good reason for stopping. This representational crisis is precipitated by the utilitarian assertion, contra Burke, that pleasure and pain exist on a single continuum, not on parallel tracks: opium does not reduce pain by X and increase pleasure by Y, but confers a utility of X+Y on the Opium-Eater. The individual is no longer an Archimedean point in the aesthetic universe, standing over beauty and towered over by sublimity, but instead a yardstick or electrometer of finite extension in a field of massive but finite forces, always measuring and being measured. This massive field is the capacity for a fully-formalized (Kantian) aesthetics, in the presence of a universal and continuous scale of human pain/pleasure, to render all acts of aesthetic judgment quantitatively relative, both in terms of the pleasure the aesthete expects to find in a given encounter, and the abstract distance of that projected pleasure from the norm.

This is not intended as a condemnation of a utilitarian account of pleasure, or of formalization. As Avital Ronell has argued, excess of and in measurement is a form of affection integral to modernity, that she calls the "test drive."⁴ And as Frances Ferguson

² Timothy Morton discusses the problem of "massive finitude," in a rejection of the discourse of infinitude. See Morton, *Hyperobjects: Philosophy and Ecology After the End of the World* (Minneapolis: University of Minnesota Press, 2013).

³ Miller, J. Hillis, *The Disappearance of God: Five Nineteenth-Century Writers* (Cambridge, MA: Belknap Press of Harvard University Press, 1963) 55.

⁴ Avital Ronell, *The Test Drive* (Chicago: University of Illinois Press, 2007).

has argued in her work on pornography, utilitarianism is not, as Foucauldians would have it, a discourse of power that exposes the individual to social control, but rather a means by which the social renders itself visible: utilitarianism brings into the sphere of social critique and debate the yardsticks that we call “values.”⁵ De Quincey is not interested in the precise quantification of pleasure and the rigorous formalizability of experience as a means of approximating a (social or personal) reality. Rather, he is interested in the ways that these representational strategies deform/reform/inform modernity’s conceptions of truth and value. I therefore attempt to remain critical: I am interested not in whether we should measure pleasure, but in interrogating the potentialities of such an undertaking.

An autobiography of addiction is the perfect medium for such an analysis.

Foucault diagnoses confession as modernity’s paradigmatic discursive form, in that it produces an alienated form of self-relation, in which the subject relates to him or herself as an object of knowledge, as routed through the judgments of a (real or virtual) intermediate confessor.⁶ Such a confessing subject achieves both social legibility and virtue in the act of presenting his or her sins and sinful motivations; the successful confession is genetic, producing a new self in the renunciation of the old. And yet this is precisely what De Quincey’s autobiography refuses to do. Famously, he withholds his bodily representation from his autobiography. And in the process of doing so, he questions the entire confessional enterprise, equating his position as an author with that of the “criminal at the bar.” Bordering on bad faith, he wonders aloud, “why confess at all?” (*OE*, 61) Above all, he never renounces opium, or his addicted self. His escape from

⁵ Frances Ferguson, *Pornography, the Theory: What Utilitarianism Did to Action* (Chicago: The University of Chicago Press, 2004).

⁶ Michel Foucault, *The History of Sexuality, Vol. 2: The Use of Pleasure*, trans. Robert Hurley (New York: Random House, 1990).

addiction is not terminal but chronic, taking the form of harm-reduction: “I saw that i must die if I continued the opium ... I apprehended ... that I took it very irregularly: and that I varied from about fifty or sixty grains, to 150 a-day. My first task was to reduce it to forty, to thirty, and, as fast as I could, to twelve grains. I triumphed...” (*OE*, 77-8). Victory is twelve grains, not zero – if it is true that De Quincey cannot stop himself, it is more significant that he can cut back measurably.

But an account of De Quincey’s autobiography that explores the ways that the formalizability and quantifiability of experience informs the truth and value of a written life will have to take account of his extended engagement with political economy, most explicitly David Ricardo. The Opium-Eater sets Ricardo up as a philosopher equaled only by Coleridge (*OE*, 7); he credits Ricardo’s 1817 *Principles of Political Economy* with getting him through the worst of his withdrawal (*OE*, 64-5); and, most audaciously, he promises a forthcoming pocket-sized volume that reduces Ricardo’s principles to “algebraic symbols [rather than] the usual clumsy and loitering diction of economists,” to be entitled “*Prolegomena to All Future Systems of Political Economy*” (*OE*, 65). Unsurprisingly, the algebraic publication never came to fruition, but De Quincey would publish several articles on Ricardo, starting in 1821, and finally a book-length treatise called *The Logic of Political Economy* in 1844.⁷ In De Quincey’s *Logic*, he sketches out a new theory of value that re-locates quantified utility (as a scale from pleasure to pain) in the individual consumer; this consumer’s estimation of utility is theorized as a form of aesthetic judgment, and De Quincey uses this new theory of value to re-assess the

⁷ De Quincey, *Logic of Political Economy*, in *The Works of Thomas De Quincey*, ed. John Whale, v. 14 (London: Pickering & Chatto, 2001) 187-313. Cited hereafter as *LPE*.

viability of capitalism as a system of social organization, turning away from the dire predictions of Malthus and Ricardo to promise the possibility of unlimited growth.

This rosy prognosis for capitalism in his later work on economics entails a shifting of the ground of value away from a more social *sensus communis* towards the personal preferences of the individual end-consumer. Regenia Gagnier and Catherine Gallagher have already noted the ways in which this shift in his economic work anticipates by several decades the reactionary economic movement called “marginal utility” theory.⁸ This movement, led by William Jevons’ 1871 *Theory of Political Economy* and Alfred Marshall’s more influential 1890 *Principles of Political Economy*, argued that the production and the realization of value in the economy could only be maximized if individual consumers’ choices were taken as the ultimate ground of value; by rejecting common standards of value in favor of individual preferences, it served as a bulwark against progressive arguments for wealth redistribution.⁹ De Quincey anticipates some of the key propositions of marginal utility theory: that individual consumers’ valuations of commodities vary greatly; that it is not the place of economics to enter into moral debates over these values but instead to solve the problem of efficiently maximizing the realization of these valuations; and that individual consumer desire (informing and informed by culture) is a key force in driving technological development.

⁸ See Regenia Gagnier, “On the Insatiability of Human Wants: Economic and Aesthetic Man,” *Victorian Studies* 36:2 (1993): 125-153, and *The Insatiability of Human Wants: Economics and Aesthetics in Market Society* (Chicago: University of Chicago Press, 2000). Catherine Gallagher, *The Body Economic: Life, Death, and Sensation in Political Economy and the Victorian Novel* (Princeton: Princeton University Press, 2006).

⁹ Alfred Marshall, *Principles of Economics* (London: Macmillan and Co., 1890), hereafter cited as *POE*. William Stanley Jevons, *Theory of Political Economy* (London: Macmillan and Co., 1871).

Gagnier and Gallagher, who register De Quincey's unexpected innovativeness in this area, at the same time dismiss his economic criticism as an unserious historical prelude to the fully-formed marginal utility theory that is the central target of their critique.¹⁰ Mary Poovey takes a somewhat different, but confused stance, in arguing that De Quincey failed to challenge political economy insofar as he "answer[ed] the supposed enemies [of aesthetic value] on their own terms," ignoring his innovative redefinition of utility for both aesthetics and political economy.¹¹ In these double-dismissals, they follow John Guillory's critique when he represents contemporary theories of utility as reducible to marginal utility theory, and this as nothing more than a formalization of capitalist ideology.¹² From this perspective, studies of consumption that do not take the approach of demystifying ideology critique and route questions of value ultimately back to their conditions of production, are only ever apologies for exploitation. It is my contention that the persistent interest of discourses of "choice" warrants more attention, and that De Quincey's interest and anticipation of these can shed light on the problem. More forcefully, I argue that the uncritical leftist dismissal of formalized economics and discourses of choice implicitly valorizes compulsory labor under the heading of a naturalized necessity, and turns all consumptive acts into sites for the production of the quintessentially virtuous postmodern subject, the conscientious consumer.

De Quincey's Opium-Eater gives us an etiology and a prognosis for this figure of virtue: specifically, re-invoking labor as the ultimate ground of all value produces precisely the colonization of the subject by the social (here, capital) that Foucauldians

¹⁰ See Gagnier, *Insatiability* (2000), 241; and Gallagher, *Body Economic*, 23-31.

¹¹ Mary Poovey, *Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-Century Britain* (Chicago: University of Chicago Press, 2008), 217.

¹² John Guillory, *Cultural Capital: The Problem of Literary Canon Formation* (Chicago: University of Chicago Press, 1993) 380 fn. 27. Hereafter cited as CC.

decry. While in his later work, De Quincey (to my mind nihilistically) embraces capital's antinomy between the production and realization of value, his autobiography suggests harm-reductive paths out of modernity's insistence that all pleasure ultimately derives from labor, which itself is its own reward. This analysis of De Quincean character will therefore build on the radical utilitarianism of Ferguson and Barbara Herrnstein-Smith, in order to move beyond a proprietarian notion of quantifiable utility while retaining a critical sense of the potential effects of such a transition. The downside risk of a general standard of value, however democratically arrived at and open to change, is that it is the perfect medium for arbitrage and the accumulation of (social, cultural, or financial) capital. When consumers telegraph their desires to clearinghouses, they are sometimes (and almost always temporarily) rewarded, as in Amazon's ability to provide access to otherwise inaccessible books.¹³ More frequently, they are fleeced, as in online real-time psychographic advertising tests, which directly transform media consumption into a form of (affectively laborious) value production for the platform.¹⁴ Another way of saying this is to note that standards seek their own reproduction. For utilitarianism, as we will see, a universal right to consumption could only be justified by arguing (in a manner anticipatory of Keynes) the productive nature of certain classes of consumption. Desire, then, was rendered open to public debate but at the high price that its justification would come in terms of its quantitative contribution to capitalist production.

¹³ See the now-classic (and rather convincing) case for the added value of internet commerce: Erik Brynjolfsson, Yu (Jeffrey) Hu, and Michael D. Smith, "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety at Online Booksellers," *Management Science*, 49:11 (November 2003) 1580-96.

¹⁴ See Rob Horning's work on value production in social media, for example, "Ego Depleted". *The New Inquiry*. November 17, 2013. March 14, 2015.
<<http://thenewinquiry.com/blogs/marginal-utility/ego-depleted/>>

De Quincey's early work points a way out of this problem, just as his later work nihilistically embraces its antinomies. In order to set the chapter's main argument on firm ground, I open with a primer on the discourse of utility in aesthetics and economics. I then turn to De Quincey's 1844 *Logic of Political Economy* in order to set De Quincey's deep, rigorous, and abiding fascination with Ricardian political economy in its proper context. I believe my account of this relationship is the most detailed to date. As will become clear in my second section, however, my focus is as much on De Quincey's departures from Ricardo as his affinities. Perhaps the most interesting aspect of his economic work is its anticipation of the discipline's turn, three decades later, to the consumer as the ultimate source of all value. In recent years, this aspect has come to characterize his work, in his brief cameos in Catherine Gallagher, Mary Poovey, and Regenia Gagnier. But these accounts do not fully grasp the significance of his intervention to our understanding of value and utility, and the limits of the economic science, typically dismissing his work as intuitive but ultimately useless. Crucially, De Quincey's later theory of consumer desire overcomes the paranoia of collapse that haunted the diverse political economies of Malthus, Ricardo, and James Mill by demonstrating that consumption is always recuperable by capital as a form of indirect value-production.

The third section, however, considers the fate of this consumer, by turning directly to *Confessions of An English Opium-Eater*, and comparing De Quincey's account of addiction and pleasure to a more recent account given by Nobel Prize-Winning Economist Gary Becker. I argue that De Quincey's account is in fact more rigorous, and exposes Becker's work as an attempt to solve what Marxists call the antinomy of value

production and value realization. Put in the terms of a recent Spinozan critique of Marx,¹⁵ De Quincey shows Becker's transformation of pleasure into a kind of effortless labor for what it is, a highly-leveraged, total administration of affect, with inevitably disastrous consequences. Having painted a dire picture of De Quincey's consumer-economic subjectivity, I will in my final sections turn to his literary-autobiographical reformulation of character as a potential way out. De Quincey's non-confessing English Opium-Eater represents an extended experiment with the ethics of individuation in consumer capitalism. Individuation begins to look not like a proprietarian fencing off of the self, but a mapping of a necessarily singular path through a dense social space, a quasi-intentional accumulation of distinguishing information. Such a task is iterable, intertextual, selfless, and ultimately productive of social forms of life: individual subjectivities emerge as socially-locatable experiments in being. This perspective on utility--what we do with what we can get our hands on--presents a kind of minimal universal communicability that can comprehend both equality--but under a radically devalued or variably-valued universal equivalent--and dignity--but for a self whose distance from the norm is always registered.

0. General and Marginal Utilities

John Guillory closes his 1993 *Cultural Capital* with an extended critique of aesthetic value, specifically in its then-contemporary incarnation in Barbara Herrnstein-

¹⁵ Frédéric Lordon, *Willing Slaves of Capital: Spinoza and Marx on Desire*, (New York: Verso, 2014).

Smith's 1988 *Contingencies of Value*. Smith describes her project as an attempt to explain and aid the realization of the political multifariousness of art:

What is desirable ... is an inquiry pursued with the recognition that, like any other intellectual enterprise, it would consist, at any given time, of a set of heterogeneous projects; that the conceptual structures and methodological practices adopted in those projects would *themselves* be contingent ...; that whatever other value the descriptions and accounts produced by any of those projects might undoubtedly have ..., their specific value as descriptions and accounts would be a function of how well they made intelligible the phenomena within their domain to whoever, at whatever time, and from whatever perspective, had an interest in them; and that its pursuit would be shaped by--that is, energized and transformed in response to--those various, historically emergent interests, and its descriptions and accounts variously interpreted and employed accordingly.¹⁶

What is valuable about art, from this perspective, is that it is useful, and in many different ways, to many different people; aesthetic judgment, here, loses its disinterested Kantian character, and comes to look like the very stuff of political action. Guillory's critique of this theory proceeds on two related fronts: first, that utilitarian theories of aesthetics essentially misunderstand themselves, and second, that theories of aesthetics that privilege the consumer cannot be critical. First, then, Guillory argues that Herrnstein-Smith's utilitarian framing of the question of aesthetic value, which privileges the

¹⁶ Barbara Herrnstein-Smith, *Contingencies of Value* (Cambridge, MA: Harvard University Press, 1988) 29. Hereafter cited as CV.

fundamental diversity of uses to which end-consumers can put cultural works, is grounded in a misconception as to what is meant by utility in the first place. When “relativists” such as herself position utility as the measure of a work’s value in opposition to its exchangeable value, he says, they forget that “*both* aesthetics and economics were founded in contradistinction to the concept of ‘use value’” (CC, 302). The upshot is that what relativists see as a “potentially infinite” array of uses for given artworks will always be in reality highly constrained, insofar as the “actual *uses*” will only be registered according to a standard of aesthetic value, which they will call utility, but which he properly recognizes as exchange value ultimately under the heading of the universal equivalent (CC, 294). Second, he argues that Herrnstein-Smith “reduc[es] ... aesthetics to the theory of the artwork” (CC, 293). In other words, Smith believes that irreducible particularity of the scene of the aesthetic encounter allows the individual end-consumer, in conjunction with the individual artwork, to resist and reformulate the set of potential uses that the artist, in conjunction with the culture industry, intended in their more-or-less mechanical production of the work of art. This, for Guillory, disables any systemic critique of the discourse of aesthetics and would even seem to go so far as to make the consuming individual the only legitimate site for political interventions in culture.

The ideal reader, viewer, or listener, from this perspective, would be the person able to realize the most pleasure in an aesthetic experience; such a utility-maximizing individual is the *homo economicus* of the consumer society. In a perverse feedback loop, the desire to allow art to mean different things to different people only intensifies art’s usefulness as a social sorting mechanism, in which the ability to realize innovative uses for old works appears as the highest mark of cultural distinction. It is for this reason that

Guillory sees only elite cultural consumers as able to realize fully the potential of Herrnstein-Smith's variable standard of aesthetic value: "it is only in the graduate seminars that one can have the thrill of experiencing the 'contingency' of value" (*CC*, 324). Moreover, within this stratified system of distinction, culture comes to look like a matter of choice, and so the ranking of individuals within these strata naturalizes a meritocracy of taste; as Gagnier puts it, such an individualist perspective on taste "occludes economic relations and reconstructs class as culture, but culture as voluntary."¹⁷ In short, economics abandoned the truly multifarious nature of use in order to rationalize a use value according to the logic of universal exchangeability, and aesthetics valorized a useless pleasure only realizable in the contemplation of form by a disinterested individual; Herrnstein-Smith's turn to utility, therefore, is not a disenchantment of aesthetics via political-economic metaphors but an explicit embrace of the social sorting mechanism already implicit in aesthetics.

Implicit in this critique is a sense that despite herself, Smith is in fact deeply Kantian, but in the worst way. Specifically, Kant is frequently seen as inaugurating a properly consumerist theory of art, the only check on whose individualist tendencies is the disinterestedness that Smith's project deconstructs. Gagnier gives us the standard Kant (and goes on to footnote Smith, along with Fish and Bordieu, as his critics):

[The] taste for freedom is, ... notoriously, a form of discipline, a freedom from the selfish desires.

A Kantian judgment of taste is neither simply subjective, relating to the consumer, nor objective, relating to the object. ... When we say that the beautiful object ought to please others also, we bring in rational and

¹⁷ Gagnier, *Insatiability*, 242.

objective elements. Recognizing something in us that is common to the species, and something in each member of the species that is not owned but is universal property, we are freed from our former confinedness and limitations....¹⁸

If the problem with a consumer-centric aesthetics is that it is a pure commodity fetishism, in which the subject's pleasure or pain takes precedence over the production history of a given artwork, then the "discipline" of disinterestedness is, however problematic, the only check against an individualistic hedonism. But this standard, schematic account of Kantian disinterestedness-as-discipline, which presents judgment as a whole as a bridge between reason and the understanding, and aesthetic judgment as a bridge between individual desires and moral goods, leaves out critical philosophy's contribution to the problem of the politics of judgment in this context. To do so misunderstands what Smith is inheriting from Kant, and its significance.

When Kant insists on the disinterestedness of aesthetic judgments, he is not making a case for treating beauty as a sort of cognitive commons in which people with generally similar sensoria come to appreciate generally the same sorts of things. In fact, that is precisely the sort of empirical account of *sensus communis* that he is pushing back against.

There can be no objective rule of taste, no rule of taste that determines by concepts what is beautiful. For any judgment from this source [i.e., taste] is aesthetic, i.e., the basis determining it is the subject's feeling and not the concept of an object. If we search for a principle of taste that states the universal criterion of the beautiful by means of determinate concepts, then

¹⁸ Ibid., 125.

we engage in a fruitless endeavor, because we search for something that is impossible and intrinsically contradictory. (*CJ*, 79 [232])

What is universal to aesthetic judgments, for Kant, is error. Specifically, it is the inescapable error that Kant calls "subreption", in which we naturalize our own representational schema, which is to say we see things "as if" they really were that way. Zachary Sng gives a clear account as to how this subreptive error is in fact *constitutive* of judgment in general: "The very act of *seeing-as* (*ansehen*) is what leads reason astray, in that it is seduced by the deceptively similar appearance (*Ansehen*) of subjective and objective principles, but seeing-as also seems to be the solution to this problem."¹⁹ From this perspective, the framework that presents judgment as a bridge between reason and the understanding merely recapitulates the problem judgment would solve, by seeing it as constituted by freely-given rules; this will result either in a totalitarian naturalization of the rules as the highest expression of freedom, or an anarchic elevation of an ill-defined freedom as the only true rule.²⁰ The problem of judgment's error, Sng shows, is insoluble: judgment indeed gives its own rules to itself (as a gift), but then it follows these rather rigorously (which amounts to giving itself up to that rule).²¹

I find remarkable just how much this sounds like an (ideal) act of consumer-economic valuation, in which a prospective buyer estimates the future utility of a commodity: when we hand over money (the story goes) we submit to our own

¹⁹ Zachary Sng, *The Rhetoric of Error from Locke to Kleist* (Stanford: Stanford University Press, 2010) 85.

²⁰ I take this to be the political subtext of Sng's argument, which attempts to navigate between critiques of Kant's Romantic organicism and Pheng Cheah's attempt at a radical recuperation of this organicist rhetoric (Cheah, *Spectral Nationality: Passages of Freedom from Kant to Postcolonial Literatures of Liberation* [New York: Columbia University Press, 2003]).

²¹ Sng, *Error*, 98.

estimations that the thing is worth the money to us.²² There must be some disagreement on that relative utility for the seller and the buyer to exchange at a given price, and it is in fact productive to see these divergences in valuation as minor errors or deviations, even if both are permanently satisfied with the trade. As we will see, the scene of purchase fascinates De Quincey for just this reason. His opium-eater persona, constituted as he is in moments of reflective judgment that center on purchase and consumption, invites us to make errors of judgment, in all the senses that this phrase conveys. It was unreasonable to blame Goethe for youth suicides in Europe, but in my opinion perfectly reasonable to blame De Quincey for widespread and dangerous experimentation with opiates. Aesthesis is necessarily erroneous because singular, but for De Quincey it is also communicative (or even communicable) in its ability to evoke judgment.

In the context of aesthetic judgment, Kant's subreptive error has two moments. First, with respect to the object we call beautiful, we necessarily make the mistake of thinking that beauty is a property in the object, rather than a feeling that we have about it:

[T]he judging person feels completely *free* as regards the liking he accords the object. Hence he will talk about the beautiful as if beauty were a characteristic of the object and the judgment were logical (namely, a cognition of the object through concepts of it), even though in fact the judgment is only aesthetic and refers the object's presentation merely to the subject. (*CJ*, 54 [211])

Second and consequently, we necessarily make the mistake of thinking that anyone who stood where we are standing, and saw what we are seeing, must necessarily feel as we do:

²² Sng himself underscores the arbitrariness of judgment's self-given rules by humorously suggesting that we should perhaps consider these not as gifts but "loans" or "borrowings" (99-100).

[I]f he proclaims something to be beautiful, then he requires the same liking from others; he then judges not just for himself but for everyone, and speaks of beauty as if it were a property of things. That is why he says: The *thing* is beautiful, and does not count on other people to agree with his judgment of liking on the ground that he has repeatedly found them agreeing with him; rather, he *demand*s that they agree. (*CJ*, 55-6 [212-13])

Kant goes on to elaborate that the demand we make of others, when debating if something is beautiful or if the host of a party has good taste, is the rather abstract one that, even if we happen to disagree in this instance, we all agree on the premise that it is theoretically possible to have a perfect, universally valid, taste.²³ These errors are why aesthetic judgments are quasi-moral, and not actually moral: we legislate as though universally, but these legislations cannot hold universally. At the same time, the mismatch between the low ethical stakes and our high emotional investment is precisely what makes them the perfect training wheels for public sphere deliberations: if you say that someone is immoral for disliking your favorite scenic vista, you have misunderstood the social utility of aesthetics.

What I want us to see here is that beauty does have utility in Kant, but it is a strange utility that has nothing to do with the perceiving subject's pleasure. The utility of beauty is that it draws an opinion out of us, and forces us into dialogue with those around us as we negotiate the differences in our senses of value. This is why Kant insists that aesthetic judgments participate in an ethic of universal communicability: “[I]t must be the

²³ “What the people who make [judgments of reflection] dispute about is not whether [a universally valid] claim is possible; they are merely unable to agree, in particular cases, on the correct way to apply this ability” (*CJ*, 58 [214]).

universal communicability of the mental state, in the given presentation, which underlies the judgment of taste as its subjective condition, and the pleasure in the object must be its consequence" (*CJ*, 61 [217].) Kant will go on to make the rather normative claim that peoples' generally concordant preferences for the same sorts of things gives us empirical grounds for believing that humans have generally similar sensoria and cognitive organization (*CJ*, 79 [232]). However, empirical proof in this domain is (as ever) unsatisfactory for Kant, and it is in the compulsion to communicate and the belief in communicability that we find the social utility of aesthetic judgments. And it is on this question of communicability that Smith's interests largely coincide with Kant's. To reiterate, critical assessments of literature derive their "specific value as descriptions and accounts [as] a function of how well they [make] intelligible the phenomena within their domain to whoever, at whatever time, and from whatever perspective, [has] an interest in them..." (*CV*, 29). The glaring difference between Smith and Kant, namely that he aims at a universal communicability and she at a contingent communicability, can easily wash out their similar investment in seeing art as an ideal medium for the negotiation between differing value systems. It certainly seems to have done so in the case of Guillory, who presents Kantian universal communicability as a stalking horse for the universal equivalent, and argues that Smith's "utility" always conforms to exchange value.

The difficulty with Guillory's absolutist position on unalienated use value is that cultural productions take their value, in large part, as a result of their circulation; and a certain degree of quantified valuation would seem an effective means of facilitating, rather than hindering, this circulation. This of course does not hold for people who dislike it when their favorite band becomes too popular, or their hole-in-the-wall cafe is rated on

Lonely Planet and suddenly becomes too well-known; but then such people are a large part of the problem we are discussing. If we can see the disinterestedness of aesthetic judgments as a gesture towards communication as the ground of a truly common utility in Kant, we can see Smith's partial embrace of economics and its impersonal, systemic logic as an attempt to expand our understanding of utility beyond its individualistic, hedonistic framework. From this perspective, both Guillory and Smith are deeply invested in the question of use value, and his vicious attack on her position is an ideological tragedy. His condescension in fact travesties itself when, in the process of mocking what he sees as Smith's lack of knowledge in the field of economics, he dismisses out of hand the relevance of a significant branch called marginal utility theory, the history of which we will investigate in the next few pages. Guillory is not wrong when he says that "this economic theory is manifestly inadequate to account for the phenomenon of exchange value," and that "neo-pragmatism's rediscovery of utilitarian notions only rediscovers the longstanding ideology of capitalist political economy" (*CV*, 380, fn. 27). However, it would have been worth noting in his polemic that the field had undergone a minor transformation in the previous decade and a half in the work of the neoliberal economist Gary Becker, who theorized a quantified form of cultural capital under the heading of "consumption capital," in a 1977 paper he published with George Stigler, "De Gustibus Non Est Disputandum"; in 1996 he would publish a book-length study, *Accounting for Taste*.²⁴ It would also have been worth noting that Smith has actually read and meditated upon this Becker, and a responsible and generally more useful Marxist critique of her

²⁴ George J. Stigler and Gary S. Becker, "De Gustibus Non Est Disputandum," *The American Economic Review* 67:2 (1977) 76-90, hereafter cited as *DG*. Becker, *Accounting for Tastes* (Cambridge, MA: Harvard University Press, 1996).

utilitarianism would actually read her footnotes and be capable of registering the tensions between her project and Becker's.²⁵

Guillory's critique of value, like Herrnstein-Smith's, compellingly refuses to allow a mystification of aesthetics as standing above the economic; but, having admitted this common ground, he refuses to allow the exploration of utility to have any traction as an immanent critique of the problem of aesthetic value. His attention to the effects on the field of cultural production of the subordination of what he calls "actual" use to the logic of universal exchange resonates with a central claim of this dissertation, that we should critically evaluate programs of formalization and quantification in terms of their potential effects on the systems they seek to measure. Moreover, we find this to have become a very useful line of argumentation against neoliberal culture. David Harvey has a wonderful parallax-view example of this problem when he argues that capitalism is why we can't have weird things: the financialization of mortgages transformed homes into commodities, and so restricted investment into novel uses for them because these would diminish the value of one's investment; as a result, very few houses have aviaries in the back yard, or mirrors on bedroom ceilings.²⁶ And yet it is worth noting that Harvey's example takes its force from the appeal of aesthetic perversion, namely that such perversion allows us to imagine novel utilities as the effects of diminutions in the relative power of universal value.

²⁵ Specifically, Becker fully endorses a universal equivalent for utility-maximizing individuals, and it seems to me that Smith reads him against the grain by pointing out the context-dependency of taste insofar as his argument shows preferences in the domain of culture to be highly responsive to changes in price (*CV*, 191-2, fn. 6.).

²⁶ David Harvey, *Seventeen Contradictions and the End of Capitalism* (Oxford: Oxford University Press, 2014) 20.

It is therefore worth asking whether there is something about the notion of aesthetic utility which, in spite of its quantification of use, is worth recuperating from economic discourse. Frances Ferguson's work on the history of utilitarianism is useful here. Ferguson has forcefully argued that utilitarianism represented an attempt to force competing value systems into the realm of public debate. This public utilitarianism does not establish a neoliberal "marketplace of ideas" but rather moves away from proprietary notions of the good: "[A]n objective procedure for analyzing the social group and redistributing the power of the social group, in serial fashion, to individuals created the possibility for a new form of social recognition, one that was not based in either property or a strong account of personal character."²⁷ Indeed, we could even see how her reconsideration of utilitarian normativity opens up a potential in the discourse for an affirmative, municipal biopolitics of the sort sought after by Roberto Esposito, founded on a "'norm of life' ... according to an order that, rather than circumscribing life written within the limits of the norm, opens the norm to the unpredictability of life."²⁸ Normatively, utilitarianism sought after a single register for comparing the individual and aggregate benefits of different actions. Politically, this general scale of human experience necessarily opposed social inequality, but its problem was that it only justified equality by subordinating it to economic productivity: the presupposition of basic human equality was justified on the grounds that it was the only way to maximize the aggregate good, to realize the most for the most. The question of utility maximization for the aggregate of

²⁷ Frances Ferguson, *Pornography, the Theory: What Utilitarianism Did to Action* (Chicago: University of Chicago Press, 2004) 2.

²⁸ Roberto Esposito, *Bíos: Biopolitics and Philosophy*, trans. Timothy Campbell (Minneapolis: University of Minnesota Press, 2008), 190. See also Esposito's discussion of the non-proprietary *munus* foundational of *communitas* in Esposito, *Communitas: The Origin and Destiny of Community* (Stanford: Stanford University Press, 2010).

universal human subjects implicitly raises the question as to what, precisely, we mean by “utility.” The presupposition of a universal human subject was intended as a challenge to political and economic inequality; and it implied a radical politicization, often to the point of instrumentalization, of aesthetics. Utilitarianism, contra Burke, placed pleasure and pain on a single continuum; utility measured increases in pleasure and diminutions in pain equally. Not only should we presuppose the equal claims of individuals (your pleasure does not necessarily outweigh my pain), but also a certain equality in terms of their types of claims (my love for Austen does not necessarily outweigh your love of hamburgers).

Indeed, the problem with “value” under neoliberalism is not that acts of valuation (I like George Elliot more than Elizabeth Gaskell, and by amount X) are ranked against one another but that they are taken as determinative of character, and treated as private property. Cultural capital is not just a measure of my worth as a person but is something I am possessed of. And importantly, this is so because we have come to see acts of valuation as a form of intellectual labor, whose fruits we are entitled to and the possession of which constitute us as political subjects in the Enlightenment tradition of Locke. This proprietarian notion of strategies for utility-maximization, however, is precisely what Ferguson is arguing against in her analysis of the historical roots of utilitarianism. As we will see in the sections that follow, it is not the formalization and quantification of utility that remakes aesthesis in the image of capital accumulation, but rather the subordination of consumption to the logic of production, an error common to both liberal reformers and reactionary conservatives from the nineteenth century onwards. Here, it will be useful to outline the theory of marginal utility economics

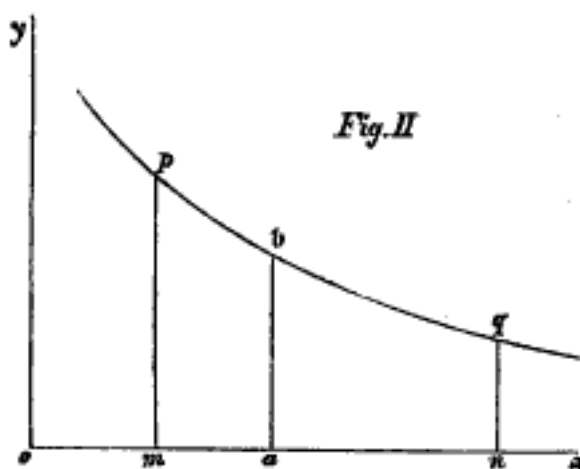
ignored by Guillory, as a way of indicating what such a subordination actually looks like, in order to establish a ground for contrast in the subsequent analysis of the nineteenth-century discourse of consumption, in Ricardo, Mill, and De Quincey.

With the 1871 publication of William Henry Jevons' *Theory of Political Economy* and Alfred Marshall's more influential 1890 *Principles of Political Economy*, economists began to argue for a fully-mathematized approach to political economy, one which set the individual, end-consumer as the ultimate arbiter of value in the economy.²⁹ A central antinomy of industrial capitalism, as diagnosed by Marx, is that between the production of exchangeable value and its realization in consumptive uses. The individual capitalist wants to pay the worker as little as possible to produce sellable products, but in doing so he undermines his ability to sell these products. Utilitarianism presents this problem morally, as the desire to find a just balance between the maximization of value production, and its equitable distribution amongst the public. Marginalist economics, pioneered by Jevons and Marshall, argues that the utility of a thing varies so greatly from one person to another that distributive solutions must fail, because there is no general calculus for how much utility any given person receives from a thing. In other words, it is not necessarily a bad thing that I make a quarter of a million dollars and you twenty thousand, because I can realize more utility from that money than you could if it were yours, or if we split the total equally.

Economic subjectivity is rethought in terms of utility-maximizing individuals, and economic activity as the aggregate of these individuals' actions. Any arbitrary system of redistribution interferes with individuals' incentives to work, and to accurately express

²⁹ Thanks to Peter Hartley at Rice's Baker Institute for help in clarifying several of my misapprehensions about marginal utility discourse and Gary Becker's thinking on the subject.

their desires in the marketplace; this decreases with market efficiency and overall productivity, and so redistribution is self-defeating. The only solution to the distributive problem, therefore, is a maximization of production. But more than this, distributive problems are never as bad as the utilitarians or Marxists make them out to be. The natural limits on human appetites for individual commodities mean that a person with a million dollars won't try to buy up all the food and in doing so drive up prices such that everyone else starves. Instead, he will buy one sandwich, and enjoy it immensely, a second sandwich, and gain some pleasure from it, a third sandwich, and feel sick. The "total value" of a given commodity can be represented as the area under a demand curve characterized by diminishing marginal returns; Jevons' major innovation was to introduce integral calculus into the science of economics, rendering it a study of infinitesimals:



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Having maxed out on his personal desire for sandwiches, the story goes, the rich man will spend his remaining money on a yacht; the rest of the sandwiches will be freed up for other consumers to buy, and a dozen shipwrights will be employed for a few months, and buy sandwiches of their own. Such a marginal theory of utility underwrites consumerist

³⁰ Jevons, *Theory*, 37.

theories of economics. The ultimate ground of value is the individual economic actor, who chooses how hard to work and how to spend his or her money; only he knows how miserable his job is and how his wages can be deployed to maximize utility in his unique social situation.

From this perspective, we can see the attractiveness of critiquing marginal utility theory, which founds twentieth-century conservative economics, on the basis of its turn away from the social and towards aggregated individuals, whose tastes cannot be meaningfully judged by another individual, nevermind by a general calculus of utility. However, as we will see in section 3, such arguments miss two crucial complications, that on the one hand Alfred Marshall does in fact posit the theoretical quantifiability and so comparability of individual utility maximization in his formulation of the key concept of “consumer surplus,” and on the other hand that Marshall and Jevons differed strongly as to how different tastes could be ranked, at least as indexes of civilization according to a universal scale of historical progress. Such misconceptions are understandable, given that mainstream economics seems confused about its own history. For instance, as we will see in section 4 the Becker and Stigler article begins with the entirely mistaken premise that Marshall had no formal account of the ways in which taste profiles change over time. The importance of these complications is that they present utility-maximization in the abstract as a form of labour itself, whose fruits redound to and constitute the individual. Becker gives the most extreme formulation of pleasure-as-effortless-labor with his notion of “consumption capital,” which does indeed submit to a general calculus of utility-maximization. The more jazz I consume, the more pleasure I am able to realize every time I listen to jazz (so, more for less); and from this perspective,

the problem with heroin is not that it can kill you, but that each time it takes more to achieve the same high (so, less for more) (*DG*, 79).

It is against precisely these individualistic, proprietary notions of the good that Ferguson positions utilitarianism's support for a reasonable level of publicity in terms of values. Much of her argument, in fact, diagnoses the problem of the ranking of values and the ranking of subjects as the tendency of these rankings to come to look like unalterable attributes of people, who can appropriately interpret these signals by voluntarily associating themselves with systems or games in which they excel. Utilitarianism, in other words, can contribute to the meritocratic ideology of a natural aristocracy when we attempt to assign the effects of actions to individuals according to the logic of personal property. In what follows, I tell a parallel story about the way in which pleasure is turned against itself in order to articulate the possibility of a liberatory theory of consumption as informed by a critical aesthetics. Specifically, I hope to adumbrate her analysis of the conflation of persons with property, by showing the subordination of consumption to production as a primary means by which the liberal publicity of valuation is privatized.

Such an analysis has implications not only for our understanding of the interrelated histories of aesthetics and economics, but also for political problems in the contemporary consumer society. It is becoming clearer and clearer that the quantification of pleasure, at least in the context of large-scale commercial data collection on consumer behavior, manages to turn the process of utility-realization into a form of alienated labor from which value is extracted. When we make a purchase, we give a valuable "signal" to data brokers about what our relative preferences are; our choice helps manufacturers, advertisers, and retailers tailor their products in such a way as to maximize their chances

of parting us and our money again in the future. And, looked at from the other direction, the pleasure of the purchase is the paradigmatic form of postmodern capitalist affect described by Frédéric Lordon, insofar as it turns a form of work (consumer segmenting micro-targeting) into something pleasurable (the joy of finding just the right thing at just the right price).³¹

My approach here is critical: the problem of apparently effortless, compulsory affective labor for the information age consumer is in many ways worse than the condemnation of the consumer society levelled by Guillory. Guillory says of the discourse of choice that it depoliticizes power differentials by making them look like the natural outcome of preferences, capabilities, or even freely-made decisions. He says of Barbara Herrnstein-Smith's pragmatic turn to utility as an evaluative framework of literary interpretations, that her utility is a false utility. It is not an authentic use value, but a use value made exchangeable. Regenia Gagnier offers up a similar version of this argument when she identifies the nineteenth-century formalization of economics with a turn to a consumptive rather than a productive theory of art; the great work, sprung fully-formed from the head of the genius artist, is the template for the fetishized commodity: the "preoccupation with the formal aspects of works ... parallels the formalist economics of neoclassicism."³² Appropriately, both writers believe that only a demystifying critique of consumption according to the conditions of production will be able to undo our attachment to a proprietarian theory of aesthetics. As Gagnier says, we need to remind ourselves that we are producers *as well as* consumers: against the formalist economics of neoclassicism, she privileges a counter-tradition of "broader economic visions that saw

³¹ Lordon, *Willing Slaves of Capital*.

³² Gagnier, *Insatiability*, 138.

humans as both producers and consumers, workers and wanters, and as both individuals with individual needs and capacities and as members of social groups whose material conditions could be constitutive” (CC, 5). And in Guillory’s terms, art will only be just when there are no artists because everyone is an artist. (CC, 338-40).

These complaints about the quantification of utility in the service of exchange value presuppose an alienation of pleasure under capitalism, which is an oddly individualistic line for these critics to take. We could see from another point of view that money's impersonality guarantees a minimal communicability of any acts of valuation, and in fact I take that intuition to be the source of the continuing appeal of consumer economics' discourse of choice. We might also observe the fruitlessness of accusing the discourse of choice of being necessarily individualistic, when part of what people like about it is their ability to easily signal their desires publicly. Neither will attempts at demystification of the fetishized commodity be particularly successful when we argue on the basis of the weightiness of a consumer's choices, when choices are necessarily low-stakes and function to distribute responsibility. The problem then is not the quantification of pleasure but the sense that these quantities could be claimed as private, rather than common, property. What is truly common about taste is not its empirical grounding but its communicability, articulated in the trajectory taken by an asocial pursuit of an as-yet unarticulated desire.

Accepting Ferguson’s more nuanced reading of utilitarianism as a starting point, I argue that the quantification of pleasure turns pleasure against itself not (as Guillory would seem to have it) when we evaluate relative claims of value on a standard scale but rather when we subordinate consumption to production, that is, when we find ourselves

sanctimoniously reminding ourselves that we must earn our bread by the sweat of our brows. We will see below that John Stuart Mill comes closest to De Quincey's optimism in the long-term viability of capitalism, but his optimism, as we will see, comes at a high cost. It relies on an empirical common taste being essentially good because aligned with productivity, and against which is pitted the empirical decadence of the wealthy, at best harmless but above always suspect as a result of its unproductive nature. The problem with this bargain is that it leaves arguments against inequality little rhetorical traction if economic growth begins to slow. What is valuable about De Quincey's experiments with quantified pleasure is that at their best they establish a dialectical play between the asocial pursuit of new desires and the social dissemination of these pursuits. Specifically, these experiments help us to imagine pleasure projecting new forms of sociality, within a social system capable of registering these projections. Following Kant, we see what is common in taste for De Quincey is not empirical agreement between people but a desire to communicate one's values. As we will see, De Quincey does, in his late economic work, put pleasure in the service of production, but it is worth noting that this connection is an indirect one. More, in the person of the connoisseur, pleasure seems above all interested in producing itself in acts of minute discrimination, and the question of economic growth is, subtly, a wash. The overall thrust of De Quincey's late economic work is towards the privatization of pleasure (it is, at the end of the day, the connoisseur's alone), but we will also see that this is a problem that De Quincey himself diagnoses in his *Confessions*.

This is all to say that De Quincey, likely despite himself, but certainly as a result of his refusal to take up the question of structural economic inequality, presents to us a

curious form of consumption that is economically unproductive and yet participates in exchange and the quantification of utility. Indeed, this quantifiable utility that has nothing necessarily to do with production, I believe, puts us on firmer ground by allowing us to see that the real threat to a healthy dialectical play between the asocial pursuit of new desires and the social dissemination of these pursuits is after all the unequal distribution of resources, which narrows the possibilities for both improvisation and experimentation. It is potentially a blind spot for my argument that I allow De Quincey to draw my discussion of utility away from a logic of necessity and towards a logic of desire; but I see the question of necessity as fundamentally linked to a productivist logic and therefore as shaky ground on which to think about use value. The alternative position, which makes the case for distributive equality on the basis that it maximizes overall wealth, implicitly justifies compulsory labor by naturalizing the desire that would be fed; if we need bread and we earn our bread by the sweat of our brow then we need to sweat and the only matter left open to debate is who sweats and how much. In order to make this case, I will have to tell the story of the ways in which pleasure was yoked to productivity in Romantic and post-Romantic political economy; and to show Thomas De Quincey's role in formulating some of this movement's basic ideas. In the final section of the paper, I will show how his early writing also does the work of diagnosing the movement's pitfalls, and pointing to a way out of this problem that embraced the formalization of pleasure as utility without evaluating it according to a productivist logic.

1. The Tendency of the Rate of Profit to Vary: “Our fate ... rests very much in our own hands”

In order fully to understand the economic significance of the consumer in De Quincey's political economy, we will first examine Ricardo's contribution to the debate over what is commonly called the tendency of the rate of profits to diminish. Most rigorously theorized by Marx in his third volume of *Capital*, this problematic has come back into vogue in critiques of post-industrial inequality, most famously in Thomas Piketty's hieroglyphic formulation $r > g$. Piketty, outlining the Ricardo/Marx evolution of the question of distribution, portrays Ricardo as primarily concerned with land prices:

Once both population and output begin to grow steadily, land tends to become increasingly scarce relative to other goods. The law of supply and demand then implies that the price of land will rise continuously, as will the rents paid to landlords. The landlords will therefore claim a growing share of national income, as the share available to the rest of the population decreases, thus upsetting the social equilibrium. For Ricardo, the only logical and politically acceptable answer was to impose a steadily increasing tax on land rents.

This somber prediction proved wrong: land rents did remain high for an extended period, but in the end the value of farm land inexorably declined relative to other forms of wealth as the share of agriculture in national income decreased. Writing in the 1810s, Ricardo had no way of

anticipating the importance of technological progress or industrial growth in the years ahead.³³

This is a helpful starting point but a problematic representation of Ricardo's position. Piketty is drawing from the textbook outline of Ricardian political economy, which divides the economy between three classes: wage labor, capital, and rentier. Ricardo's progressivism did indeed lead him to characterize the rentier class as an impediment to growth under the new economic order represented by industrial capitalism: maximally efficient growth was only possible in a union of the interests of wage labor, which added value to raw materials, and capital, which efficiently organized wage labor for the realization of that value given limited resources. Ricardo therefore (at great length) considers the systemic effects of taxation on all forms of economic activity; chapters X-XV of his 1817 *Principles* cover: Taxes on Raw Produce, Taxes on Rent, Tithes, Land-Tax, Taxes on Gold, Taxes on Houses, Taxes on Profits, Taxes on Wages, and Taxes on other Commodities than Raw Produce. The least damaging sector to tax, from the perspective of maximizing economic growth, is indeed the tax on rent.

Piketty misunderstands two things in this sketch. First, however much rent stands, for Ricardo, as an inefficient artifact of an outdated form of economic organization, its elimination is a necessary but insufficient condition for sustained growth under capital. Like an air balloon losing altitude, dropping ballast will help in the short term, but gravity will still be there. The analogy is Ricardian: he likens the tendency of the rates of profit to fall to the law of "gravitation."³⁴ As we will see below, the ultimate limit on capitalist growth is set by quasi-natural limits on agricultural yields. Here, it is sufficient to note

³³ Thomas Piketty, *Capital in the Twenty-First Century* (Belknap Press, 2014) 5-6.

³⁴ David Ricardo, *On the Principles of Political Economy, and Taxation*, (London: John Murray, 1817) 114, 133. Hereafter cited as *PE*.

that Ricardo opens his chapter on profits, and his analysis of their rates' fundamentally problematic tendency to decline, by bracketing the question of rent:

We have seen that the price of corn is regulated by the quantity of labour necessary to produce it, with that portion of capital which pays no rent.

We have seen too that all manufactured commodities rise and fall in price, in proportion as more or less labour becomes necessary to their production. Neither the farmer who cultivates that quality of land, which regulates price, nor the manufacturer, who manufactures goods, sacrifice any portion of the produce for rent. The whole value of their commodities is divided into two portions only: one constitutes the profits of stock, the other the wages of labour. (PPE, 116-17)

This leads to Piketty's second misunderstanding, that "Ricardo had no way of anticipating the importance of technological progress or industrial growth in the years ahead."³⁵ While Ricardo was unaware that he was on the verge of rapid leaps forward in (especially agricultural) technological progress and industrial growth, we will see below that he recognized the significance of such advancements. I find it politically unhelpful, given our broader culture's desperate embrace of futurism in the face of ecological collapse, to condemn pessimism even retrospectively; more consequential to a critical evaluation of Ricardo is his response to a sense of doom, as he embraces a narrative of capitalist progress in the face of a radically uncertain future.

If we suspend the question of rents by at least characterizing these as invariable, Ricardo divides the gross income from any commercial activity between profits on the one hand and wages on the other. If the price of raw materials used in the production of

³⁵ Piketty, *Capital*, 6.

necessaries like food and clothing increases, then wages will go up, and eat into profits, both in the agricultural and industrial sectors:

Thus in every case, agricultural, as well as manufacturing profits are lowered by a rise in the price of raw produce, if it be accompanied by a rise of wages. If the farmer gets no additional value for the corn which remains to him after paying rent, if the manufacturer gets no additional value for the goods which he manufactures, and if both are obliged to pay a greater value in wages, can any point be more clearly established than that profits must fall, with a rise of wages? (PPE, 124-25)

This seems like it would be an easy problem for capitalism to avoid, insofar as its proponents base their claims to its superiority on efficiency, which is to say the minimization of the costs of production. However, the production of raw materials differs from the production of manufactured goods, in his telling. Whereas industrial production can unproblematically scale so long as there is capital to build factories, a population to put in their employ, and raw materials to pump into those factories, agricultural production is subject to diminishing marginal returns.

One can, Ricardo says, increase the output of the agricultural sector with increased capital investment, but each additional unit of production has higher associated costs. This is because farmers naturally till only the best land; and so to demand more production from this sector is to demand that the farmer bring online other, marginally less fertile, acreage. As a result, any increase in demand from the agricultural sector means a rise in the cost of production for these goods; this of course means a rise in their cost, and thus a rise in wages across the economy, which eats into profits.

[W]ith every increased demand for corn, it may rise so high as to afford more than the general profits to the farmer. If there be plenty of fertile land, the price of corn will again fall to its former standard, after the requisite quantity of capital has been employed in producing it, and profits will be as before; but if there be not plenty of fertile land, if, to produce this additional quantity, more than the usual quantity of capital and labor be required, corn will not fall to its former level. Its natural price will be raised, and the farmer, instead of obtaining permanently larger profits, will find himself obliged to be satisfied with the diminished rate which is the inevitable consequence of the rise of wages, produced by the rise of necessities. (PPE, 132-33)

The upshot of all this is that industrial capitalism is held back by (what he sees as unavoidably) pre-industrial agriculture. Industrial capitalism can theoretically scale limitlessly by efficiently turning investment into profit, but the commensurately scaled industrial workforce increases the demand for food and other necessities, and past a certain limit the agricultural sector cannot scale profitably.

The pre-industrial state of agricultural technology therefore sets a hard, and theoretically quantifiable limit, on the rate of growth under industrial production; but on the other hand, industrial capitalism appears as the only form of social organization capable of maximizing the potentially realizable value within this horizon. For this reason, the rate of profit tends to diminish even as the total output of an economy grows, checked only by the unreliable and unpredictable advancement of technology that pushes

back either the quasi-natural horizon set by agricultural production and/or the efficiency of industrial production within that horizon.

The natural tendency of profits then is to fall; for, in the progress of society and wealth, the additional quantity of food required is obtained by the sacrifice of more and more labour. This tendency, this gravitation as it were of profits, is happily checked at repeated intervals by the improvements in machinery, connected with the production of necessities, as well as by discoveries in the science of agriculture which enable us to relinquish a portion of labour before required, and therefore to lower the price of the prime necessary of the labourer. The rise in the price of necessities and in the wages of labour is however limited; for as soon as wages should be equal ... [to] the whole receipts of the farmer, there must be an end of accumulation; for no capital can then yield any profit whatever, and no additional labor can be demanded, and consequently population will have reached its highest point. Long indeed before this period, the very low rate of profits will have arrested all accumulation, and almost the whole produce of the country, after paying the labourers, will be the property of the owners of land and the receivers of tithes and taxes.

(PPE, 144)

The question of technological advancement is a crucial one, as we will see below in De Quincey; for now I want to focus on the fact that this quasi-natural (as a measure of nature's resistance to technologies of industrial production) limit to growth under

capitalism expands on and changes a similar proposition in Smith, and anticipates one of Marx's foundational antinomies.

For Smith, the tendency of the rate of profit to diminish is a mark of distinction for capitalist production, because it represents the market's ability to solve the problem of equitable distribution. Competition follows profit, he argues, so no industrial producer can gain too much for too long without tempting others to enter the market and so drive down his profits. Ricardo disagrees with this position strenuously, arguing that in such a situation, a given manufacturer's market share might decrease, but *overall* profits within that sector would increase; industrial manufacture is efficient and scalable:

[H]e does not appear to see, that at the same time that capital is increased, the work to be effected by capital, is increased in the same proportion. M. Say has however most satisfactorily shewn, that there is no amount of capital which may not be employed in a country, because demand is only limited by production. No man produces, but with a view to consume or sell, and he never sells, but with an intention to purchase some other commodity, which may be immediately useful to him, or which may contribute to future production. By producing, then, he necessarily becomes either the consumer of his own goods, or the purchaser and consumer of the goods of some other person. (PPE, 399-400)

Only a fall in demand or a rise in the cost of production can account for a fall in overall profits, he argues, and so we need the external explanation of the technological relation between agriculture and land to explain the tendency of the rate of profit to fall.

Ricardo therefore extends and augments Smith's observation on the tendency of the rate of profit to fall, by turning it into a law as intractable and universal as that of gravitation. He extends the rule insofar as it applies to the entire economy as a quasi-natural limit on growth under any state of technological development, and augments it insofar as it transforms from a selling-point of capitalist production under Smith into an abstract measure of the fate of capital. This sense of limitation and doom is picked up on by Marx, of course, who (dispensing with the question of an agricultural horizon) folds the empirically-observed tendency of the rate of profits to diminish into a larger antinomy between the production and realization of value. Agreeing with Smith that production under the profit motive is self-limiting, Marx inverts his reasoning: capitalists compete with each other not, strictly speaking, for market share but instead for profit.³⁶ In their individual, short-term search for higher margins, they drive down the wages of labor as far as possible; this, however, has the effect of reducing aggregate demand and so overall growth within an economy.

A fall in the rate of profit and accelerated accumulation are different expressions of the same process only in so far as both reflect the development of productiveness. Accumulation, in turn, hastens the fall of the rate of profit, inasmuch as it implies concentration of labour on a large scale, and thus a higher composition of capital. On the other hand, a fall in the rate of profit again hastens the concentration of capital and its

³⁶ See David Harvey, *Seventeen Contradictions*, 79-85.

centralization through expropriation of minor capitalists, the few direct producers who still have anything left to be expropriated.³⁷

The limit on capitalist growth which Ricardo saw as quasi-natural, Marx saw as artificial but immanent.

It spelled doom for both, but in different ways. Marx saw as one of the fundamental antinomies that could only be overcome by the socialist organization of resources.

Those economists, therefore, who, like Ricardo, regard the capitalist mode of production as absolute, feel at this point [when profits begin to fall] that it creates a barrier to itself, and for this reason attribute the barrier to Nature (in the theory of rent), not to production. But the main thing about their horror of the falling rate of profit is the feeling that capitalist production meets in the development of its productive forces a barrier which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the limitations and to the merely historical, transitory character of the capitalist mode of production; testifies that for the production of wealth, it is not an absolute mode, moreover, that at a certain stage it rather conflicts with its further development.³⁸

Marx's characterization of Ricardo's paranoia is more than fair. Contrary to this apocalyptic but rosy prognosis, Ricardo portrayed utter collapse. Only the profit motive, from his perspective, could impel industrial growth, and only industrial production could

³⁷ Karl Marx, "Chapter 15, Exposition of the Internal Contradictions of the Law," in *Capital, Vol. 3*, trans. Marxists.org (1996). *Archive.org*. No date. March 31, 2015. <<https://archive.org/details/CapitalVolume3>>

³⁸ Ibid.

fully realize the latent value of labor and raw materials. Such a full realization is absolutely necessary, when one sets a hard limit to growth as dictated by the state of agricultural technology. Having sketched the external limits to capitalist growth, we will now interrogate the internal impediments and his reactions to these, with a focus on the problematic character of the consumer.

Ricardo's capitalist engine of growth is a precarious one. It is constantly threatened by the government, the workers, and the very earth's inability to scale production according to demand. Having set a quasi-natural limit on production in the form of agricultural technology, capitalism is represented as a more-or-less efficient system for the realization of value in the form of profit within those bounds. The primary threat to efficient value-realization (which is to say the maximization of profits) is the level of wages paid to workers. In other words, "consumption," in the aggregate, certainly enables profits insofar as commodities must be sold for their produced value to be realized, but wages also threaten future growth because they do not, like profits, feed immediately back into the productive cycle as investments seeking higher returns according to compound interest.

It must be understood that all the productions of a country are consumed; but it makes the greatest difference imaginable whether they are consumed by those who reproduce, or those who do not reproduce another value.

When we say that the revenue is saved, and added to capital, what we mean is, that the portion of revenue, so said to be added to capital, is consumed by productive instead of unproductive labourers. There can be no greater error than in supporting that capital is increased by non-

consumption. If the price of labour should rise so high, that notwithstanding the increase of capital, no more could be employed, I should say that such increase of capital would be still unproductively consumed. (PPE, 164, fn.)

Consumption becomes unproductive whenever it does not directly feed back into capitalist production as investment. Where Malthus feared production falling behind consumption, Ricardo fears the wrong kind of consumption; but the results are equally catastrophic:

In proportion as the capital of a country is diminished, its productions will be necessarily diminished; and, therefore, if the same unproductive expenditure on the part of the people and of the government continue, with a constantly diminishing annual reproduction, the resources of the people and the state will fall away with increasing rapidity, and distress and ruin will follow. (PPE, 163-4)

Consumption threatens production by not being reducible to it, and when they cause profits to dip below some ill-defined level, the economic system turns on itself and profits turn into compound losses, in a downward spiral. And yet, it is the paranoid style of this dismal outlook that signals a way out of Malthus' population bomb.

Specifically, the ability of capitalist production to compound its surplus value through the re-investment of profits into production is what allows us to exceed, in however constrained a manner, the basic limits set by agrarian production. Against the landlord, who extracts rents from his land, and the government and labor, which directly extract wealth from capitalist production, is pitched the figure of the capitalist himself.

The capitalist, in Ricardo's economy, is the only sufficiently productive figure because only he re-invests his wages (called profits) back into the productive engine. Everyone else, in some form or fashion, skims off the top, leaves less for the machine, and in doing so extracts from the next year's surplus value. Society depends upon, and to greater or lesser extent steals from, the capitalist. Only a rigorous deference to the capitalist's needs can save society from its own impulse to take bread out of its childrens' mouths.

In this context, the principle of the diminishing marginal returns on agrarian production, and the pitting of the capitalist against these constraints, shows the laborer's consumption, at any level, to be an ineradicable, internal threat to capitalism. Specifically, wages are internally opposed to profits and therefore the capitalist's ability to combat the tendency of profits to fall:

The natural tendency of profits then is to fall; for, in the progress of society and wealth, the additional quantity of food required is obtained by the sacrifice of more and more labour. This tendency, this gravitation as it were of profits, is happily checked at repeated intervals by the improvements in machinery, connected with the production of necessaries, as well as by discoveries in the science of agriculture which enable us to relinquish a portion of labour before required, and therefore to lower the price of the prime necessary of the labourer. The rise in the price of necessaries and in the wages of labour is however limited; for as soon as wages should be equal [to the market price of the goods produced], the whole receipts of the farmer, there must be an end of accumulation; for no capital can then yield any profit whatever, and no additional labour can be

demand, and consequently population will have reached its highest point. Long indeed before this period, the very low rate of profits will have arrested all accumulation, and almost the whole produce of the country, after paying the labourers, will be the property of the owners of land and the receivers of tithes and taxes. (PPE, 133-34)

The diminishing marginal returns on land set a hard limit on the productive capacity of the country, because they set a hard limit on the return on capital investment by farmers and manufacturers. The drag on the system here is introduced by the landlord, who charges even for the use of his worst land—but where this problem can theoretically be addressed through taxes on rent, the problem of rising labor costs is insoluble in the face of harder-to-farm land. Labor always demands wages sufficient to its biological reproduction, regardless of how much surplus value is created by its toil.

Ricardo's gloomy outlook, then, first praises the capitalist for producing surplus value at compound rates through re-investment; quickly sets a hard limit on the rate at which the necessary profits could be accumulated under an economic system that includes a non-capitalist rentier class; and finally warns of the total collapse of the possibility for surplus value production under capitalism if these thin margins are encroached upon by labor in the form of marginally higher wages, or the government in the form of taxes. Edmund Baxter, the first De Quincey scholar to treat his *Logic* at any length, acutely observes that this is at base a political problem, and one that admits of violent solutions through the dispossession of the unproductive rentier and laboring classes who are opposed to the productive capitalist. This, he argues, is the source of De Quincey's attraction to, and the general thrust of his revision of, Ricardo. The tendency

of the rate of profit to fall signifies, for Baxter, an inertial force whose moribundity appeals to De Quincey: “In economics De Quincey finds a generalised version of an individual death-wish, for Ricardian theory implies that the human race will eventually be consumed in an inevitable movement towards inertia.”³⁹ This moribundity admits of renewal through violence, here coded as the rhetorical violence of ideology intruding into a scientific text:

Where economics breaks down, morality and political belief intrude to throw into relief the economist’s claims of accuracy. De Quincey’s Tory sentiments call into question the rhetorical content of economics and indicate profound contradictions. . . . De Quincey repeatedly shifts the ground from political economy to politics, a shift which involves a pointedly perverse union of apparently mutually exclusive discourses.⁴⁰

Ricardo’s formally perfect, closed economic system, in other words, appeals to De Quincey precisely because its smooth functioning requires the maintaining intervention of state violence, and this mirrors what Baxter sees as the inherently violent mode of address adopted by the De Quincean narrator in order to maintain authority over his readership, specifically over the ways in which they will receive and understand his writings.

De Quincey’s attraction does require explaining. As John Whale, the editor to the Pickering edition of De Quincey’s *Logic* puzzles, it is hard to see what the continued interest could be for his High Tory public intellectualism, given that Ricardo had become best known in popular discourse for his labor theory of value, which theory was a

³⁹ Edmund Baxter, *De Quincey’s Art of Autobiography* (Edinburgh: Edinburgh University Press, 1990) 154.

⁴⁰ *Ibid.*, 157.

foundational principle for utilitarian and socialist arguments for economic reform.⁴¹

Thomas Hodgskin's 1825 *Labour Defended Against the Claims of Capital* and William Thompson's 1827 *Labor Rewarded* draw heavily from Ricardo in this respect, as of course does John Stuart Mill's 1848 *Principles of Political Economy*.⁴² But Baxter has fundamentally misunderstood the nature of De Quincey's Ricardianism by aligning it with a moribund bloody-mindedness. De Quincey's primary complaint about Ricardo, in fact, is his pessimism; his *Logic* closes with the consideration of "a practical question, and carrying along with it a sting of anxiety to whole generations":

It is this. Amongst all men (even those who pretend to no scientific economy) there is a misgiving that profits, and by consequence interest, must be under a fatal necessity of gradually sinking, until at length they touch the point of extinction. Even Ricardo has too much authorized this false idea. There is no *essential* tendency downwards in profits, more than upwards. True, there is a constant motion downwards upon the land scale from good to bad, from bad to worse: and as that happens to be chiefly concerned in the doctrine of rent, which again reappears in the doctrines of profits and wages, Ricardo had a disproportionate necessity for continually dwelling on that particular movement. But to this, which acts from year to year, there is a tendency strictly antagonist, which acts much more slowly at times, and is felt most from century to century. (*LPE*, 312)

⁴¹ Whale's answer is a compelling one likely influenced by Baxter: De Quincey is attracted aesthetically to the abstraction of the system, to its prognostic pessimism, and the power of the consumer (*Logic*, editor's notes, v. 14, 187-8). As we will see below, this insistence on pessimism is a misreading, and sits at odds with the aesthetics of abstraction and the empowered consumer.

⁴² See Thomas Hodgskin and William Thompson, *Democratic Socialism in Britain: Vol. 1: Ricardian Socialism*, ed. David Reisman (Vermont: Pickering & Chatto, 1996).

This countervailing tendency is the same as named above by Ricardo, namely technological advancement. We will concern ourselves shortly with De Quincey's reasons for being more confident than Ricardo in such timely, profit-saving advancement, but for now we want to dwell on the consequences of this confidence. He continues:

[B]y way of single illustration from our modern experience in this particular, it may be well to mention these facts. Go back to a period two centuries from 1844, and the current rate of interest will be found nearer to 8 than 7 per cent. Go back to a period only one century from 1844, and interest is found to have fallen so low as 3 per cent. This was the prevailing rate through that part of Sir Robert Walpole's public life which lay in the reign of George II., or, in general terms, from 1727 to about 1739-43. In the course of this latter period, interest again began to advance; and in forty or forty-five years more it had risen beyond five percent. (Ibid.)

His examples accumulate; the lesson, with which his treatise concludes, is that "the rate of interest is under no immutable law of declension," that "[d]uring these last two centuries ... it has *oscillated* in all directions; and," that "by that one fact, so abundantly established, we are released from all apprehensions of a downward *destiny*. Our fate in that respect is not sealed; it rests very much in our own hands" (*LPE*, 313). Against the assertion of the tendency of the rate of profit to fall, De Quincey argues that, historically, there has in fact been a tendency for profit to *vary*.

It should be noted that Baxter does acknowledge De Quincey's optimistic argument regarding technological advancement, but dismisses it as showing the opposite

of what it intends, insofar as this optimism is a paradigmatic example of an arbitrary ideological intervention in a scientific text. Specifically, the logic of political economy, and the functioning of a political economy, demand arbitrary political violence as the price of renewal: “Ricardian pessimism must be negated, yet De Quincey’s assertion of (an admittedly vague) hope is grounded all the same in a gloomy view of society ever on the point of collapse.”⁴³ But there is nothing vague about De Quincey’s hope; as we saw above, he traced a historical trend of periodic technological renewals in a hasty but rather determinate manner. His argument is an empirical historical one, which outlines the progressive history of value-creation under capitalism. Of course, a back-of-the-napkin sketch of historical interest rates is just another form of argument-by-assertion, and a fully satisfactory response to Baxter’s charge would have to show that De Quincey’s political-economic system is capable of its own reform without exogenous technological inputs, or at the very least that these arbitrary/exogenous inputs were not of the sort Baxter saw.

Specifically, De Quincey prefers to the violent interventions of the author/capitalist the minor adjustments of the reader/consumer, and that while he allows technological advancements to be tied to a force which might fairly be called exogenous, that force sits just on the margins (or, as an aporia in the very heart) of the question of value under capitalism, expressed as consumer desire indexed to price. Technological advances that allow for a rise in farming yields are, De Quincey admits, unpredictable; but, he insists, they are real, effective, and, he implies, driven by consumer demand. Following his own detailed exposition of Ricardo’s theory on the tendency of the rate of profits to fall in agriculture, he suddenly turns to a discussion of recent technical

⁴³ Baxter, *Art of Autobiography*, 156.

developments in certain trades due to increasingly skilled labor, and the social benefits of these changes. Having, in his discussion of agriculture, laid out “the whole law of profits as it acts upon the largest scale,” De Quincey notes that “there must be exceptions,” and argues by analogy, pointing towards the premium that skilled labor, in technically-advanced fields, is able to charge as an exception to general wage levels (*LPE*, 294-95).

The labourer is often to be regarded not in the light of a man receiving merely wages, but of a man receiving wages for his daily work, and a considerable interest on the capital which he has been obliged to sink in his education. And often it happens that, as the modern processes of art or trade become more and more scientific, wages are continually rising. The qualifications of a master or of a mate, even in the commercial navy, are now steadily rising. Probably the wider range of chemical knowledge, in such employments as dyeing, brewing, calico-printing, may devolve in its growing responsibilities chiefly upon a superior rank of workmen. In coining, or striking medals, where the ambition of nations is now driving their governments into substituting for that base mechanic art prevalent in Christendom, the noble fine art patronized in Pagan ages, it is probable that a higher class of workmen is slowly coming into request. And in the business of forgery applied to bank-notes, a business which once gave employment to much capital and various talent, simply by a rise in one qualification that whole interest has been suppressed. ... In the service of one vast public agency, that of travelling, so great has been the rise of qualifications, that of late even an academic examination has been talked

of for the working engineers, &c., or (as a vicarious measure) a probationary appointment, contingent for its ratification upon the results of a vigorous trial. In medicine again, the improvement, having kept pace with the expansions of chemistry, botany, and physiology, has spread downwards to the body of druggists: these are the lowest class of medical practitioners; and I believe that now they look for higher attainments in their servants, or for a higher fee as the condition of communicating such advantages. (*LPE*, 295)

We see semi-skilled labor in the advancement of industrial manufacture of goods, which necessitates “a superior rank of workmen”; he suggests that in the manufacture of currency, better money drives out bad; and locomotive engineers are being tested before given charge of their dangerous rigs. His final, ironic example, the druggist, serves two purposes. First, its lightheartedness codes the problem as ultimately inconsequential: what’s a little scamming at the edges, by a quack, of an addict, to England’s economy? Just as De Quincey is unconvinced that stagnation and overpopulation are England’s doom, he lacks Ricardo’s paranoia over waste in inflated wages. Second, the example’s ironic knowingness inoculates his broader argument against the charge that these “skilled” laborers aren’t in fact adding any value to the economy. The only people capable of telling whether Druggist A’s putatively credentialed assistant was worth the marginal increase in price over the drugs one got from Druggist B’s unpretending helper would be a narcotics connoisseur of De Quincey’s caliber; and connoisseurs are defined not simply in their ability realize more pleasure than the average consumer but also by the pleasure they take in the very act of making such minute qualitative discriminations.

De Quincey is providing inductive, anecdotal evidence, which is the only kind suitable for his case that his readers needn't worry about an impending economic apocalypse. By offering up as examples the technological advancements in a number of different fields, he attempts to increase confidence in the long-term stability of the economic system. He has -- albeit indirectly -- addressed Ricardo's pessimism not merely by implying that an agrarian technological revolution was right around the corner, but by downplaying the fear that the margins were so tight as Ricardo imagined, and by suggesting that apparently wasteful consumption (inclusive of high wages for specialized labor) could in fact be a powerful force in driving crucial technological advancement. This last point addresses a question implicitly raised earlier in the section: what kind of consumption is helpful, and what harmful to England's national economic interests? De Quincey's selection of exemplary industries in his host of contemporary technological advancements are conspicuously professional, varied, and hard to represent as directly productive for the interests of industrial capital. Some of them border on the luxurious. The implication would seem to be that if increasing wages for professional classes go hand in hand with unforeseeable technical improvements, then perhaps we should worry not about investing too much money in agriculture, but too little. De Quincey has effectively linked cultural refinement with economic development; but to understand the import of this we will have to look closer at the discourse surrounding "productive" and "unproductive" consumption.

2. **Useful Consumption:** “[N]ot ... useful ... *quoad commodum or quoad utilitatem*, but ... *ad utendum, utendi gratia*.”

In drawing a line from cultural refinement to economic growth, De Quincey effectively inverts the universalist cultural imperialism implicit in pre-marginalist intersectional studies of wealth and culture. J. R. McCulloch, for example, argues in his 1824 *Discourse on the Rise, Progress, Peculiar Objects, and Importance, of Political Economy*, that political economy is necessary to amass wealth, which in turn provides the material conditions for the civilization of taste:

The possession of a decent competence, or the being able to indulge in other pursuits than those which directly tend to satisfy our animal wants and desires, is necessary to soften the selfish passions; to improve the moral and intellectual character, and to ensure any considerable proficiency in liberal studies and pursuits. And hence, the acquisition of wealth is not desirable merely as the means of procuring immediate and direct gratifications, but as being indispensably necessary to the advancement of society in civilization and refinement. Without the tranquility and leisure afforded by the possession of accumulated wealth, those speculative and elegant studies which expand and enlarge our views, purify our taste, and lift us higher in the scale of being, can never be successfully prosecuted. It is certain, indeed, that the comparative barbarism and refinement of nations depend more on the comparative

amount of their wealth than on any other circumstance. A poor people are never refined, nor a rich people ever barbarous.⁴⁴

De Quincey's position, outlined above, is at once more forgiving of decadence and more enthusiastic about its relationship to economic growth: he argues not that wealth creates good taste, but that refined tastes participate in wealth creation. De Quincey is intervening here in a long debate over the appropriate role of consumption in a healthy capitalist economy. As we will see, Jevons later intervenes in precisely the same way; but first we will have to sketch the debate itself, over the definition of what constitutes "productive," and what "unproductive," consumption.

Ricardo's *Principles*, as we saw, introduces the problem of an "unproductive consumption" by wage-earners, which threatens the economic system by reducing profits that might otherwise have been put back into the productive machinery of capitalism. All wages above a basic level provisioning for biological necessity constitute such an unproductive consumption, regardless of what those excess wages are spent on.

When we say that the revenue is saved, and added to capital, what we mean is, that the portion of revenue, so said to be added to capital, is consumed by productive instead of unproductive labourers. There can be no greater error than in supporting that capital is increased by non-consumption. If the price of labour should rise so high, that notwithstanding the increase of capital, no more could be employed, I should say that such increase of capital would be still unproductively consumed. (*PPE*, 164, fn)

⁴⁴ McCulloch, *A Discourse on the Rise, Progress, Peculiar Objects, and Importance, of Political Economy* (Edinburgh: Archibald Constable and Co., 1824) 3-4.

In saying this, Ricardo has evacuated the moral content that attended discussions of consumption in the eighteenth century, in the form of critiques of taste. Guillory located the dissociation of aesthetics from economics in the trajectory from Adam Smith's *Theory of Moral Sentiments* to his *Wealth of Nations*, but it is Ricardo who renders cultural decadence as quantifiable.

That said, it is important to note that Ricardo is chillingly inconsistent on this point. Where inflated wages are condemned for their opposition to profits, luxurious tastes are explicitly spared such scrutiny, presumably because a little free spending by the wealthy will not have the systemic effects that an across-the-board increase in wages would:

The effects produced on profits, would have been the same, or nearly the same [as a rise in the price of food], if there had been any rise in the price of those other necessities, besides food, on which the wages of labour are expended. The necessity which the labourer would be under of paying an increased price for such necessities, would oblige him to demand more wages; and whatever increases wages, necessarily reduces profits. But suppose the price of silks, velvets, furniture, and any other commodities, not required by the labourer, to rise in consequence of more labour being expended on them, would not that affect profits? certainly not: for nothing can affect profits but a rise in wages; silks and velvets are not consumed by the labourer, and therefore cannot raise wages. (*PPE*, 131)

So to the extent that *laborers* spend money for purposes other than receiving profit or surviving biologically is not a mere quirk of human behavior external to political

economy, it in fact represents a principle antagonistic to the long-term prospects of any capitalist economy. And, as we saw above, the consequences of a fall-off in profits are calculated in a compound manner, ramifying into total catastrophe when profits are sufficiently diminished by unproductive consumption beyond some ill-defined point. All profits are haunted by the possibility of higher profits, and count as virtual losses against that potential. From the perspective of compound interest, virtual losses mount with increasing rapidity, and become difficult to tell apart from the specter of actual losses. Ricardo's essentially paranoid economic logic sees in any marginal shortfall the potential for a negative feedback loop from which we cannot recover; and the relative nature of profits and losses makes the actual tipping point into this abyss murky and inducing of further paranoia.

The debate does not end with Ricardo. In 1824, James Mill's *Elements of Political Economy* revisited the question of unproductive consumption, either cleverly or mistakenly reinserting some of the old moral philosophy into the discourse of political economy. Mill agrees with Ricardo about the catastrophic consequences of a diminution of profits beyond some ill-defined point. Having classed all taxes (governmental "consumption") as unproductive, he warns of the outcome of overtaxation: "It is, indeed, possible for government to consume part of the capital of the country. This, however, it can only do for one year, or for a few years. Each year in which it consumes any portion of the capital, it so far reduces the annual produce; and, if it continues, it must desolate the country."⁴⁵ However, in an intentional or unintentional misreading of Ricardo, Mill conveniently ignores his purely quantitative point about unproductive consumption, and

⁴⁵ James Mill, *Elements of Political Economy* (London: Baldwin, Cradock, and Joy, 1824) 240-41.

allows for a more liberal understanding of what it takes to sustain a human laborer:

“[T]he necessities of the labourer, under which term are included all that his wages enable him to consume, whether these confine him to what is required for the preservation of existence, or afford him something for enjoyment.”⁴⁶

The casual liberality with which Mill includes personal pleasure for the laboring classes amongst their existential needs does not do away with the instrumentalization of this class in principle. However, it does in republican fashion align the taste profile of the commons more with the national interest than it does that of the elite, specifically the capitalist himself:

Thus it is, that men consume for the sake of production. They also consume, however, without producing, and without any view to production. The wages which a man affords to a ploughman, are given for the sake of production; the wages which he gives to his footman and his groom, are not given for the sake of production. The flax which the manufacturer purchases, and converts into linen, he consumes productively; the wine which he purchases, and uses at his table, is a commodity which he consumes unproductively. These instances are sufficient to illustrate what is meant when we speak of unproductive consumption. All consumption, which does not take place to the end that an income or revenue may be derived from it, is unproductive consumption.⁴⁷

⁴⁶ Ibid., 214-15.

⁴⁷ Ibid., 216.

In spite of his backtracking abstraction, this is a useful intervention. Ricardo, aligning capitalist growth with the figure of the capitalist, can only see the laborer's wages as a threat to the growth of capital, the neat solution being that a luxuriant capitalist who robs his own till would not remain a capitalist for very long. Mill, asserting the dignity of the commons against the excesses of the elite, undermines the formal purity of Ricardo's system by explicitly carving out an exception based on a value judgment of different tastes, but as he does so, he reintroduces the most obvious and common form of profit loss into a system that, as he has conceded, survives on the minimization of that loss.

Mill's aim here is not a simple moralization, however; instead it embraces the complexity of his argument's consequences. Specifically, he goes farther, in his re-insertion of a liberal morality into his discussion of consumption, than merely to critique one class's tastes as selfish and wasteful and to defend another's as virtuous and productive. Unproductive consumption, he argues, is both the goal and the potential demise of all capitalist production. "[P]roductive consumption is itself a means; it is a means to production. Unproductive consumption, on the other hand, is not a means. This species of consumption is the end. This, or the enjoyment which is involved in it, is the good which constituted the motive to all the operations by which it was preceded."⁴⁸ His usage here is uncertain, but he seems to be arguing that when we claim for ourselves some portion of the economy's surplus value in order to indulge our private desires, we are realizing the ultimate purpose, the efficient cause, of the capitalist economic system -- *and at the same time threatening the system as a whole*. James Mill's purpose, here, would seem to be to counter Ricardo's system-centered perspective with a human-centered one, in which capitalism exists to make us all richer, rather than us existing to

⁴⁸ Ibid.

contribute to the increase in capital. His introduction of an extra-systemic, parasitic desire as personified in the skimming capitalist or aristocrat exposes his liberal tensions between the particular individual and the abstract whole, and his fear of the eclipse of the former by the latter.

For John Stuart Mill, however, his father's critique of the discourse surrounding ethical consumption would seem to be too partisan an intervention in a field hoping to claim the status of a science. Writing in 1844, the same year as De Quincey's *Logic*, the younger Mill's *Principles of Political Economy* attempts to overcome this antagonistic relationship between production and consumption by naturalizing consumption under the heading of "utility". "Labour is not creative of objects, but of utilities. Neither, again, do we consume and destroy the objects themselves; the matter of which they were composed remains, more or less altered in form: what has really been consumed is only the qualities by which they were fitted for the purpose they have been applied to."⁴⁹ This is effectively an extension of the elder Mill's humanist impulse, to re-insert the consuming subject as the universal ground of economic activity: "All the members of the community are not labourers, but all are consumers, and consume either unproductively or productively."⁵⁰ In other words, the reason humans labor is to produce the necessities of life and the means of pleasure for humanity, not for the operation of an abstract capitalist system; the system serves the needs of the members and not the other way around. Hence, unproductive consumption, of "pleasures or luxuries", is importantly qualified "with a reservation perhaps of a certain quantum of enjoyment which may be classed among necessities, since anything short of it would not be consistent with the greatest efficiency

⁴⁹ John Stuart Mill, *Principles of Political Economy* (Boston: Charles C. Little and James Brown, 1844) 56.

⁵⁰ *Ibid.*, 64

of labour.”⁵¹ We should be cautious, he implies, of strictly drawing the line between productive and unproductive consumption, given the very human need for pleasure.

We can see, then, that his position re-inserts moral judgments about taste into what was supposed to be a scientific calculation of social utility. Thus, even while allowing that a bespoke jacket is yet a jacket and can be worn as such, his examples of unproductive commodities together constitute a familiar litany of wealth’s excesses: “The annual consumption of gold lace, pine apples, or champagne, must be reckoned unproductive, since these things give no assistance to production, nor any support to life or strength, but what would equally be given by things much less costly.”⁵² His objection, at the end of the day, is about quantitative deviation from the common taste, as an index of the exploitative impulse to cultural distinction:

It would be a great error to regret the large proportion of the annual produce, which in an opulent country goes to supply unproductive consumption. It would be to lament that the community has so much to spare from its necessities, for its pleasures and for all higher uses. ... The things to be regretted, and to be remedied, are the prodigious inequality with which this surplus is distributed, and the large share which falls to the lot of persons who render no equivalent service in return....⁵³

All things considered, the collective profligacy of capitalism is one of its chiefest recommending qualities. This, even in the face of the productive irrelevance of half the country’s laborers, grouped as the unproductive class, who could be maintained “in

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid., 66.

idleness for a whole year”⁵⁴ without material effects to the economy. The younger Mill, willing to arbitrarily put half the country on the dole and predicting no negative economic impacts, is therefore at least as optimistic as De Quincey about the survival of capitalism. Unlike De Quincey, his objection is that wealth is unfairly distributed, and the index (and likely cause) of that unfair distribution is the impetus to cultural distinction.

What JS Mill shows is why humans work -- we work not for the abstract machine of capital but for humanity, but problematically unequally -- what he has not done (unlike De Quincey) is to connect consumption or production within the economy to the progressive narrative of economic development and technological innovation. De Quincey, as I have argued, connects economic development to precisely those unproductive forms of labor that JS Mill helpfully aligns with forms of unproductive consumption. Skilled labor, for De Quincey, goes hand in hand with technological advancements and higher wages, sometimes in the service of safer trains or the discouragement of counterfeiting, but quite often in the service of luxuries like calico and well-crafted (or at least well-marketed) drugs. Like James Mill and Ricardo, De Quincey sees the fulfillment of individual desires as the ultimate driving force of the economy; but unlike both Mills, he sees it as having potential long-term, and real short-term, utilities. The problem that the above productive/unproductive distinction is meant to solve is a reconciliation between productive and consumptive forces, specifically by disciplining taste. This enforced reconciliation between production and consumption, as Guillory has argued, is the role traditionally played by aesthetics or common sense in eighteenth-century moral sense philosophy. But, as we have seen, the debate within Romantic-era liberal political economy has a hard time excluding questions of non-economic value.

⁵⁴ Ibid.

De Quincey, in fact, provides a direct challenge to JS Mill's attempt to naturalize this notion of productive value by framing it as a question of utility. As De Quincey observes, utility is present in all market transactions, as a quantity estimated by a prospective buyer:

[W]here U, or the utility value, is suddenly called into action as the controlling force, it will generally be found that this force, in its extremity, has not only been latent previously as regards any effect upon the price, but latent as regards even the consciousness of the individual appreciator. ... The buyer had not, until a certain moment, been aware of the potential U which really existed to his own contingent appreciation. No necessity had ever arisen that he should enquire rigorously how much he would submit to give in the case of U becoming the operative force. (*LPE*, 207)

This utility, however, does not admit of general, quasi-moral judgments. Utility in the market is an abstract calculation of a commodity's teleological fittedness to a task, having nothing to do with "usefulness" and its connotations of the salutary:

The use means the capacity of being used, that is, of being applied to a purpose. It is not meant that, by possessing value in use, a thing is useful -- is valuable -- *quoad commodum* or *quoad utilitatem*, but valuable *ad utendum*, *utendi gratia*, with a view to being used; not that it accomplishes some salutary or laudable purpose, but that it accomplishes a purpose -- however monstrous, pernicious, or even destructive to the user; and that its price, instead of being founded on its cost, (or the resistance to its reproduction,) is founded on its power to realize this purpose. From the

Greek word for a purpose, (or final cause,) viz, τέλος (*telos*,) we have the word *teleologic*; to denote that quality in any subject by which it tends towards a purpose, or is referred to a purpose. Thus the beauty of a kitchen-garden, of a machine, of a systematic theory, or of a demonstration, is said to be teleologic; as first of all perceived upon referring it to the purposes which it professes to answer. On the same principle all affirmative value, or value in use, is teleologic value -- value derived from the purpose which the article contemplates. (*LPE*, 240)

Such teleological judgments/calculations are so context specific as to apparently require lengthy autobiographical narration, without which the buyer, presumably, would not accurately be able to judge what a thing is worth to herself.

When markets fail and we find ourselves forced to either pay the seller's extravagant rate or to go without, the always-present but hidden calculation of utility to ourselves of the commodity suddenly becomes very important. If someone is trying to sell us the last cheap trinket on earth, De Quincey argues, and he asks us £40, it matters whether we believe that we, personally, will derive £39 or £41 worth of pleasure from the thing. He therefore gives us the excruciating/fanciful details of the trade:

You are on Lake Superior in a steam-boat, making your way to an unsettled region 800 miles ahead of civilization, and consciously with no chance at all of purchasing any luxury whatsoever, little luxury or big luxury, for a space of ten years to come: one fellow-passenger, whom you will part with before sunset, has a powerful musical snuff-box; knowing by experience the power of such a toy over your own feelings, the magic

with which at times it lulls your agitations of mind, you are vehemently desirous to purchase it. In the hour of leaving London you had forgot to do so: here is a final chance. But the owner, aware of your situation not less than yourself, is determined to operate by a strain pushed to the very uttermost upon U, upon the intrinsic worth of the article in your individual estimate for your individual purposes. He will not hear of D as any controlling power or mitigating agency in the case: and finally, although at six guineas a-piece in London or Paris, you might have loaded a wagon with such boxes, you pay sixty rather than lose it when the last knell of the clock has sounded, which summons you to buy now or to forfeit for ever. (*LPE*, 203-4)

Such specificity has been criticized by Catherine Gallagher, who sees it as a rhetorical extravagance ultimately useless to political economy.

The extreme subjectivity of the origin of use value ... requires an inordinate amount of narrative.... There is, indeed, so much circumstantial narrative in De Quincey's explication of use value that it overwhelms his abstract point.... And even if one were willing to cede the point ... it is difficult to know how it could be applied on any but an individual, narrative basis.⁵⁵

This is to misunderstand what De Quincey has done by shifting a publicly-debatable question over the degree to which consumption contributes to the public welfare (as

⁵⁵ Gallagher, *The Body Economic*, 29-30.

routed through the engine of capitalist production) into a matter of individual estimation of utility, abstracted even from questions of pleasure (music boxes) or pain (poison).

In the section on the tendency of the rate of profits to fall (or vary), we saw that De Quincey offers the possibility of excess and the refinements of craftsmanship as homologous if not causally related to the advancements in agricultural technology necessary to save Ricardian capitalism from itself. In this section, we have seen him take public questions of general societal usefulness and argue that only a broader definition of utility is required, one abstract enough to allow for all human motivations, only measurable in terms of the (virtual) price the consumer will bear, and only determinable through acts of individual, aesthetic self-reflection. The culturally-embedded individual, here, has become the ground not just of value in the market, but of the market's future prospects, if we take seriously the idea that the aggregate demand for calico scarves is not entirely unrelated to the development of new agricultural technologies. In the next section, we will examine this value-producing subject, whose individual estimates of utility, based on aesthetic self-reflection, are the ultimate drivers of economic activity in De Quincey's Ricardian system.

3. Marginal Utilities and Consumer Surplus

Catherine Gallagher, in her examination of the productivist economic logic of nineteenth-century fiction, acknowledges on the one hand that De Quincey's theory of value "anticipated the political economy at the end of the century, which would try to understand the relation between value and what came to be called the 'marginal utility' of

a commodity to the consumer,” while arguing against its utility: “There is, indeed, so much circumstantial narrative in De Quincey’s explication of use value that it overwhelms his abstract point.... And even if one were willing to cede the point--John Stuart Mill thought it had been anticipated from the beginning--it is difficult to know how it could be applied on any but an individual, narrative basis.”⁵⁶ Indeed, De Quincey’s simplifications of Ricardo do not read as very simple, and no one has yet shown evidence for his works’ influence on the marginal utility theory that he anticipated. How, then, are we to evaluate the significance of De Quincey’s apparently extravagant but useless economic theory?

We might begin by observing that De Quincey would take issue with the notion that extravagances are useless. In a polemic that has been underappreciated in both economic and aesthetic theory, De Quincey devastates the classical opposition between use-value and exchange-value on which Adam Smith founds his theory. Smith’s famous passage in *The Wealth of Nations*, which still retains its currency in public discourse on economics,⁵⁷ lays out the opposition as between diamonds on the one hand, and water on the other:

The word VALUE, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called ‘value in use;’ the other, ‘value in exchange.’ The things which have the greatest value in use have frequently little or no value in exchange; and, on the contrary, those which

⁵⁶ Ibid., 29.

⁵⁷ *LRB* article: <http://www.lrb.co.uk/v36/n13/benjamin-kunkel/paupers-and-richlings>

have the greatest value in exchange have frequently little or no value in use. Nothing is more useful than water; but it will purchase scarce any thing; scarce any thing can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.⁵⁸

To which, De Quincey replies that people don't pay money for things they don't think they will use. "[I]t is," he says, "inconceivable and monstrous. ... [I]t is impossible that a man, valuing the article ... at eight guineas, should consent to give twelve" (*LPE*, 208) Smith, he argues, "has absolutely declared it possible for a man to pay, by any assignable sum, a greater price for a commodity than that same man conceives its uttermost intrinsic value to justify: he will give more than the maximum which he would give" (*LPE*, 267). Another way of putting this is to say that diamonds are very useful: they are fabulous embellishments to almost any piece of jewelry.

But if De Quincey thinks that exchange-value's presupposition of use-value undermines Smith's example, Ricardo's first chapter on value makes a similar point without seeing it as a critical intervention. All three writers agree that exchange value derives from the difficulty one would have in obtaining the potential commodity; that is, the toil or labor involved in its production. So while water is useful to the point of necessity, it typically cannot be sold because it is typically so easy to obtain. Conversely, diamonds are quite difficult to obtain, and so they carry a very high price. The caveat added by Ricardo and De Quincey is that difficulty is necessary but insufficient to

⁵⁸ Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations*, vol. 1, eds. R. H. Campbell, A. S. Skinner, W. B. Todd (Oxford: Clarendon Press, 1976) 44-5.

explain market transactions; without consumer desire, exchange value for any commodity is zero no matter what the labor that went into its production.

Water and air are abundantly useful; they are indeed indispensable to existence, yet, under ordinary circumstance, nothing can be obtained in exchange for them. Gold, on the contrary, though of little use compared with air or water, will exchange for a great quantity of other goods.

Utility then is not the measure of exchangeable value, although it is absolutely essential to it. If a commodity were in no way useful,--in other words, if it could in no way contribute to our gratification,--it would be destitute of exchangeable value, however scarce it might be, or whatever quantity of labour might be necessary to procure it.

Possessing utility, commodities derive their exchangeable value from two sources: from their scarcity, and from the quantity of labour required to obtain them. (*PPE*, 2)

De Quincey presents this “two-fold *conditio sine quâ non* ... essential to the composition of an exchange value” in the form of a brief, dialogic scene:

Case Epsilon - A man comes forward with his overture, ‘Here is a thing which I wish you to purchase; it has cost me in labour five guineas, and that is the price I ask.’ ‘Very well,’ you reply; ‘but tell me this, what desire or purpose of mine will the article promote?’ Epsilon rejoins, ‘Why, as candour is my infirmity, none at all. But what of *that*? Useful or not, the article embodies five guineas’ worth of excellent labour.’ This man, the candid Epsilon, you dismiss. (*LPE*, 198)

This basic point, that “exchangeable value” presupposes consumer desire, remains a favorite of conservative critics of the labor theory of value: “Nobody who has ever had a cake fail to rise could believe in the labor theory of value,” writes a columnist in *The National Review*, criticizing what he thinks is Thomas Piketty’s argument.⁵⁹

Where De Quincey parts from Ricardo and launches his critique of Smith, is in arguing that this consumer desire, present in all market transactions, is not Ricardo’s ill-defined precondition, but an implicitly estimated quantity. Again, for Smith to say that Diamonds are useless but expensive is “inconceivable and monstrous. ... [I]t is impossible that a man, valuing the article ... at eight guineas, should consent to give twelve” (*LPE*, 208). Individual desire, which for De Quincey and Ricardo is elided with a sense of utility, has a monetary value put to it in De Quincey’s formulation. The function of this estimated use value in pricing is regulative: it sets the maximum price a person is willing to pay for a thing. On the one hand, this regulatory status would seem to limit any broader significance of his critique; as De Quincey acknowledges, the difficulty of attaining the object determines the price “[i]n ninety-nine cases of a hundred” (*LPE*, 203), or, putting it less dramatically, under “ordinary circumstances” (205). But on the other hand, he has just articulated a principle on which the capitalist production and exchange will later be quantified and justified in terms of benefit to the consumer.

Specifically, in ninety-nine cases of a hundred, consumers receive pleasure in surplus of what they paid, quantifiable as the difference between the maximum they would have paid, and the amount that they actually do. Alfred Marshall takes this step in

⁵⁹ Tim Cavanaugh, “On Top of Piketty,” *National Review Online*. May 15, 2014. March 22, 2015. <<http://www.nationalreview.com/article/378069/top-piketty-tim-cavanaugh>>, quoted in Benjamin Kunkel, “Paupers and Richlings,” *London Review of Books*. March 2014. <<http://www.lrb.co.uk/v36/n13/benjamin-kunkel/paupers-and-richlings>>.

his famous 1890 *Principles of Economics* lays out this argument, referring to the excess pleasure as “consumer rent” (and in later editions as “consumer surplus”):

We may now turn to consider how far the price which is actually paid for a thing represents the pleasure that arises from its possession, or in other words the “utility” of wealth. This is a wide subject on which economic science has very little to say, but that little is important.

We have already seen that the price which a person pays for a thing, can never exceed, and seldom comes up to that which he would be willing to pay rather than go without it: so that the gratification which he gets from its purchase generally exceeds that which he gives up in paying away its price; and he thus derives from the purchase a surplus of pleasure. The excess of the price which he would be willing to pay rather than go without it, over that which he actually does pay is the economic measure of this surplus pleasure: and for reasons which will appear later on, may be called Consumers’ Rent. (*POE*, 175)

This step, of suggesting the in-principle quantifiability of consumer desire, and using that quantified desire as an index to a new kind of value, turns the labor theory of value on its head. Rather than seeing the toiling laborer as the sole source of value in the economy, we see consumers generating value almost *ex nihilo*, in their ability to realize pleasure in their purchased objects.

In theorizing the individual consumer as on the one hand the only reliable ground for determinations of utility, and on the other hand a source for the production of new forms of utility, De Quincey posits what would become a persistent aesthetic aporia

within mathematically formalized accounts of political economy. To recap briefly: De Quincey's fundamental optimism with respect to economic progress led him to critique the notion of unproductive consumption that had been the site of so much anxiety for Ricardian and Malthusian pessimists. But unlike the liberal utilitarians Mill Jr. and Sr., his optimism was grounded not in the fundamentally moral character of the common taste, but just the opposite. To the extent that the Mills expressed anxieties about wasteful consumption, they pinned this on the champagne-taste extravagance of the capitalists, while forgiving the laboring classes their desire for an extra couple pints after work. De Quincey on the other hand implied that it was only technological innovation that would allow capital to overcome its own inertial forces (the tendency for the rate of profit to diminish), and that the most effective drive towards such innovation came from novel consumer wants that clearly fit the general definition of "unproductive," if only because they didn't fit neatly into the existing mode of industrial production. Most of his examples favored the upper-classes' extravagances (a desire for fine silks, for instance), but not all (fast rail transport of goods and people, and most drugs).

This is clearly allied to an argument about class, of course, but more generally a question about the bourgeoisie's virtue of individuation through distinctions in taste. For De Quincey, in opposition to the Mills, common taste is implicitly the problem, because only divergences from it will create new forms of value and in doing so lead to new forms of value-creation in the development of new technologies. These divergences are implicitly quantifiable, on two axes: as the excess pleasure above the norm a consumer can derive from a commodity, and the difficulty the current mode of production would have in meeting this new want (we would call this the marginal cost of production). In

other words, the notion of unproductive consumption, whether abstract as with Ricardo or quasi-moral as with the Mills, has gone out the window, to be replaced with a completely amoral formula in which all consumption is productive, but unequally (and theoretically quantifiably) so, and that which looks the least productive (as indexed by its divergence from the common taste) is in fact the best candidate for being most productive in the long run.

It took economics a while to catch up with De Quincey. The notion that variation in taste could be fundamentally allied with long-term economic growth under capitalism is most baldly articulated by William Stanley Jevons, in the 1879 second edition of his *Theory of Political Economy*.⁶⁰ Presupposing alienated labor and an equation of labor with pain, marginalist economics establishes consumer desire as the ultimate arbiter of value in the economy. The fundamental human activity is, for these thinkers, the maximization of utility, by which they mean the maximization of pleasure and the minimization of pain. “We labour to produce with the sole object of consuming, and the kinds and amounts of goods produced must be determined with regard to what we want to consume.”⁶¹ Consumer desire is prior to production both in terms of working for wages, and in terms of what is made. Crucially, once this abstract consumer desire for commodities and hatred of work has been made the essence of economic activity, it must be made insatiable if we are to explain economic growth.

⁶⁰ Gagnier’s account of this historical narrative linking consumptive excess with civilization is much more detailed: see *Insatiability*, chapters 1-3, 19-114. I provide my own account because hers starts from a premise critical of consumption, which is at odds with the goals of this chapter.

⁶¹ Jevons, *Theory*, 43.

[T]he theory of Economics must begin with a correct theory of consumption. ... Senior, in his admirable treatise, has ... pointed out what he calls the *Law of Variety* in human requirements. The necessities of life are so few and simple, that a man is soon satisfied in regard to these, and desires to extend his range of enjoyment. His first object is to vary his food; but there soon arises the desire of variety and elegance in dress; and to this succeeds the desire to build, to ornament, and to furnish -- tastes which, where they exist, are absolutely insatiable, and seem to increase with every improvement in civilisation.⁶²

Insatiability, not for one thing but for variety, is therefore the vital force that impels development, much like Darwin indexes species survival to a vital force of genetic mutation. I make the Darwinian comparison and say “vital” because the variety of wants, as a mark of a desire for variety itself, is not simply an index of civilization, but also a self-impelling force. Quoting from an 1844 lecture given by T. E. Banfield, Jevons argues that desire always reaches beyond itself: “*the satisfaction of every lower want in the scale creates a desire of a higher character.*”⁶³

Alfred Marshall, however, modifies this claim that desires beget further desires progressively, both for the individual and for the market at large. In that view, our desires seem to lead us on; he argues more pragmatically that our self-cultivation is the primary (if messy and complex) ground that shapes those desires: “Speaking broadly ... although it is man’s wants in the earliest stages of his development that give rise to his activities, yet afterwards each new step upwards is to be regarded rather as the development of new

⁶² Ibid., 43-4.

⁶³ Ibid., 46.

activities giving rise to new wants, than that of new wants giving rise to new activities” (*POE*, 147). In the second edition (1891) of his *Principles of Economics*, he introduces a new chapter on “Wants in Relations to Activities” in his third book on “Demand or Consumption”. This chapter agrees with Jevons and Banfield that a taste for variety, far from manifesting cultural decadence, is an index of universal historical progress:

As ... man rises in civilization, as his mind becomes developed, and even his animal passions begin to associate themselves with mental activities, his wants become rapidly more subtle and more various; and in the minor details of life he begins to desire change for the sake of change, long before he has consciously escaped from the yoke of custom. (*POE*, 144)

Increases in wealth, in other words, only create increasing desires for the same things up to a point; we begin to want new things rather than simply greater quantities of the old. Because a millionaire can only eat so many hamburgers before he wants something new, the individual accumulation of surplus value will not naturally lead to pathological distortions of the market but rather a drive towards further specialization.

But for Marshall, a natural drive towards variation and change is too individualistic and therefore insufficient to the moral case for capitalism. To say that almost no one, made rich, would buy a thousand hamburgers doesn’t exactly prove that most of us would spend that money in a way that most of us would see as socially beneficial. Marshall therefore asserts as more fundamental the social drive for “distinction” that both checks one’s excesses and guides one’s desires. Gift-giving is the simplest benign end towards which this social desire directs the use of surplus wealth: “As a man’s riches increase his food and drink becomes more various and costly; but his

appetite is limited by nature, and when his expenditure on food is extravagant it is more often to gratify the desires of hospitality and display than to indulge his own senses” (Ibid.). Beyond its manifestation in hospitality, the aesthetic domain of self-display provides a richer example of the social influence on individual desire. His example here is dress:

A woman may display wealth, but she may not display only her wealth, by her dress; or else she defeats her ends. She must also suggest some distinction of character as well as of wealth Even under the sway of modern fashions, to be “well-dressed”--not “expensively dressed”--is a reasonable minor aim for those who desire to be distinguished for their faculties and abilities; and this will be still more the case if the evil dominion of the wanton vagaries of fashion should pass away. (*POE*, 145-46, fn. 1)

This is a fascinating modification of the argument about the natural limits of appetite; Marshall is arguing that the upper limit of diamonds in a brocade is set by tackiness. “Distinction” here is the outward sign of inward aesthetic judgment by which we engage with and creatively depart from existing taste. And so we do not simply enjoy spending our surplus *on* others in the form of gifts/hospitality, but we also like spending our surplus *on ourselves for others* in the form of aesthetic self-display.

Jevons and Banfield surpass Marshall in the bland nihilism of their abstract systematicity, which equates a diversity of expressed desires with a diversity of available consumer goods with the progress of civilization. But if we can easily identify that the problem within such a framework is that it disables all cultural critique, Marshall’s re-

introduction of culture as a regulative and guiding force within the marketplace is totalitarian in its ends. To displace a drive for novelty with a drive for distinction is to view economic subjectivity as the only viable and historically legible subjectivity. “Excellence” is the highest expression of this drive towards distinction, and unites the consumptive and productive moments of the economic subject’s life in a network of virtuous cycles, as the connoisseur and the expert maker cooperatively push technological advances in production:

[T]he desire for excellence for its own sake graduates down from that of a Newton, or a Stradivarius, to that of the fisherman who, even when no one is looking and he is not in a hurry, delights in handling his craft well, and in the fact that she is well built and responds promptly to his guidance. ...

[A] large part of the demand for the most highly skilled professional services and the best work of the mechanical artisan, arises from the delight that people have in the training of their own faculties, and in exercising them by aid of the most delicately adjusted and responsive implements. (*POE*, 147)

Excellence can be quantified in terms of increased efficiency; it can be aestheticized as singularity of purpose.

As a contemporary apologia for a reformable capitalism, excellence thrives. Mihaly Csikszentmihalyi, in his influential popularization *Flow: The Psychology of Optimal Experience* (1990), searched for a way out of alienation within the confines of capitalist production and came up with presentness as the solution. In one of his examples drawn from interviews with real people, two factory workers on the same assembly line

are held up for comparison alongside one another; where Julio Martinez finds his work deadening and lets his precarious economic situation undermine his sense of self, Rico Medellin finds meaning.

The opposite state from the condition of psychic entropy is optimal experience. When the information that keeps coming into awareness is congruent with goals, psychic energy flows effortlessly. There is no need to worry, no reason to question one's adequacy. ...

... Rico Medellin gets this feeling quite often on his job. ... The task he has to perform on each unit that passes in front of his station should take forty-three seconds to perform--the same exact operation almost six hundred times in a working day. Most people would grow tired of such work very soon. But Rico has been at this job for over five years, and he still enjoys it. The reason is that he approaches his task in the same way an Olympic athlete approaches his event: How can I beat my record?⁶⁴

"Optimization" is a measurable reduction of inefficiency, and on its scale, discontent is quantifiable. To figure experience in terms of information is to idealize work without effort, and a model of human subjectivity in which human beings can be ranked according to their integration into any social situation. Like Marshall, Csikszentmihalyi believes that the union of individual and social goods occurs in the maximization of personal productivity.

Where previous generations of economists were concerned with economic dissolution in the face of a turn away from efficient production and productive desire,

⁶⁴ Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper Perennial, 1990), 39.

Marshall is as cheerful about modern civilization's economic prospects, as he is casual in his condemnation of those he sees as deficient in their drives. He finds them to be responsible for their own plight:

[W]atch the West Indian negro, using his new freedom and wealth not to get the means of satisfying new wants, but in idle stagnation that is not rest; or again look at that rapidly lessening part of the English working classes, who have no ambition and no pride or delight in the growth of their faculties and activities, and spend on drink whatever surplus their wages afford over the bare necessities of a squalid life. (*POE*, 147)

Smith had abandoned the disinterested judgment of common sense in favor of the distributed determinations of exchangeability, as the standard by which value could be set in the economy. This left the abstract quantities of production and distribution as the measures of the common good, which could now only be measured in terms of optimization: the most for the most.

Jevons, Banfield, and De Quincey were right that it was extraneous to and created problems for this problem of optimization to include a second standard of value according to a general ethics or a *sensus communis*. But De Quincey was too right in his aesthetic perversity: universal equivalence forces economics to measure poison on the same level as corn seed, and a worthless trinket of a music box using the same standard as a bejewelled one with a curse on it. In order for Marshall to maintain the moral justice of capitalism, he had to loop social forms of judgment back into economics, as means of optimizing distribution (through gift-giving) and production (through good taste). But there are consequences of making distinction and consumer taste into quantifiable

entities. For Marshall's moralizing stance, the outcome is, predictably, the explicit condemnation of entire classes of people to penury and death, all in order to maintain the fantasy of choice. For De Quincey's amoral stance, the outcome is yet more fantastical. To the extent that the expert consumer's ability to realize value in produced commodities is established as the ultimate ground of all economic activity, and ultimately of the long-term technological innovation necessary to the system's preservation, we can see that the consumer's inability to realize such value will have large-scale consequences. Specifically, as we will see below, if the consumer cannot continue to find outsized pleasure in the product, then the entire value proposition comes crashing down.

De Quincey, both anticipating and exceeding later, consumer-centric economics, attempts to turn taste into the ultimate source of economic value, by turning consumption into a creative act. The post-purchase act of consumption is, like the pre-purchase act of production, a site of surplus value creation; but this creative consumption is not constrained by scarce resources but only by the individual consumer's creative imagination. And as we saw in the second section above, aesthetics has come, in De Quincey, to once more serve the purpose it did in eighteenth-century moral sense theory, of balancing production and consumption in the economy. De Quincey manages this re-insertion of aesthetics into Ricardo by evacuating all moral content from aesthetics, and rendering aesthetic value judgments, at least in principle, productive of quantitative estimates of utility. More than this, as we saw in the first section, he argues that rising wages and rising prices for luxuries are signs of technological advancement, in order to imply that inflationary tendencies in agriculture might could very well signal the advent of higher farming yields and thus the productivity of capital as a whole. Unregulated

consumer desire and inflation, far from being a danger to the operation of the capitalist economy, come to look as though they might save the system from itself. When he argues that “our fate is in our own hands”, he does to an extent mean all of us, laborers and non-laborers alike, but consumers all, now figured as intellectual laborers in the post-purchase production of pleasure.

This is a heavy burden for the consumer to shoulder. All consumption is productive, and capitalism will always needs all the production it can get. If consumption is the ultimate source of all value in the economy, we should expect to see Ricardo’s old paranoia over insufficient profit re-appear in the figure of the consumer. This is indeed what happens. Where moralizing economists fretted over whether we desired properly, this later De Quincey frets over whether we desire enough, and whether we sufficiently enjoy our market-supplied answers to that desire. De Quincey explores this paranoia in his *Confessions*, as his subject transitions from “The Pleasures of Opium” to “The Pains of Opium”. Just as Ricardo’s profits are haunted by the potential for higher profits, De Quincey’s opium connoisseur is haunted by the possibility of not taking enough pleasure in his aesthesis; and in both, the consequences of failing to yield a high enough return are the same: catastrophe. This paranoid aesthetic capitalism is set in best relief against one of marginal utility theory’s leading twentieth-century thinkers, the Nobel Prize-winning economist Gary Becker.

4. The Precarious Connoisseur

Gary Becker and George Stigler's famous 1977 article "De Gustibus Non Est Disputandum" attempts to put to bed all debates over aesthetic value by simply asserting that there is no such thing as a debate over aesthetic value. Following marginal utility theory's consumer-centric logic, value, as an individual estimate of utility, can only be measured in terms of its expression in price: a thing's value is what a person will pay for it. And so the old maxim "de gustibus non est disputandum" should not, they argue, signify the obscure, individual sources of value when it comes to questions of consumer surplus value, but rather it should signify that people don't actually debate the value of commodities like art in the marketplace; they simply either buy them or they don't. "[T]astes neither change capriciously nor differ importantly between people. ... [O]ne does not argue over tastes for the same reason that one does not argue over the Rocky Mountains—both are there, will be there next year, too, and are the same to all men" (*DG*, 76). This theoretical invariance in taste is made practicable by figuring "taste" as a set of strategic behaviors intended to maximize individual pleasure under given circumstances: "[W]e are proposing the hypothesis that widespread and/or persistent human behavior can be explained by a generalized calculus of utility-maximizing behavior" (*Ibid.*). Taste, to borrow an analogy from Tim Morton, is like James Watt's eponymous, universal measure of energy: a universal measure for the consumer's relative technology capacity to maximize utility in the consumption of any commodity, where utility is measured by price, according to the universal equivalent of money.

Clearly, though, this answer on its own is unsatisfactory. The ideological utility of marginal utility theory hinges on the fact that the same object is worth different amounts to different people, and so you will spend your ten dollars on a jazz album, I will buy a

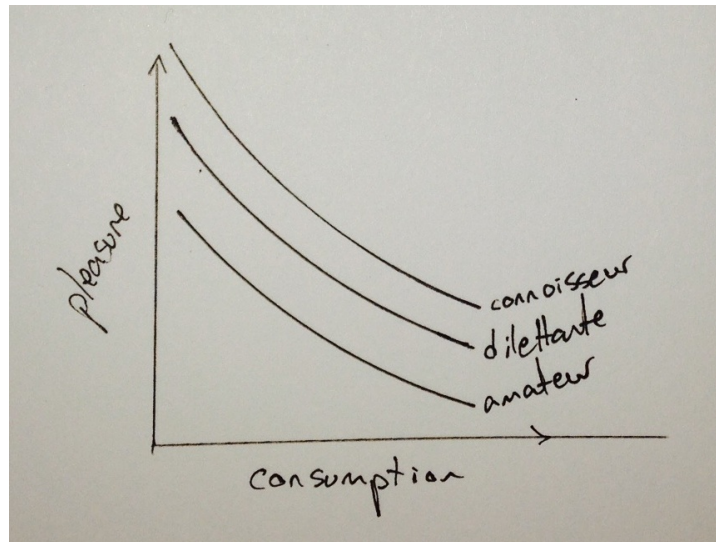
Wilkie Collins double-decker, because each commodity will bring more pleasure to the one person than it does to the other. Utility inheres in the subjective valuation of the commodity, not in the commodity itself. It is here that Becker's argument becomes interesting and not merely obnoxious. As he observes, individuals' ability to realize pleasure in objects changes over time according to their particular habituations. We have already seen Marshall arguing that individuals' taste preferences change over time according to processes of acculturation, or, in their more individuated form, distinction or excellence. It is worth noting a further adumbration of Marshall's, then, that as early as his first (1890) edition, in the process of defining "the LAW OF THE DIMINUTION OF MARGINAL OR FINAL UTILITY" he made the same essential point as Becker about individuals' ability to change their taste profiles. Specifically, the addictive commodities of art and alcohol change us by having the effect of shifting the curve of marginal returns upwards, or more precisely, of "raising of the demand schedule" (*POE*, 158):

This law has indeed some apparent exceptions: the more pictures or books a man has the stronger is his taste for them likely to become, and the more he is likely to spend on them: avarice and ambition are often insatiable; the virtue of cleanliness and the vice of drunkenness alike grow on what they feed upon. But in such cases our observations range over some period of time; and the man is not the same at the beginning as at the end of it.

(*POE*, 155)

In other words, Marshall, in his clarification of Jevons' argument about the diminishing marginal returns of all consumer behavior, found his discussions of culture and

acculturation to necessitate the accommodation of changing taste profiles. The graphic representation of “raising the demand schedule” would look like this:



After each literary or chemical debauch, the “demand schedule” is raised, which is to say that the commodity has more “total utility” for the connoisseur (in a given consumptive session) than for an inexperienced consumer.

Becker believes he is objecting Marshall, on the grounds that a change in taste is neither illuminating nor an explanation for why people find more pleasure in certain commodities as a result of habitual consumption: “We believe that the phenomenon Marshall is trying to explain, namely that exposure to good music increases the subsequent demand for good music (for some persons!), can be explained with some gain in insight by assuming constant tastes, whereas to assume a change in tastes has been an unilluminating ‘explanation’” (*DG*, 78). This objection is misguided. By “constant tastes,” Becker means that “taste” should be understood as a sort of universal utility maximizer. But Marshall seems to mean the same thing, insofar as he describes changing tastes according to a raising of the demand schedule. The primary function of staging a departure from Marshall would seem to be that it allows Becker to draw a line between

good addictions like the connoisseur's increasing "total utility" from extended exposure to literature, and bad addictions like the addict's increasing dependency on heroin: "[W]e distinguish 'beneficial' addiction like Marshall's good music from 'harmful' addiction like heroin" (Ibid.). The essence of the distinction is arbitrary, though he would almost certainly defer to empirical studies or common sense. Taste, understood a technology of utility maximization, might be said to improve or deteriorate according to one's capacity for realizing more pleasure than the next person from a given commodity. Becker quantifies this capacity as "consumption capital": "[T]he marginal utility of time allocated to music is increased by an increase in the stock of music capital. Then the consumption of music appreciation could be said to rise with exposure because the marginal utility of the time spent on music rose with exposure, even though tastes were unchanged" (DG, 79).

Like compound interest, our ability to appreciate music feeds on our appreciation of music itself. The distinction between art and drugs is therefore nothing more than a negative sign in terms of the ways that consumption capital accumulates. Drawing on the commonsense notion that a user of addictive drugs can never match the first high, Becker argues that "[a]n increase in consumption at any age reduces the stock of consumption capital available subsequently" (DG, 80). His model, in which addicts chase the same high with ever-increasing doses, leads to his radical redefinition of addiction in both its "beneficial" and "harmful" forms:

[A]ddiction to heroin—a growth in use with exposure—is the *result* of an inelastic demand for heroin, *not*, as commonly argued, the *cause* of an inelastic demand. In the same way, listening to music or playing tennis

would be addictive if the demand curves for music or tennis appreciation were sufficiently elastic; the addiction again is the result, not the cause, of the particular elasticity. (*DG*, 81)

Addiction, in the context of a fully formalized model of consumption, is simply the unresponsiveness of a particular desire to the relative difficulty of attaining its object; not “I need it no matter the price” but, absurdly, “it does not matter what it costs, and so I need it.” And in this sense, Becker is right to say that he has broken from Marshall—indeed, he has broken from Jevons and marginal utility theory as a whole. The utility of a thing suddenly seems not radically relative to the individual consumer but instead baked into a thing, insofar as a heroine addict cannot, over time, appreciate his preferred commodity in the same way that the bibliophile can hers.

De Quincey is more consistent; but, as we will see, the price the consumer pays is steep under his model. Rather than arbitrarily declaring a difference in opiate and literary aesthesis, he argues within a unified field of aesthetic distinction that opium pays its connoisseurs dividends. Like a prism magnifying social distinction, it benumbs the dull and quickens the sensitive. He articulates this function racially: whereas “Turkish opium-eaters, it seems, are absurd enough to sit, like so many equestrian statues, on logs of wood as stupid as themselves,” an English aesthete will find his appreciation of music (here London opera between 1804-12) greatly enhanced: “The choruses were divine to hear, and when Grassini appeared in some interlude, as she often did, and poured forth her passionate soul as Andromache at the tomb of Hector, &c., I question whether any Turk, of all that ever entered the Paradise of Opium-eaters, can have had half the pleasure I had” (*OE*, 45). Felicitously, the prismatic metaphor applies economically, as well: De

Quincey's community of Opium-eaters is organized like a pyramid scheme, which rewards those at the top and punishes those at the bottom.

These radical divergences based on the consumer's initial mental and bodily state describe the "paradise" as a highly unstable system formally identical to Ricardo's unstable economy, which immediately turns on itself if the capitalist receives less than some ill-defined margin of his factory's surplus. If opium elevates the enlightened and denigrates the benighted, it seems very hard to imagine a low-stakes encounter with the drug: the consumer either wins or loses, his time wasted in merely physical pleasure, or handsomely rewarded with boundless intellectual pleasure. And so it is, that as soon as De Quincey stops taking the drug merely for intellectual pleasure, he falls into a downward spiral of mental torpor. On the one hand, his addiction is brought on in response to an ill-defined physical or emotional trauma in 1813: "[A]t the time I began to take opium daily I could not have done otherwise" (*OE*, 53). And on the other, his resistance to this new addiction is enough to usher in his "happiest *lustrum* ... or even ... happiest *year*":

Strange as it may sound, I had a little before this time descended suddenly, and without any considerable effort, from 320 grains of opium (*i.e.* eight thousand drops of laudanum) per day, to forty grains.... Instantaneously, and as if by magic, ... I was again happy; I now took only 1000 drops of laudanum per day; and what was that? A latter spring had come to close up the season of my youth; my brain performed its functions as healthily as ever before; I read Kant again, and again I understood him or fancied

that I did. Again my feelings of pleasure expanded themselves to all
around me.... (*OE*, 55)

The Opium-Eater character emerges in this feedback loop of consequences which the original actor cannot, finally, reclaim. The polite narrator is a polite fiction maintained so as never fully to answer for the unsettling promise made in the opening pages, that “not the opium-eater, but the opium, is the true hero of this tale” (*OE*, 77).

Frances Ferguson has defined this horror of the eclipse of action as the essence of gothic character: “character [becomes] less the consequence of action than the impossibility of avoiding one’s character as one’s inheritance, so that character becomes less a predictor of action than an emblem of the irrelevance of action” (*SS*, 134). This critique of character, however, must be modified to critically engage with cultural formations under consumer capitalism: a widespread sense of the irrelevance of action is precisely the means by which action is reduced to choice, and character is rendered a reliable predictor of these choices. De Quincey’s novel, a commodity whose nominal “hero” is an addictive commodity, requires an explicitly economic framework to understand certain of its ideological dimensions and political possibilities.

What critics have therefore identified as the gothicism of De Quincey’s writings is therefore precisely that which makes both his economic logic and the attendant forms of characterization and autobiographical narration so relevant to the post-war era’s consumer-based microeconomics, which takes pride in the reduction of action to choice for the purposes of predictive modeling. As I hope to show, his conception of character, articulated at the emergence of a consumption-driven economy, offers useful strategies for understanding and challenging discourses of compulsory labor and naturalized want.

What is examined here, ultimately, is a rhetoric: like Ricardo's labor theory of value was of immense use to the Owenites and Marxist socialists movements, De Quincey's literary and putatively non-literary works offer up their anti-capitalist advice against the author's evident ideological tendencies.

It would be wrong to conflate the two aesthetic economists' positions. Becker's purpose in attempting a quantitative model of taste based on pleasure is to externalize and render measurable a domain of human experience traditionally defined by interiorized self-reflection. De Quincey's purpose in theorizing the aesthetics of consumer economics is to see how far the operations of the market can be adapted to the Romantic project of aesthetic individuation. In paraphrase of Regenia Gagnier, who sees neoliberal economics as a "colonization" of everything from ethics to aesthetics⁶⁵ we might not inaccurately say that the one is colonizing aesthetics with economics, and the other, economics with aesthetics. De Quincey's problematization of the character of the consumer in both aesthetics and economics, then, suggests strategies for identifying and backing out of our current alignment of pleasure, price, and individual choice as the hallmarks of a vibrant cultural landscape, without embracing the tempting but ultimately disabling expedient of subordinating pleasure to production.

4. Life-Writing

Well before Foucault and Barthes announced the author's death, Walter Benjamin warned of the dangers posed to literature and philosophy by the kind of literary biography that understands life and work as dialectical halves of artistic creativity: "So triumphs the

⁶⁵ Gagnier, *Insatiability*, 8-10.

dogma which, having enchanted the work into life, now through a no less seductive error allows it, as life, to petrify back into work....”⁶⁶ Life and work unite in form, purified in the author’s twin pursuits of the great work and the beautiful soul. This is not life, and this is not work, for Benjamin; it is only in the openness of these forms that works take on historical after-lives and lives can pursue meaningful work. It is in philosophy’s ability to open itself to the problem of art that we feel our way towards new forms of life. And while life writing in general does place life and work into close proximity, it does not always establish an easy reciprocity of the sort Benjamin diagnoses in Goethe’s idolaters. In fact, biography in general and autobiography especially poses particular problems for theories of literature and art, drawing out our normative commitments in our notions of life and communication.

Foucault’s analysis of confession has heavily influenced subsequent critical approaches to life-writing. Confession, for Foucault, inaugurates subjective interiority following Augustine: it is the process by which the speaking subject constitutes herself as an object of knowledge, in order that this subject can place herself and be placed within existing power structures.⁶⁷ The confessional mode of writing therefore implicates the communicative imperatives of what Foucault calls biopolitics: life is only recognized as life if it presents itself according to certain conventions, which are most clearly articulated in confessional narratives. The most important of these conventions, as identified by Foucault, is renunciation. The subject comes to self-knowledge (and

⁶⁶ Walter Benjamin, “Goethe’s Elective Affinities,” in *Selected Writings: 1913-1926*, eds. Marcus Bullock and Michael W. Jennings (Cambridge, MA: Harvard University Press, 1996), 324.

⁶⁷ Michel Foucault, *The Hermeneutics of the Subject: Lectures at the Collège de France*, trans. Graham Burchell (New York: Palgrave Macmillan, 2005 [2001]) 355-370, 510. Thanks to Niki Clements for my introduction to Foucault’s reading of confession.

achieves social legibility) in a reflective process which recognizes the past as past and memories as a kind of personal property, which property gives the self an identity but which the self stands above by claiming ownership.

Feminist and deconstructive critics after Foucault, while adopting his ideological critique of the confessional narrative form, began to identify ways in which women writers resisted these conventions. Shari Bernstein's *The Private Self* considers autobiography's first-person "I" as an internally-divided figure, split between the author's recollected and writing selves.⁶⁸ But where Foucault, following Augustine, represents the task of self-narrative as the reconciliation of these positions, Bernstein argues that women's autobiography exhibits different, subaltern concerns. Women's autobiography, penned as it is by subjects who are in life denied the ability to—however necessarily falsely—represent themselves as completed individuals, is able to attend to this problem of autobiography's internal division as a problem within writing itself. By attending to writing's "inner seam," women's writing is able to stage a more authentic encounter with the aporias of self-representation from within.⁶⁹ Felicity Nussbaum's *The Autobiographical Subject* takes this post-Foucauldian approach in a more historicist direction, arguing that the logic of narrative closure actually only applies to a small fraction of autobiographical narratives in the eighteenth century.⁷⁰ The vast majority of non-canonical writers, she argues, produced self-accounts that remained open to reinterpretation and revision; and this revisionary approach to life-writing, she

⁶⁸ Shari Bernstein, "Authorizing the Autobiographical," in *The Private Self: Theory and Practice of Women's Autobiographical Writings*, ed. Bernstein (Chapel Hill: UNC Press, 1988) 10-33.

⁶⁹ Bernstein, "Authorizing the Autobiographical," 12.

⁷⁰ Felicity Nussbaum, *The Autobiographical Subject: Gender and Ideology in Eighteenth-Century England* (Baltimore: The Johns Hopkins University Press, 1989).

convincingly argues, explains certain aspects of the publication and composition histories of better-known autobiographical works like Bunyan's and Pepys'.⁷¹ Revisionary practices resist the logic of renunciatory closure, in favor of an open-ended accounting of one's life that would not be finished until one was dead.

The situation is somewhat more complicated for De Quincey's late-Romantic life-writing. On the one hand, as we have seen, he refuses the renunciatory move that would mark his past life as lived and present himself as the author of it. And on the other, he does not revise his life story so much as invent and even steal it; the *Confessions* are remarkable for their misappropriation of his friends texts and even experiences, and his entire autobiographical career seems to have been a plagiaristic endeavor. The *Confessions*' original release shook Coleridge to his core with the uncanny sense that he was reading the worst chapters from his own life's story: "Coleridge read the *Confessions* with 'unutterable sorrow ... the writer with morbid vanity, makes a boast of what was my misfortune.'"⁷² Given the pair's history of shared debauches, it is reasonable to assume that this linked sense of uncanniness and theft derives not only from the general condition of addiction, but the particulars of the opium-eater's related experiences. This practice seems to have continued surreptitiously. His 1845 *Suspira de Profundis*, which presented itself as a plumbing of the psychological depths of the Opium-Eater's character, discloses a pathetic scene in which he comes upon his sister's deathbed alone, and finds himself transported by the sunlight. This scene has been foundational in biographical accounts of De Quincey's childhood trauma; but seems to have been lifted from the German

⁷¹ Ibid., 24, 64-73.

⁷² Morrison, *English Opium Eater*, 211.

Romantic novel *Titan*, by Jean Paul.⁷³ As we will see, these thefts and his refusal to renounce his past experience curiously perform the same function in their disregard for the value of individual subjectivity and privatized intellectual property. His appropriations likewise push the logic of autobiographical revision to its breaking point by reconsidering life in terms of what is common and iterable, rather than what is private and unique.⁷⁴

De Quincey mis-performs the confessional genre's renunciatory demands by closing his narrative with a physiological crisis: "I saw that I must die if I continued the opium: I determined, therefore, if that should be required, to die in throwing it off" (*OE*, 77). He then announces that he "triumphed," and anticipates that a bad-faith reader will take this triumph as license to experiment with the drug: "But he may say, that the issue of my case is at least a proof that opium, after a seventeen years' use, and an eight years abuse of its powers, may still be renounced" (*OE*, 78). But the terms of this triumph are not those of getting clean but rather those of harm reduction:

How much I was at that time taking I cannot say; for the opium which I used had been purchased for me by a friend who afterwards refused to let me pay him; so that I could not ascertain even what quantity I had used within the year. I apprehend, however, that I took it very irregularly: and that I varied from about fifty or sixty grains, to 150 a-day. My first task was to reduce it to forty, to thirty, and, as fast as I could, to twelve grains.

⁷³ See Patrick Bridgwater, *De Quincey's Gothic Masquerade* (New York: Rodopi, 2004) 7, fn. 1.

⁷⁴ In taking this perspective on theft as revision and focusing on his original text, I therefore diverge not only from general arguments about the relationship between revision and life writing but also from specifically De Quincean arguments that present the revision history of his *Confessions* between 1821 and 1856 as a tightening of the author's control over a highly personal history whose depths only he can plumb.

I triumphed: but think not, reader, that therefore my sufferings were ended; nor think of me as one sitting in a *dejected state*. (OE, 77-8)

De Quincey cannot stop, cannot drop his consumption to zero—at least not without dying. And this asymptotal ending, in which the addict quantifies his ineradicable distance from self-possession (12 grains/day), casts a shadow backwards over the preceding pages when he famously displaces himself as the narrative's subject: "Not the opium-eater, but the opium, is the true hero of the tale: and the legitimate centre on which the interest revolves. The object was to display the marvelous agency of opium, whether for pleasure or for pain: if that is done, the action of the piece has closed" (OE, 77). The autobiography's "I" becomes, retroactively, the opium that the opium-eater cannot ultimately separate himself from.

This particular way of constructing an autobiographical persona blurs the poles of what Catherine Gallagher has identified as the characterological hallmark of modern fiction, namely the finitude/immanence dialectic, in which textually-delimited "nobodies" stand in complementary opposition to the (putative) psychological plenitude of their readers.

Despite representational tactics that give the impression of layers and plenitude, characters are "peculiarly delimited" as textual beings. Persons, even dead persons, can more accurately be said to be inexhaustible. ...

The proper name "Anna Karenina" is made up of a finite set of sentences no matter how much more insightful, mature, or knowledgeable our

reading becomes, no matter how much more skillfully we analyze that text or how much more ruthlessly we deconstruct it.⁷⁵

Gallagher's model of readership, then, offers a cynical twist on the traditional liberal theory of why we like to read about characters. It is not that we identify with these characters, but that we learn to ironically distance ourselves from them, and in doing so to identify with ourselves as individuated subjects. In making this case she allows "round," psychologically complex characters to serve a function continuous with that that identified by Lynch as the hallmark of "flat," eighteenth-century characters, like the travelling Tom Jones or the circulating bank-note: "The coin's or the banknote's adventures closely resemble those of the gentleman who knows what it is to enter into sociable exchanges with all and sundry. (Conversely, it is the possession of these coins and banknotes that expedites the gentleman's exemplary mobility.)"⁷⁶ For Lynch, these flat but universally-liked characters give readers a sense of the potential knowability of an economically complex society and help them to form a sense of trust in its operations, thereby allowing for the rise of the credit economy. Gallagher, in other words, presents the transition from "flat" to "round" characters as involving a progressive realization on the part of the readership that it is his or her own "speculation" about a fictional character's existential "probability" (rather than actuality) that constitutes that character's "conditions of possibility," and so demanding of a progressive intensification of required intellectual labor.

⁷⁵ Gallagher, "The Rise of Fictionality," in *The Novel, Volume 1*, ed. Franco Moretti (Princeton: Princeton University Press, 2006) 336-62 at 361. I was introduced to this essay as a Teaching Assistant for Timothy Bewes's 2013 class, "Ishiguro, Amongst Others."

⁷⁶ Lynch, *Economy of Character*, 96.

Gallagher's parasitic reader, demanding of psychological interiority, is the perfect connoisseur, according to our earlier discussion of consumption capital. This reader knows just how to evaluate the way in which a particular kind of person would act in a particular situation; and these (differentially expert) evaluative judgments are what create the (differentially) realized value in the scene of readerly consumption. But the character of the Opium-Eater causes Gallagher's model for value-realization to misfire in important ways. First, his inability to separate himself from the history he has told causes Gallagher's immanence/finitude dialectic to misfire, by allowing us to see that her model of a parasitic reader depends on the character's (apparent) hapless belief that he exceeds the pages of the story being told. Or, put differently, the Opium-Eater's abjection gives us pause, and causes us to reconsider what it is we as readers want from fictional characters, and what this says about us ethically. As we will see, the picture is an unflattering one, if what we are after is a real person, publicly exposed, rather than an interesting fictional character expressive of a diversity of potential utilities. Second, and perhaps more importantly, this character's refusal to renounce his past self does not take the form of an individuated subjectivity claiming his experience as his own. We have already discussed this to a certain extent in recalling the opium's role as the novel's protagonist. The Opium-Eater's character is defined by his tastes in such a way that we might define as a kind of virtual depth: he is multidimensional, but typically quantifiably so; he often seems to be nothing but surface and style, but this surface is manifold (or, in his words, involuted). Ironic distance fails with the Opium-Eater, because he is usually waiting for us at the distance we retreat to. De Quincey's character therefore invites readerly identification, but only on a local level, which is to say as one consumer, speaking to

another, swapping preferences and found uses; it is a mistake to attempt to integrate these experiences into an individual person. The traditional liberal account of novelistic character, then, which allows readers to simulate complex social relations, stands, but with a check against the imperative to claim these simulated experiences as one's own. The model of character we find in the opium eater is one which is open to experimental, partial uptake, having no original claimant from the start.

This anti-individual reading of character in De Quincey's autobiographical persona is at odds with those readings that deal most closely with the questions of property and political economy in his work. Baxter, for instance, convincingly reads the 1856 *Confessions*' explicit thematization of its own revisions as an attempt to assert the infinite depths of personal memory, barely comprehensible to the nominal owner and so certainly beyond the reach of outside auditors. Baxter and Rzepka both present De Quincey's relationship with his readers in terms of the problem of alienated intellectual labor; but while they agree in the essentials of how the problem is articulated, they differ with respect to his solution. The press, in both tellings, appears in De Quincey's (usually prefatory writings) as a metonymic figure for the impossibility of perfect communication between author and reader. For Baxter, this is a problem of editorial interventions marking a divergence from De Quincey's actually-written words, coupled with the intractability of language itself; the result is a failure, but one productive of an (abject) autobiographical persona:

Through the publication of his writings, he is obliged to produce an autobiographical self. The idea of the Press -- of social relations -- of 'others' -- provides an excuse for the inadequacy of the self. If 'I' am

unique, how can I hope to communicate? ... De Quincey cannot surmount the idea of his labour failing. He knows it must and will fail. De Quincey will be misunderstood, his work will not function as he desires. Together the Press and language provide him with an alibi -- the work was never De Quincey's own, it was always an inflexion of the 'necessary' set of relations.⁷⁷

Rzepka's formulation of the problem of writing for the press is a more standard alienation narrative, namely that De Quincey is selling the story of his life for money:

What De Quincey cannot bring himself to acknowledge, as he assumes the author-function, is the labor source of the money he earns by it. That is because the freedom to spend money, not success at earning it, had always been the most potent index of manhood. Money was less a quantitative sign of labor expended, than a power of expressing and securing affection and respect through the purchase of consumables, primarily for others.⁷⁸

Whether De Quincey's fretting about communication is a matter of institutional and technological mis-translation, or the subordination of writing to a system of abstract, quantitative value (money), in both cases we see the individual author pitted against society, figured either as a reading public, or its stand-in, the publishing industry.

These similar formulations of the problem of alienated writing, however, produce opposing solutions in Baxter and Rzepka. Baxter sees De Quincey embracing this necessary miscommunication by adopting the role of the eternal debtor, eternally credited by the "fascinated" reader; Rzepka argues that De Quincey refuses the commodity status

⁷⁷ Charles Rzepka, *Sacramental Commodities: Gift, Text, and the Sublime in De Quincey* (University of Massachusetts Press, 1995), 18.

⁷⁸ *Ibid.*, 28.

of his works, instead presenting them as gifts to the reading public, who indebted themselves to him by virtue of their acceptance/purchase-and-consumption. Baxter's reading is biographically compelling. De Quincey lived on and under the shadow of credit both before maturing into his inheritance and again, shortly thereafter, once he had blown through it all in books, household expenses, opium, and loans given out to friends. Morrison makes an explicit connection between debt and addiction in terms of their shared ineradicability:

Drugs and debt crippled De Quincey in much the same way. Both relationships were rooted in denial, fabrication, and guilt. Both shared a common psychology. De Quincey invariably found that the closer he came to breaking his dependence on laudanum, the fiercer his struggles became. Similarly, he felt 'unusual happiness' when he believed himself close to deliverance from debt, and yet he trembled in the knowledge that he would be 'more furiously persecuted' for the amount that remained 'than ever I had been when my debts were heaviest'. As opium was the solution to opium, so borrowing was his best answer to debt, and the two central afflictions of his life reinforced and extended one another in seamless circles of misjudgement, despondency, and alienation.⁷⁹

Baxter makes the same connection implicitly, framing De Quincey's writing in terms of a loan repayment, as though he were paying off an advance from his editor, or making good on his reader's purchase, at the same time:

⁷⁹ Robert Morrison, *The English Opium Eater: A Biography of Thomas de Quincey* (Pegasus Books, 2010) 250.

De Quincey is the master of deferred payment. His text expresses again and again that the payment is yet to come. But the contract is never fulfilled, nor will it be. ... The enterprise of writing does not necessarily entail 'payment': it may never be read as De Quincey intends -- and in a sense, it *can* never be read in this way. De Quincey's text invariably functions in the absence of a 'confidante', an 'Elizabeth' whose remembered existence testifies to the possibility and lack of resolution. Having embarked on the infinite project of his autobiography he is trapped within the confines of a mediated discourse.⁸⁰

De Quincey, in other words, bakes into his writing the impossibility of its stated goal, of direct communication of the writer's life with his readership. Baxter sees this embrace of the eternally-indebted state as best exemplified in De Quincey's obsessive and explicit revisions of his biography. Because his life will never be properly written, the best he can do is inhabit a "performative self in the present of composition"; and so, paradoxically, this embrace of writerly subordination comes close to perfectly inhabiting the industrial mode of literary production: "De Quincey's work does not 'progress' as such, in the sense that means of production stay stable while he autonomously improves his his ideas. Instead, the various working environments (by which I mean the different social relations) generate various possibilities which he then explores."⁸¹ Baxter's account, in other words, provides an account of autobiography in which the *bios* and the *graphia* become coterminous only as a result of the distortion of both by the logic of

⁸⁰ Baxter, *Art of Autobiography*, 62.

⁸¹ Ibid., 56-7.

approximation: life's chaos of particularities allows itself to be captured by a writing that insists it is open to infinite revisions.

Baxter's case for the 1856 *Confessions*' proprietary model of subjectivity is a strong one, and in large measure comports with the reactionary neoclassicism of De Quincey's later economic theory. But as we have seen, the 1821 autobiography diagnoses such proprietary eudaemonism as a risky game doomed to eventual collapse, like a gambler's streak at cards. We might also observe, then, that De Quincey's earlier self-representation performs the transcendental fathomlessness of memory as a kind of revisionary plagiarism. Writing of a kind of eidetic imprisonment within his own personal experiences, he cribs from Coleridge to account for this memory that is more than recollection:

The minutest incidents of childhood, or forgotten scenes of later years, were often revived: I could not be said to recollect them; for if I had been told of them when waking, I should not have been able to acknowledge them as parts of my past experience. But placed as they were before me, in dreams or intuitions, and clothed in all their evanescent circumstances and accompanying feelings, I *recognised* them instantaneously. I was once told by a near relative of mine, that having in her childhood fallen into a river, and being on the very verge of death but for the critical assistance which reached her, she saw in a moment her whole life, in its minutest incidents, arrayed before her simultaneously as in a mirror; and she had a faculty developed as suddenly for comprehending the whole and every part. This, from some opium experiences of mine, I can believe; I have,

indeed, seen the same thing asserted twice in modern books, and accompanied by a remark which I am convinced is true; viz. that the dread book of accounts, which the Scriptures speak of, is, in fact, the mind itself of each individual. Of this at least, I feel assured, that there is no such thing as *forgetting* possible to the mind.... (OE, 68)

Entering into a discussion of his own inability to regulate his powers of recall which have elevated themselves to the status of recognition, De Quincey invokes the near-death experience of a female relative as corroboration evidence for the mind's transcendental anamnestic capacities. In doing so, he lifts both structure and direct phrasing from the well-known chapter VI of Coleridge's *Biographia Literaria*, which uses the example of a young German woman who, taken by fever, begins to exhibit the signs of demonic possession: "She continued incessantly talking Latin, Greek, and Hebrew, in very pompous tones and with most distinct enunciation."⁸² The young woman is not, of course, possessed, but merely uncontrollably recalling the habit of the old pastor she had served, "to walk up and down a passage of his house into which the kitchen door opened, and to read to himself with a loud voice, out of his favorite books."⁸³ Having shown that the debilitated woman's mind was exhibiting a fundamentally natural capacity, Coleridge then asserts the transcendental wonder of that nature:

This authenticated case furnishes both proof and instance, that reliques of sensation may exist for an indefinite time in a latent state, in the very same order in which they were originally impressed; and as we cannot rationally suppose the feverish state of the brain to act in any other way than as a

⁸² Samuel Taylor Coleridge, *Biographia Literaria*, vol. 1, ed. J. Shawcross (London: Oxford University Press, 1907) 78.

⁸³ *Ibid.*, 79.

stimulus, this fact (and it would not be difficult to adduce several of the same kind) contributes to make it even probable, that all thoughts are in themselves imperishable; and, that if the intelligent faculty should be rendered more comprehensive, it would require only a different and apportioned organization, *the body celestial* instead of *the body terrestrial*, to bring before every human soul the collective experience of its whole past existence. And this, this, perchance, is the dread book of judgement, in whose mysterious hieroglyphics every idle word is recorded! (*OE*, 79-80)

Whatever is written in De Quincey's "dread book of accounts," it would seem that it shares some passages with Coleridge's "dread book of judgement." Writing of the unfathomable depths of human experience, and the uncontrollable power of total recall, De Quincey has lifted both form and substance of Coleridge's argument and muddled the question of intellectual property. What is more, he has aligned himself experientially with the abject figure of the moribund woman present in both tellings, refusing to observe the descent into these depths from a safe, impartial distance.

Julian North has observed a similar entanglement of individuality, intellectual property, and gender in De Quincey's biographical representations of Coleridge and Wordsworth. Wordsworth and Coleridge, the paradigmatic autobiographical poets, are appalled at the biographical genre's "invasion" of writers' lives.⁸⁴ Biography interferes with the writer's ability to create his own version of himself, specifically by bringing artistic creativity down to its material ground. Biographers exhibit an "anti-poetic

⁸⁴ Julian North, "Self-Possession and Gender in Romantic Literary Biography," in *Romantic Biography*, ed. Arthur Bradley and Alan Rawes (Aldershot: Ashgate, 2003) 109-138 at 112.

utilitarian ethos” whose obsession with verifiable facts “would try to undermine the poet’s self-created character,” to disastrous ethical consequences for aesthetics: “The fashion for biography means that self-scrutiny, the proper aim of authors and readers, has been usurped by gossip about the private, domestic life of others.”⁸⁵ De Quincey’s biographies of the Wordsworth circle in *The Lake Poets* was of course seen as a breach of trust, and created an irreparable personal break between himself and his friends. But if this break was enforced on the one side by the Wordsworth and Coleridge families, De Quincey’s intimacy with the group’s history made it impossible for that break to be final or absolute. As Alexander Regier has argued, De Quincey not only gave us a window into the personal lives of the poets in such a way as to deny them absolute control over their public personae, but presented us an archival Wordsworth, bound intertextually to De Quincey, Coleridge, Dorothy, and even his own self-revisions.⁸⁶ In my terminology, De Quincey renders the distances between the different writers, and those between their different drafts, theoretically measurable. North reminds us of De Quincey’s wonderful characterization of Coleridge’s plagiarism as a kind of kleptomania:

With the riches of El Dorado lying about him, he would
 condescend to filch a handful of gold from any man whose
 purse he fancied; and in fact reproduced in a new form,
 applying itself to intellectual wealth, that maniacal propensity
 which is sometimes known to attack enormous proprietors and
millionaires for acts of petty larceny. The last Duke of Anc–

⁸⁵ Ibid., 113.

⁸⁶ Alexander Regier, “The doubling force of citation: De Quincey’s Wordsworthian Archive,” in *Fracture and Fragmentation in British Romanticism* (Cambridge: Cambridge University Press, 2010), 141-64.

could not abstain from exercising his furtive mania upon articles so humble as silver spoons; and it was the daily care of a pious daughter, watching over the good name of her father, to have his pockets searched by a confidential valet, and the claimants of the purloined articles traced out.

Coleridge, the plagiarist, is like a man who, by stealing silver spoons, violates domestic trust, and De Quincey, the discrete discoverer of Coleridge's thefts, projects himself as the 'pious daughter' who mothers her father by searching his pockets.⁸⁷

The difference between silver and ink, however, is that spoons can be returned intact, and reputations can be preserved. At least, that is the explicit meaning of De Quincey's metaphor—but it brilliantly misfires by rendering theft social, insofar as the victims and the thief were linked together by the comic story of a Duke's petty crime. And what is true for the Duke's spoons is unavoidable for Coleridge's ink: he can't un-steal the words he has purposefully or otherwise lifted, and so De Quincey's apparent restitution permanently links the philosopher and his victims, by the bibliomaniac's fascination and the lesser writers' irritated pride at having written something good enough to be stolen. De Quincey is not seeking to undermine Coleridge, but to place him in a network of literary exchange. In De Quincey's life-writing, revisionary practices, like renunciatory practices, are degraded from absolute breaks into relative distantiations: self-renunciation degrades into convalescence, and revision into plagiarism.

⁸⁷ North, 121, quoting De Quincey, "Samuel Taylor Coleridge," in *Tait's Edinburgh Magazine* (September, October, November, 1834; January, 1835), 40.

Rzepka's reading of De Quincey's autobiographical practice suggests a different solution than Baxter's to the problem of writerly alienation. Baxter's account, for all its focus on the complexities of De Quincey's textual production, pays little attention to the scene of consumption, where we would expect these anxieties about reliable communication to manifest themselves most fully. A through-line in Rzepka's study, therefore, is the figure of "The Malay," the unexpected visitor to De Quincey's cottage who no-one in the house can understand, but whom he manages to invite in for rest, and to send on his way with a lump of opium as a gift. Rzepka convincingly frames the scene in terms of two moments of communication. First, a comical failure in linguistic communication, as De Quincey tries several languages including some lines from the *Odyssey*, and neither manages to make sense to the other, but in the process does at least convince the household that communication has taken place as a result of De Quincey's learning: "In this way I saved my reputation with my neighbours, for the Malay had no means of betraying the secret" (*OE*, 56). Second, a successful material communication, in which De Quincey gives the rested, departing traveller a gift of opium, the man instantly recognizing the thing itself:

On his departure I presented him with a piece of opium. To him, as an Orientalist, I concluded that opium must be familiar; and the expression of his face convinced me that it was. Nevertheless, I was struck with some little consternation when I saw him suddenly raise his hand to his mouth, and, to use the schoolboy phrase, bolt the whole, divided into three pieces, at one mouthful. The quantity was enough to kill three dragoons and their

horses, and I felt some alarm for the poor creature; but what could be done? (*OE*, 57)

Consumption, here, is literalized as bodily ingestion, and the commodity is refigured as a gift. Rzepka puts it this way:

The scene of literary reception ... unfolds as a scene of lectoral instruction: the reader is to accept the *Confessions* as a gift rather than as a commodity, and to return ‘worship’ and gratitude, not just specie, to the giver. Such an acceptance, apparently, will somehow enable the embodied writer to bridge the ‘impassible gulf’ ordinarily fixed between his mind and that of his reader by the material processes of history, including those economic processes of material exchange by which the body, the physical obstacle to any immediate communication of mind with mind, is maintained.⁸⁸

De Quincey is no longer a hack writer, but a beneficent scholar (however comically debased), and the reader is no longer a consumer, but a beneficiary of his literary wisdom. As with Baxter, debt plays a principal role in structuring this relationship between the reader and writer, but Rzepka has reversed the direction of indebtedness by arguing that the commodity exchange is figured as a gift-exchange by De Quincey. The literary autobiographer, as the authority possessed of the irreplaceable commodity of his life story and the means of writing it properly, effectively potlatches his consumers by giving them more than their money could possibly be worth--“enough to kill three dragoons and their horses.” The reading public is indebted to the author.

⁸⁸ Rzepka, *Sacramental Commodities*, 8.

From this perspective, what Rzepka's analysis shows as missing from Baxter's is that De Quincey's obsession with the conditions for his works' communicability might, in fact, signal a real solicitousness for his readers' desires. A focus on the consumer/reader's place in De Quincey's work allows us to avoid an unnecessary reinscription of individuating boundaries around the figure of the genius autobiographer in search of the perfect words expressive of his inner state, and instead to consider the provisional way in which desires and utilities are offered up to the reader as a template for quasi-public experiments in the maximization of pleasure. My only objection to Rzepka would be his insistence that this framework for the sharing of values takes place in opposition to the marketplace and as an attempt to de-commodify the literary work. The potlatching model for literary dissemination, in which the writer indebts the reader by providing a unique value (his story) for a relatively debased value (a small amount of common currency on the open market), is not opposed to the market but, as we saw in our previous discussion of "consumer surplus," precisely what neoclassical economists claim is the market's primary benefit. As the above sections have hopefully shown, there is no reason to think that De Quincey would necessarily see the putatively pre-capitalist form of patronage as more authentic or socially beneficial than consumer-capitalist exchange.

De Quincey, then, involves himself, his readers, and his literary sources in a network of mutual indebtedness, in which intertextual borrowings and the relative aesthetic values of works can be established, if only provisionally. And as we have seen above in the examples of Coleridgean filching, the borrower and the lender, in a literary context, end up owing one another as long as both texts survive and are linked by the

archivist's memory. In one sense, this sounds rather like the standard liberal narrative of debt as a character-enriching social technology, which we find in Poovey. For instance, readers of Austen learn to extend trust to instruments of credit by becoming more astute judges of what constitutes a good faith versus a bad faith representation:

By alluding, however indirectly, to actual issues that might have concerned her readers--the war, unacknowledged debt, the role that representation had always played in Britain's credit economy--Austen was able to incorporate these matters into a safe, because textual, world of words, where they could be managed, translated into other terms, then simply dismissed. By foregrounding the theme and effects of representation, this narrative system could provide a symbolic resolution to real anxieties because the idea that representation was a *problem* was precisely what Austen's contemporaries had to learn to overlook.⁸⁹

The difficulty with this position, however, is that it ignores the inherently violent prehistory of the logic of universal equivalence. For De Quincey, who was hounded throughout his life by debt collectors and almost certainly would not have begun writing professionally without this spur, such ignorance is an unattainable luxury. Indeed, this ignorance forms the political core of Gagnier's complaint against Poovey, for obscuring material production with discursive production: "Poovey is not interested in the identity, or subjectivity, of the poor, nor in their positions with respect to the labor process, but in their status as discourse or myth: 'the social body.'"⁹⁰ And yet as we have seen, De Quincey's awareness of the violence of the logic of debt does not translate into a

⁸⁹ Poovey, *Genres of the Credit Economy*, 371.

⁹⁰ Gagnier, *Insatiability*, 241.

fetishization of the labor process as realist corrective; quite to the contrary, the justification of consumption according to the logic of production is precisely what leads consumption to become privatized, greedy, and self-destructive in the insatiable search for quantitative individuation.

A more useful contrast to De Quincey's understanding of the significance of exchange can therefore be found in David Graeber's yet-more strident critique of the same, in the anarchist manifesto of *Debt: The First 5,000 Years*: "Any system that reduces the world to numbers can only be held in place by weapons, whether these are swords and clubs, or nowadays, 'smart bombs' from unmanned drones."⁹¹ And yet Graeber's wide historical sweep tempers his position towards equivalence, if only implicitly. If it is true that debt is an instrument of social domination, it is also true that the dream of total freedom from debt is an inherently individualist one, which is to say it is capitalism's dialectical counterpart for the indebted sinner: "[Adam Smith] created the vision of an imaginary world almost entirely free of debt and credit, and therefore, free of guilt and sin; a world where men and women were free to simply calculate their interests in full knowledge that everything had been prearranged by God to ensure that it will serve the greater good."⁹² For Graeber, then, debt is a technology of social domination whose regulative ideal under capitalism is its own eradicability; this is quite a grim scenario, and yet Graeber is not without his utopian fantasies. Although he does not explicitly provide a way out of this trap, we can see that his anarchic solution looks something like local equivalence. The fall from grace, in his genealogical economic-

⁹¹ David Graeber, *Debt: The First 5,000 Years* (New York: Melville House Publishing, 2011) 385.

⁹² Graeber, *Debt*, 354.

anthropology, is the moment at which debts become transferable from one creditor to another:

[A] debt, unlike any other form of obligation, can be precisely quantified.

This allows debts to become simple, cold, and impersonal--which, in turn, allows them to be transferable. If one owes a favor, or one's life, to another human being--it is owed to that person specifically. But if one owes forty thousand dollars at 12-percent interest, it doesn't matter who the creditor is; neither does either of the two parties have to think much about what the other party needs, wants, is capable of doing--as they certainly would if what was owed was a favor, or respect, or gratitude. One does not need to calculate the human effects; one need only calculate principal, balances, penalties, and rates of interest. If you end up having to abandon your home and wander in other provinces, if your daughter ends up in a mining camp working as a prostitute, well, that's unfortunate, but incidental to the creditor. Money is money, and a deal's a deal.⁹³

De Quincey, presumably as well-acquainted as Graeber with the violence that underwrites the debt relation, at the same time finds experiments with the quantification of pleasure as not necessarily exploitative. What is more, he refuses the comforts of individualism implicit in Graeber's pseudo-contractual scene of just owing your neighbor a favor. And so in contrast to Graeber's fantasy of economic actors always indebted but manageably so with their own mental ledger, De Quincey goes as it were in the other direction, by intensifying a network of mutual indebtedness (a dread book of accounts) until we lose hope of ever paying it off and so turn our attention towards other things. His

⁹³ Graeber, *Debt*, 13-14.

character therefore partakes of the liberal narrative of the socializing effects of exchange, but refuses its individualist regulative ideal of the possibility of clearing one's debts, which even Graeber implicitly partakes of. We owe each other everything, and above all to make each other happy.

It is as a socially-situated actor who individuates himself locally, in communicable, formally-expressible, and so ultimately replicable ways, that the Opium-Eater character finally promises to present, and ultimately refuses to present, his person to the reader. The narrator asks the reader to engage in a painterly imagination of his present situation, in Dove Cottage overlooking Grasmere valley. "Let there be a cottage, standing in a valley, 18 miles from any town--no spacious valley, but about two miles long, by three quarters of a mile in average width; the benefit of which provision is, that all the families resident within its circuit will compose, as it were, one larger household personally familiar to your eye, and more or less interesting to your affections" (*OE*, 58). We are instantly home at Grasmere. The Opium-Eater has offered us not merely his particular situation, but his own eyes and their affections. His cottage is a "real" cottage surrounded by "real" mountains, by which he means a humble dwelling amongst multiple-thousand-foot peaks. And after suggesting to us the beauty of the place, with flowers "clustering around the windows" three seasons of the year, "beginning ... with May roses, and ending with jasmine," he realizes the necessity of this situation, of a cozy cottage amongst tall mountains, by asking us to paint the place in "winter, in his sternest shape" (*Ibid.*). His aim is to make the scene snug: "Surely every body is aware of the divine pleasures which attend a winter fire-side: candles at four o' clock, warm hearth-

rugs, tea, a fair tea-maker, shutters closed, curtains flowing in ample draperies on the floor, whilst the wind and rain are ranging audibly without ...” (*OE*, 58-9).

We began our portrait outdoors, but we are now on the other side of the window, with the curtains drawn behind us, and De Quincey adds to the scene a superfluous portrait artist: “But here, to save myself the trouble of too much verbal description, I will introduce a painter; and give him directions for the rest of the picture” (*OE*, 59). This “facetious introduction of a demiurgic ‘painter,’”⁹⁴ as Rzepka calls it, confuses the mode of address: “Paint me, then, a room seventeen feet by twelve, and not more than seven and a half feet high. This, reader, is somewhat ambitiously styled, in my family, the drawing-room” (*OE*, 60). Are we “let[ting] there be,” or are we “paint[ing] him,” these scenic elements? However that may be, whether the reader is a painter or an inert onlooker, this cozy room is becoming somewhat crowded: “it is also, and more justly, termed the library I have about five thousand [books]. ... Therefore, painter, put as many as you can into this room. Make it populous with books” (*Ibid.*). If we felt crowded by people before, we begin to feel crowded out by an entire population of books. The reader, with or as the painter, predictably stands behind the easel and out of the picture, and as the details are furnished, the question of who is included in De Quincey’s set, and who excluded, is raised twice, as a problem of hospitality and decorum. He begins a game of discomfiture by invoking the tea-table and its settings, while conspicuously failing to invite us to sit.

[N]ear the fire, paint me a tea-table; and (as it is clear that no creature can come to see one such a stormy night,) place only two cups and saucers on the tea-tray: and, if you know how to paint such a thing symbolically, or

⁹⁴ Rzepka, *Sacramental Commodities*, 15.

otherwise, paint me an eternal tea-pot--eternal *a parte ante*, and *a parte post*; for I usually drink tea from eight o'clock at night to four o'clock in the morning. (Ibid.)

The problem of inclusion is doubly staged in the question of how many places are set. To be included in his company (of course, do have a cup) is to be excluded from his exclusion (thankfully no visitors, present company excluded).

The problem of our inclusion is immediately sexualized, and our desire to be included is gendered, with the question of who will pour for the set places. He continues: "And, as it is very unpleasant to make tea, or to pour it out for oneself, paint me a lovely young woman, sitting at the table. Paint her arms like Aurora's, and her smiles like Hebe's:--" (*OE*, 60). We are in too deep to know if we are imposing. This is a far too intimate setting for our host to deny us, if we should ask, that setting of tea; if it is not intended for us, then we are already interrupting a private evening, and it would only be making a scene to say no to someone rude enough to ask. The question, then, is whether we are rude enough to demand that De Quincey and his lover present themselves to us bodily. He first changes his mind about her inclusion in the picture: "But no, dear M., not even in jest let me insinuate that thy power to illuminate my cottage rests upon a tenure so perishable as mere personal beauty; or that the witchcraft of angelic smiles lies within the empire of any earthly pencil. Pass, then, my good painter, to something more within its power: and the next article to be brought forward should be myself--...." He will, of course, renege on this as well; but by now, we should already feel uncomfortable with our desire to see the Opium-Eater's person. The Opium-Eater has been feminized, here, in his union with his lover as the object of an unwelcome, desiring gaze. We can certainly

include him or her in this portrait, and paint either or both to our liking, but to do so would automatically exclude us from his tight circle of good taste.

De Quincey has effectively critiqued the power relations inherent in the confessional mode, but from a pragmatic standpoint. “You understand now, reader, what I am...” (*OE*, 54). This is an ethical argument, made quantitatively: what more do we want from him? What model of character, then, will survive De Quincey’s painfully polite disciplining of readerly taste? What is left of character when the person is literally taken out of the picture? If De Quincey invokes the necessary decision only at the very end of the narrative, and then only to dismiss it, the rest of the drama is structured around decision’s secular double, choice. His indecisive non-appearance in the above scene is made up for by what we might call his taste profile, or at least a sufficiently distinctive selection from that profile:

[T]he next article brought forward should naturally be myself--a picture of the Opium-eater, with his ‘little golden receptacle of the pernicious drug,’ lying beside him on the table. As to the opium, I have no objection to see a picture of *that*, though I would rather see the original: you may paint it, if you choose.... No: you may as well paint the real receptacle, which was not of gold, but of glass, and as much like a wine-decanter as possible.

Into this you may put a quart of ruby-coloured laudanum: that, and a book of German metaphysics placed by its side, will sufficiently attest my being in the neighbourhood; but, as to myself,--there I demur. (*OE*, 60)

All we can say of De Quincey’s body is that it is nearby. These commodities triangulate his location in physical space in terms of the degree of his addiction: that particular book

and that particular drug have him on a very short leash. But they also triangulate his location culturally: the person kept on a short leash by these two particular commodities is a specific kind of person.

The question is whether he has been specific to the point of uniqueness. De Quincey's conceit is that there are so few people who, in 1821, are German philosophy buffs, and that so few of them are also opium addicts, that the number of people in this set has been narrowed down to one. He makes his refusal to present us with the person an inconsequential one, by determining for us a unique character. Of course, the number of possible people this could be, both in terms of biography and contemporary readerly knowledge, is not one but two. If we have spent our excruciating time in the study wondering if a seat and a cup of tea might be ours, the chair that De Quincey has sprung out of is Coleridge's. Morrison relates Coleridge's horror at reading the *Confessions*, that he felt his most private self had been put on public display: "Coleridge read the *Confessions* with 'unutterable sorrow ... the writer with morbid vanity, makes a boast of what was my misfortune.'"⁹⁵ But De Quincey's borrowings/theft is only half the story. As Morrison also indicates, De Quincey, very early on in his residence in Dove Cottage (beginning 1809) potlatched Coleridge and the Wordsworths in an unrepayable literary debt by loaning out large portions of his massive library, an expense which significantly contributed to his own financial ruin:

For weeks cart loads and cart loads of books had been streaming into
Town End, confirming neighbourhood rumour that De Quincey was a 'far
learn'd' man. 'You will judge that it is a great pleasure to us all to have
access to such a library, and will be a solid advantage to my Brother,'

⁹⁵ Morrison, *English Opium Eater*, 211.

Dorothy observed to a correspondent. Coleridge, who had finally launched *The Friend* in June, often stopped in to browse the approximately five thousand volumes that soon came to cram every corner of the cottage, and carried so many of them back with him to Allan Bank ‘that sometimes as many as five hundred were absent at once’.⁹⁶

If a single book of German metaphysics, alongside a decanter of laudanum, are enough to narrow the field of potential writers down to one (or two), then a library of five thousand titles is excessively unique, like a face, or a thumbprint.

And yet this is a uniqueness without depth, or, as I argued earlier in this section, a sort of virtual depth. It is an empirical individualism, like the flat uniqueness of a person’s iTunes library or Amazon.com purchase history. And it is just as potentially oppressive. The empirical fact of a (minimal) universal individuality seems to be what allows Frances Ferguson to identify the horror of the Gothic novel as resting on the realization that character is “less the consequence of action than the impossibility of avoiding one’s character as one’s inheritance, so that character becomes less a predictor of action than an emblem of the irrelevance of action” (SS, 103). In other words, the horror of De Quincey’s nightmare vision of “the tyranny of the human face” derives not from the sense of having one’s differences lost in an undifferentiated urban mass, but in a massive iteration of differences that calls the significance of difference into question.

The waters now changed their character,--from translucent lakes, shining like mirrors, they now became seas and oceans. And now came a tremendous change, which, unfolding itself slowly like a scroll, through many months, promised an abiding torment; and, in fact, it never left me

⁹⁶ Ibid., 150.

until the winding up of my case [as we have seen, even then it persists].

Hitherto the human face had mixed often in my dreams, but not despotically, nor with any special power of tormenting. But now that which I have called the tyranny of the human face began to unfold itself. Perhaps some part of my London life might be answerable for this. Be that as it may, now it was that upon the rocking waters of the ocean the human face began to appear: the sea appeared paved with innumerable faces, upturned to the heavens: faces, imploring, wrathful, despairing, surged upwards by thousands, by myriads, by generations, by centuries:—my agitation was infinite,— my mind tossed—and surged with the ocean.

(*OE*, 71-2)

These faces are in fact unique, but only in terms of their shapes. When the human face, the symbol of individuality, comes to be seen as individuated only geometrically, then it begins to look like a mask one cannot take off, and the relevance of action is indeed called into question.

At least, the relevance of individual action is called into question. The proud owner of a library of thousands of volumes can be assured of uniqueness grounded in the fact that nobody will own just the same set of volumes, but in claiming the set as private property he dons a mask he cannot take off. And as we have seen, De Quincey creates complex networks of social exchange by stealing passages and loaning out books, in order to establish a ledger of mutual indebtedness that no one would be foolish enough to think could be balanced. In doing so, he attempts to disable the violence that Graeber sees as inherent in networks of quantified debt. Nobody is going to pay anybody back, and

they will almost certainly continue to borrow from one another. The empirical fact of universal individuation therefore becomes the starting point for the mapping of, traversing of, and reconfiguration of social space. When De Quincey steals Coleridge's experiences, as when he loans him books, he is attempting to approximate the philosopher's location, in order to make it common knowledge. In doing so, he of course traces a unique trajectory, but in doing so degrades that uniqueness by imagining his anonymous character as temporarily inhabiting its endpoint, and more importantly by directing his readers as to how best to make the trip.

In other words, De Quincey attempts to smudge his character's fingerprint. His autobiography produces individuality as an aggregation of formalized experiences, centering on acts of consumption and estimations of their relative value in a particular situation. These experiences offer themselves up to the consuming reader as replicable, and isolable inasmuch as his text presents itself as a patchwork of borrowed images and ideas. The life presented here is not that of infinite self-reflection but rather the massive finitude of intertextual recombination in a network of literary exchanges. The figure of the dilettante librarian, that is, revises that of the opium connoisseur in the same way that the non-renunciatory crisis de-individualizes the question of utility maximization. Instead of seeing consumption as a means of producing a higher social status for an individual on a universal scale, the self-absenting opium-eater finds and renegotiates his distance from others in a high-dimensional space defined by formalized social relations. The locally contingent procedures of abstraction and quantification through which these relations are formulated necessarily individuate the aesthete, by determining relative distances from other social actors; but this abstraction is an index of their replicability, which is to say

their common availability. From this perspective, the maximization of utility in aesthetic experience is predicated on its resistance to individual appropriation, and character comes to be seen as a medium for the local integration of affect, of individuating experimentation that can only mistakenly (and with real costs) be claimed by the individual experimenter. The utility of art, in De Quincey's early hack writing, is its ability to proliferate potential standards of value as a means of reconfiguring the social terrain.

This section began with Benjamin's condemnation of the biographical mode of literary criticism that seeks ideological confirmation of what a good life would be, and so disallows any transformative potential in the aesthetic encounter. His essay on book collecting, "Unpacking My Library," offers an example of what such a transformation would look like, in terms that illuminate what I have been arguing is the potential of De Quincey's opium-eater persona, namely, the renegotiation of the value of the literary commodity away from an individual-proprietary model, from within the domain of consumer capitalism. The essay's temporal conceit is that it is written as the library is unpacked from crates and organized on his shelves; the structure of his feelings about book collection as such is immanently informed by, and barely able to contain, "the spring tide of memories which surges toward any collector as he contemplates his possessions."⁹⁷ Universal standards of value are devalued insofar as money is of no object in the purchase of titles, and "public collections," although "less objectionable socially and more useful academically than private collections," do not give books "their

⁹⁷ Walter Benjamin, "Unpacking My Library," in *Illuminations*, trans. Hannah Arendt (New York: Schocken Books, 2007 [1968]) 60.

due.”⁹⁸ Instead, a volume acquires its value in its particular history, which he argues can only be catalogued by a passionate collector, who knows its provenance, where he bought them, and what other books should be its neighbors on the shelf. But at the same time, the vision of property that is put forward refuses the claim of the individual collector insofar as he is represented as a contributor to this volume’s history, one which exceeds him. The collector, then, does not own his books so much as he is owned by them:

For inside him there are spirits, or at least little genii, which have seen to it that for a collector—and I mean a real collector, a collector as he ought to be—ownership is the most intimate relationship that one can have to objects. Not that they come alive in him; it is he who lives in them. So I have erected one of his dwellings, with books as the building stones, before you, and now he is going to disappear inside, as is only fitting.⁹⁹

Like De Quincey’s opium-eater, the collector is locatable in the multidimensional cultural and historical space articulated by the objects that pass through his hands. More than this, he lives—not the historically obfuscatory, enchanted life of the great work of art yoked to the great author—but the life that is informed and deformed by history, and returns the favor to the social space. In this instance, the collector weakens the grip of universal standards of value by proliferating competing values according to distributed personal relationships; moreover, the collector, like the opium-eater, disappears before claiming these values, because it is only in their transmission as common property that they attain any lasting social utility.

⁹⁸ Ibid., 67.

⁹⁹ Ibid.

Afterword

This dissertation has attempted to contribute to the conversation between Romantic literature and Romantic science that has in recent years produced so much scholarship whose general utility I believe falls under two interrelated but articulable headings. First, interdisciplinary science/literature work in Romantic-era texts helps to overcome a longstanding conceptual divide between the two: frequent simplifications of Romantic aesthetics by non-practitioners still tend to represent the period as fundamentally idealist (in both senses) and anti-Enlightenment; and the so-called second scientific revolution, in the turn to mathematization, systemization, and formalization is often seen as a hyper-rationalist development in the sciences that transcends the category of experience so central to Romanticism. Critical scholarship over the last twenty years has troubled that binary opposition by tracing the less-than straight path taken towards mathematization in the sciences, and the biographical and discursive interrelationships between literary figures and the scientists who pushed their disciplines towards formalism in this way.

This leads to the second use of such scholarship, namely its contribution to the ongoing work of historically contextualizing two fields with a history of decontextualization. The path towards the mathematization of the sciences, if I may be allowed to paint with a very broad brush, was paved by turns towards professionalization, specialization, and institutionalization, whose literary analogue is the vocational poet's Wordsworthian manifesto. Likewise, the rise of mass print culture can find its own analogue in the industrialization of science following Herschel and Humphry Davy. We therefore find Coleridge performing the part of the literary genius for his Shakespeare

lectures in the same manner and even room in the Royal Institution as the lecture series on pneumatics that made Davy a celebrity.¹

Such interdisciplinary contextualizations have, to my mind, opened up more opportunities for reflection on the contemporary state of our understanding of the relationship between the arts and the sciences. The rise of industrialized science and its concomitant mathematization seem to me an open invitation to reflect on our own post-WWII state of affairs living under what Peter Galison has called “big science” and the hyper-abstraction of scientific theories in the age of supercomputing.² I believe this is essentially related -- or at least potentially and usefully relatable -- to what has compellingly been called the “persistence” and “insistence” of Romantic aesthetics and which recent work at Brown University has undertaken in terms of “contemporary” Romanticisms.³ My work in this dissertation has attempted to lay the groundwork for building, or perhaps, more archaeologically, to mark out several partly-submerged structures for excavating, an interdisciplinary space in which we can more fully make use of Romantic experiments with abstraction in understanding and intervening in our own increasingly informationalized experience.

My project has mapped out three discursive domains in which such an inquiry might productively proceed: visibility/spatiality, intellectual labor/property, and pleasure/utility. Blake’s quasi-Kantian experimentation with the rule-based construction

¹ See Sarah Zimmerman’s wonderful essay on these biographical and performative connections, “Coleridge the Lecturer, A Disappearing Act,” in *Spheres of Action: Speech and Performance in Romantic Culture* (Buffalo: University of Toronto Press, 2009), 46-72.

² Peter Galison, *Big Science: The Growth of Large-Scale Research* (Stanford: Stanford University Press, 1992).

³ The best case for such an overlap would be Forrest Pyle’s projected work on Romanticism and abstraction.

of spatiality shows us, on an identifiably abstract level, that we naturalize experience at our own risk. However independently organic a particular object of experience might seem to us, it is useful to be able to recognize our own participation in the construction of that object's form. To the extent that we can apprehend the tools used in these constructions, we can put them to work in exploring the domain and limits of the experiential space they give to us; at the limit, we can even begin to imagine other tools and spaces, and how we might go about building these.

Of course, such formal innovation runs the risk of losing its communicability. The Wordsworths, in their search for a truly singular style, worked at the limits of such potential incommunicability. In the tight circuit of communication within their household, they constantly ran the risk of falling into a private language. But experience only becomes incommunicable when it loses its form; and Dorothy's journals, in their presentation of Wordsworthian life as natural also gave it a shape and structure. In presenting nature-as-Wordsworthian and Wordsworthianism-as-natural, she allowed their cooperative intellectual labor to progressively, like a rapidly tightening spiral, redefine the character of their shared experience while always expressing this experience in the language of everyday life. Her task in short was to allow new uses of old words, and for the concordance or archive of these innovative uses to be identifiable as belonging to their household, or more properly, her brother's name. This gossamer bridge between common language and individuated experience is what allows intellectual labor to be justifiable as intellectual property.

But then, such formal innovation and its radical experiential consequences need not be claimable by any individual. We see this in Dorothy's own journal, even if the

radical impersonality of her writerly ethos is only realizable (as I have argued) when we recognize its dialectical relationship with her brother's fall into professional egoism (however much we may temper this image of William, following Elizabeth Fay). But it is De Quincey's Opium-Eater who follows this impersonal aesthetic and its consequences for readers out somewhat further. His character, by the end of the autobiography, is shown to be little more than an amalgamation of different consumer experiences, most of these literary. To say this is not to diminish in any way the rich complexity of these experiences. It is important for the Opium-Eater that these experiences are for the most part purchasable at a reasonable price for middle-class consumers, because he is proposing a form of character that is predicated on both a dynamic sociality (norms can be redefined) and a social individuation (distinction that attempts to share itself). Individuation through formal experimentation is, for De Quincey, always already social, if only minimally, as a technology for communicating one's measurable distance from the norm.

The trajectory of abstraction that I have sketched in this dissertation demonstrates, in my opinion, the radical potential of formal experimentation. Blake shows us in principle just how far rule-based constructions of experience can be taken; Dorothy Wordsworth shows us how to pursue the elaboration of such rules in terms of a stylized form of life; and De Quincey helps us to see how to make such stylization social, even to the point where it becomes common property, in spite of the fact that asociality is always likely to be misrecognized as individualism. The Romantic uses of abstraction, therefore, have much more to say about our contemporary condition, in which increasingly more of our experience is mediated by massive databases, the empirical effects of whose

algorithms oftentimes *must* be treated as though natural in order for us to survive in their world (don't fiddle with your GPS while driving). Having made my case generally for the continued relevance of the Romantic engagement with the question of abstraction, I would like to close empirically/experimentally, by critically examining the debate surrounding the contemporary debate over the so-called “digital humanities,” whose quantitative methodology alternatively promises to save or threatens to destroy our profession and even our objects of study.

On the Quantification of Literature

In a recent op-ed for the *New York Times*, the evolutionary biologist Armand Marie Leroi celebrated the potential of the digital humanities to precipitate “the transformation of the humanities into science.” This transformation excites Leroi for two reasons. The first is precision: “the quantification of the humanities” will allow practitioners to “[use] numbers to test hypotheses” and “describe patterns and relationships with a precision that words do not.”⁴ The second is facticity, and silence:

A traditional, analog, scholar will make some claim about the origin, fate,
or significance of some word, image, trope or theme in some Great Work.
He'll support it with apt quotations, and fillet the canon for more of the

⁴ Armand Marie Leroi, "One Republic of Learning," *The New York Times*. February 13, 2015. March 26, 2015. <<http://www.nytimes.com/2015/02/14/opinion/digitizing-the-humanities.html>> Interestingly, he also goes on to make a similar rhetorical move as we saw in Brian Walsh, in the introduction to this dissertation, by insisting that the mere existence of information somehow compels a certain large-scale mathematical response from us: “The quantification of the humanities is driven by an inexorable logic: Digitization breeds numbers; numbers demand statistics.”

same. His evidence will be the sort that natural scientists call “anecdotal” -
- but that won’t worry him since he’s not doing science.

But then a code-capable graduate student will download the texts -- not just the canon, but a thousand more -- run the algorithms, produce the graphs, estimate the p values, and show the claim to be false, if false it indeed is. There will be no rejoinder; the analog scholar won’t even know how to read the results. Quantification has triumphed in field after field of the natural and social sciences. It will here, too.⁵

This version of science doesn’t sound like very much fun, unless we are outside witnesses to such behavior. We are reminded of the professors from Gulliver’s “school of languages,” who are burdened with sacks full of the objects they wish to communicate about, because clear communication only takes the form of mutely presenting your referent. Leroi is right: there is no rejoinder.

What seems invisible in this utopian vision of hoary professors silenced by mute grad students (future adjunct faculty?) with their bags full of indisputable facts is the context productive of such indisputable facticity. Leaving aside momentarily the archival and technical labor that must be erased in order for an algorithm, without breaking, to process the cleaned-up information one or more databases into a neat graph, we can observe that the facticity of these claims relies on a strict policing of variables in general. In order make a literary “hypothesis” falsifiable in the context of the quantitative analysis of textual databases, the literature professor’s argument must be stripped down to a simplistic proposition that would be quite a rarity in a published piece of scholarship. The literature professor’s dumbfounded silence is the only thing that could make the tech-

⁵ Ibid.

savvy young gun's performance look weighty, because at the end of the day he really isn't saying much at all. Of course, that's Leroi's point. The humanities generally are seen as comprised of sophists and overinterpreters; quantification in this piece does the double duty of submitting the archive to a mode of interpretation that claims universal applicability, while limiting the bandwidth for debate.

The point, after all, is not to read these thousands of texts, but rather, *not* to read them. This is Natalie Cecire's argument, at least, in her recent "Ways of Not Reading Gertrude Stein."⁶ Cecire uses Stein's longstanding reputation as an "unreadable" author to reflect on Franco Moretti's pride in finding a way to not actually read the unreadable conservative novels that his "distance reading" methodology subjects to quantitative analysis. Distance reading, Cecire argues, "is women's work," by which she means that the invisible labor of editing, publishing, preserving, digitizing, and indexing that goes into producing modern mass media always finds a way to be devalued, represented as uncreative, and if possible pawned off on unnamed women. Unlike Leroi, however, Cecire is not counselling that we actually not read, but rather that we allow our encounter with informationalized texts to challenge our individualist-subjective notions of creative authorship and private readerly pleasures. Her extended close reading of Stein's unreadability, seen through the lens of the mass-media mode of textual production in which Stein was professionally involved, is an attempt (in my opinion, a successful one) to demonstrate the continued value of professional readership in our own context of algorithmic reading. Specifically, she counsels a readerly practice that navigates between close-reading canonization (she embraces the textual horizontality that the database form

⁶ Natalie Cecire, "Ways of Not Reading Gertrude Stein," *ELH*, 82:1 (Spring 2015) 282-312.

offers) and distance-reading universal devaluation (she does actually read these "unreadable" texts and show it to be worthwhile to do so).

Cecire's critical aesthetics in the context of the database allows us to consider from a contemporary perspective the different kinds of Romantic abstraction I have investigated over the course of this dissertation. Dorothy Wordsworth's abstraction of intellectual labor, when viewed through the cottage-industrial model that the Herschels helped us to articulate, can be seen to proceed through writing practices that are undertaken as though naturally, in order to accelerate her brother's stylistic individuation, which itself rewards the careful reader. In her journals, then, we can see both the possibility of a radically impersonal form of communication, and an awareness of this style's dialectical relationship to the production of an aesthetics of individuation. Without choosing between Dorothy's "natural" style and Stein's mechanical style, it seems worthwhile to observe that where Cecire's Stein exposes the mechanical operations that underlie the work we call creative, Dorothy allows us to see that any kind of work can be made to look natural.

De Quincey's response to this natural naturalization that seems to haunt individuation (like a rising ground or an accumulation of sensations in memory), is to explore the social dimension of reading, rather than of writing. Looking at aesthetic individuation from the consumer's point of view allows him to implicitly lower the stakes on creativity, and to figure the most asocial activity (e.g., drinking laudanum and tea in an isolated cottage while reading German metaphysics) as always in principle social because communicable. This is not dissimilar to Cecire's search for a middle distance reading, or perhaps just one that toggles back and forth quickly between the distant and

the close. De Quincey's early republican desire for a common standard of pleasure, which would enable generally-pleasing because low-stakes debate over what is best, is in many ways like a computer-assisted hunt for the best passages to make the best argument on behalf of one's own standards of reading.

But we should not forget the radical nature of De Quincey's claims about utility. We have seen that these pursuits of new pleasure, however much they maintain their communicability, have the potential to carve out new forms of value and sociality. Above all, what is communicated is their precise distance from the norm. In a similar way, Blake's abstract spatial constructions both demonstrate the generative capacities of flat Euclidean space and at the same time push these capacities to their limits, by showing these constructions in many ways to be quasi-organically generative of their own spaces. Both of these authors, in other words, can be seen to meditate on the normative dimension of experimentations with abstract representation; and this lies at the heart of the difference between Cecire and Leroi. Leroi's method seeks a production of silences and in service of this goal imagines only a limited algorithmic toolbox, adaptable to a testing specific kinds of hypotheses in a fairly restricted domain. Cecire, on the other hand, presents the tools of distance reading as merely one set of tools, leaving the door open to the introduction of new equipment; indeed, her desire for a middle-distance reading would seem to demand as much. Such a diversity of algorithmic forms of reading would almost certainly be non-positivist, and their responsiveness to the reader's situation-specific needs would likely increase their noisiness and errors; as a popular if clumsy example, think of the hapless babbling of Google's translation tool, which "learns" its languages by "reading" real texts and cobbling together informal usage rules.

Practically speaking, the consequences of this difference have to do with our own sense of what work is valuable in the academy. The major problem within the digital humanities is not that scholars are applying the language of quantification to literature. Someone is bound to, after all, and there are plenty of interesting ways for computers to “read” texts. But when it is taken as an unquestionable fact (of course not all so-called digital humanists do take it in this way) that quantification, following information theory, is a universal communication medium, we lose the ability to talk about the consequences of this assumption. One consequence is that literature departments will need many fewer professors engaged in research, if all one does is “run the algorithm.” We of course understand this to be a goal for Leroi, but it is interesting to note that implicit even in Moretti’s argument, is the logic of efficiency that says there is some labor that it is better to save humans from doing. After all, as Cecire points out, who on earth would want to read unreadable texts? But an embrace of automated intellectual labor is the wrong approach to take in an environment where humanities jobs are being rendered contingent. It seems unthinkable to all these writers to suggest that new jobs might be created to study the field that they have made interesting, and this by doing something much less taxing than skimming, nevermind actually reading.

This curious inability of a new field to advocate for renewed investment in the humanities, without also imagining the dissolution of the humanities as they exist, is not a result of a clash between the humanities and the sciences, so much as of an unfortunate internalization of neoliberal ideology within the digital humanities. When digital humanists find themselves without tenure-track jobs, they tend to blame traditional systems of scholarly value, rather than reflecting on the fact that nobody has jobs:

When a DH scholar attempts to include within her tenure dossier (if, indeed, the scholar is even on a tenure track and not one of a growing set of ‘alt-academics’) not only articles and books but also, for example, code for a collaboratively built tool that enables other scholars to add descriptive metadata to digitized manuscripts, key questions about the nature of scholarship are raised....⁷

This complaint is made in “The Digital Humanities Moment,” Matthew K. Gold's introduction to the 2012 *Debates in the Digital Humanities*. And while it is apparently made unironically, it is hard to take seriously, given that the new values he offers up are taken straight from Silicon Valley; his rhetoric shuttles between “disrupting” and “building,”⁸ ultimately painting a picture of creative disruption in which it is impossible to see tenure as such survive. On the one hand, we have the digital humanities as a “disruptive political force” and on the other as a field in which reading, writing, and thinking are replaced with an ethic of “building.”⁹ Quoting from a controversial talk by Stephen Ramsay on the latter, “the fundamental commonality that can be found among digital humanists ‘involves moving from reading and critiquing to building and making.’”¹⁰ The discourse of a crisis in which the humanities are undervalued is not a problem in a peripheral field that the digital humanities reflect upon dispassionately; rather it is one of their best-selling products. With some exceptions, including Elizabeth

⁷ Ibid., xi.

⁸ Matthew K. Gold, “The Digital Humanities Moment,” in *Debates in the Digital Humanities*, ed. Gold (Minneapolis: University of Minnesota Press, 2012) ix-xvi.

⁹ Ibid., x.

¹⁰ Ibid.

Losh's essay in the same volume,¹¹ the digital humanities' uncritical embrace of a quantified methodology implicitly embraces the quantified metrics for valuing scholars' work that dominates in the social sciences; and these metrics have always been a means of creating an atmosphere of meritocratic competition for limited resources in a regime of artificial scarcity.¹²

I am not arguing against the quantification of literature as such. This dissertation has spent a good deal of time exploring the utility of controlled experiments in abstraction within the cultural domain. What I am trying to show in this dissertation's final, contemporary case study is that quantification always has a context, and humanists are in a position to be able to consider the possible systemic effects of such experiments when performed at scale. The problem with the informationalization of the textual artefacts we study, in other words, has been that this took place in the context of corporatized universities that reward individual scholarly achievement above collaboration and general knowledge production. In the same way that standardized tests are, from a systemic perspective, tools for closing schools, and performance metrics in graduate school are ways of prematurely terminating dissertations or even restructuring doctoral programs across the university, the quantification and formalization of literature, in our current context, have a strong bias towards being used to hire fewer people, under

¹¹ Elizabeth Losh, "Hacktivism and the Humanities: Programming Protest in the Era of the Digital University," in *Debates in the Digital Humanities*, 161-186.

¹² Indeed, the unquestioned and universal reliance on these quantified "impact scores" in the natural sciences has created perverse incentives for publication. As an index for this perversity, consider the problems of premature publication and unjustified claims, whose proxy we find in skyrocketing retractions across major journals. See R. Grant Steen, "Retractions in the scientific literature: is the incidence of research fraud increasing?" in *Journal of Medical Ethics* 37 (2011) 249-253. For an expert diagnosis and prescribed remedies to these problems, see Arturo Casadevall and Ferric C. Fang, "Reforming Science: Methodological and Cultural Reforms," in *Infection and Immunity*, 80:3 (March 2012) 891-896.

shorter-term contracts, to do more work, even if that work ends up meaning less. The mere fact that most digital humanists never present the opening of a new, cross-disciplinary field as an exciting opportunity for massive public and private reinvestment in the humanities in general is enough to evidence that the field's critical capacities have been at least partly disabled by its neoliberal affinities.

Of course, these nominal outsiders of course find themselves in the good company of an extant professoriate that largely embraces highly differential merit pay and allows the profession's adjunctification to proceed without public challenge. It doesn't have to be this way. We could easily see how the proliferation of archival databases might help to make a powerful case for more long-term investment, both for strictly archival work and for more synthetic research purposes. And the three case studies that I have presented in this dissertation provide us, I believe, with some useful tools for thinking our way through this crisis. For instance, if we were attempting to imagine what a highly-productive but non-exploitative corporate model for higher education might look like, a useful thought experiment would be to think through what it would have taken to make the Wordsworth household function in an equitable manner. As I hope I convincingly argued, the problem is not solved by giving Dorothy equal credit, because it is the credit model of intellectual property that ultimately produces William's conservative turn towards a model of individual genius, and Dorothy's enabling of the same. In fact, we come a little closer to a solution by simply imagining William doing the dishes. We come very close to a solution if we imagine William not marrying. Dorothy's anxiety over William's marriage has typically been read in terms of her displacement as the woman of the house, or of her amorous displacement from

William's heart; I would add that she is rightly appalled at having been used to build up the Wordsworthian brand, whose purpose has suddenly been divided into producing not only poetry, but children as well. Caroline Herschel, as always, is a good reference point: when her brother married in 1788, she was outraged. Her relationship with her brother was never as warm as that between the Wordsworths, and in Caroline's decision to exit the house and the siblings' precipitous decline in observational data-gathering, we can safely conjecture that much of her anger is that of a business partner who has been abandoned by her counterpart for other endeavors, at the height of their joint productivity. It is this dedication to the institution that, having been made the only virtue available to the women, is finally abandoned by their counterparts as they claim the enterprise's products in the consolidated form of portable celebrity. Dorothy and Caroline's shared institutional ethos, though taken to lengths personally deleterious for both, should stand for us outsiders as a permanent critique of the power differentials in these shared enterprises, however necessary those hierarchies may have seemed given the celebrity logic of the cultural marketplace in which they found themselves.

This leads us to the question of what standards of value would look like in a non-exploitative corporate university. I hinted at this in a footnote in chapter two, but will revisit the question to make it relevant here. Drayton Nabers, in a 2011 talk at Brown University, makes us think that this idea might look something like long-term cultural influence or impact, in researchers' abilities to change peoples' ideas and ways of thinking. He does this by likening English departments to corporations, according Peter Drucker's model of businesses as mission-driven rather than profit-driven.¹³ The relevant

¹³ "[Drucker's] second chapter is called, 'What is a business'? And a lot of people think he's going to end up saying, 'A business is what Milton Friedman is going to say a

Drucker: “Markets are not created by God, nature or economic forces but by businessmen. ... There may have been no want at all until business action created it—by advertising, by salesmanship, or by inventing something new. In every case it is business action that creates the customer.”¹⁴ This liberal theory of culture, however, was better articulated by William Wordsworth: “[N]ever forget what I believe was observed to you by Coleridge, that every great and original writer, in proportion as he is great and original, must himself create the taste by which he is to be relished....”¹⁵ In Nabers’ radical-consumerist academy, our purpose is to make students who in the future will participate (consumptively and productively) in a process of cultural reformation.

Nabers is of course proposing a model of addiction, but it is a model of addiction rather like De Quincey’s: what is being presented for experimental uptake and iteration is a particular form-of-life-of-mind. Adopted at an elite cultural institution, of course, this could easily tip over into an establishment of an ethics of expertise that would only accelerate processes of social sorting and the accumulation of cultural capital. But we can also see how the alternative is a real possibility: that by identifying dissemination and subsequent uptake as *the* ground of cultural value, communal cultural consumers would be reoriented to see individuated taste as valuable only *potentially*, and its value as

business is in 1970.’ But that’s not right, that’s totally full of shit. Businesses don’t exist to make money. What they exist to do is to make customers. Alright? And of course, when you begin to think of businesses as making customers rather than making money, they begin to look a lot more like English departments. What do we do, after all? We create critical thinkers. What are critical thinkers? They’re customers for Deak’s bullshit about murder courses. Okay?” Drayton Nabers, “If Students are Customers, What’s the Bottom Line?” *YouTube*. July 26, 2011. March 20, 2015.

<<https://www.youtube.com/watch?v=jONxkm62aDI>>

¹⁴ Peter F. Drucker, *The Practice of Management* (New York: HarperCollins [1954] 1993) 37.

¹⁵ William Wordsworth to Lady Beaumont, 21 May 1807, in *The Letters of William and Dorothy Wordsworth*, 6 vol., ed. Ernest de Selincourt and Mary Moorman (Oxford: Clarendon Press, 1969) 150.

realizable only in the sharing of it. This form of consumption, as I hope the third chapter made clear, is anticapitalist. Or, at the least, it argues that culture achieves its greatest social utility in its availability as a commons. But at the same time, it participates in processes of formal expression, including quantification. Under a capitalist regime, this quantification proceeds according to a logic of differential accumulation; De Quincey's model of consumption, at its most radical, points us towards a logic by which quantification can function in terms of cooperative estimation and experimentation.

Finally, our understandable collective reluctance to engage with quantitative analysis and the sorts of computational abstraction peddled by “future of the academy” types and digital humanists especially has produced certain blind spots in our discourses and made our work seem irrelevant in certain quarters of public debate. I hope that this dissertation has made a strong case that the humanities can still engage critically with the most abstract of scientific discourses. And this engagement needs to be critical. The national public defunding of higher education has led science departments to turn more and more to private sources of funding for their research grants, to disastrous effects. Not all cases of the corruption of research are as bald as in the recent scandal of climate denier Wei-Hock Soon's involvement with the Charles G. Koch Charitable Foundation, but in the wake of these February 2015 revelations, there has been no public condemnation of M.I.T. for its continued association the form of the David A. Koch Institute for Integrative Cancer Research, even after these funders have been shown to have an agenda in corrupting scientific research; across the campus at Rice University where I am writing this conclusion sits the Shell Center for Sustainability, which has deep ties to the public policy department. My own personal experience has shown

scientists to be incapable of admitting that systemic corruption of financial inputs could lead to systemic corruption of published output. On some level, we need to be able to talk publicly to these colleagues, even if it is only to make a strong case about the fundamental nihilism of certain of their endeavors.

The humanities have a good deal to say to the sciences, and not in the form of Steven Pinker's figuration of the humanities as dessert for the brain.¹⁶ From one perspective, we might say that if William Blake can be shown to be conducting experiments with fractal geometry, then we can certainly engage with the cultural significance of supercomputer models of climate change. Tim Morton's work in this particular direction is exciting in its ability to bring into contact the domains of what we call human experience, and the fundamentally inhuman world of "hyperobjects." But where Morton, also a Romanticist, tends to keep a wary distance from the period's understanding of human subjectivity and its relationship to existence as such, my project's hope has been to go farther, by drawing out a fascination with abstract representation in some of the period's apparently most individualistic poets. In doing so, I hope not simply to have offered up an *a fortiori* proof of humanistic relevance to the sciences (if the Romantics have something to say about abstraction then everyone does) but also to have suggested some usefully uncanny resemblances to current problems with subjectivity and representation, especially those produced in our attempts to understand the humanistic (and potentially post-humanistic) enterprise.

¹⁶ Steven Pinker, *How the Mind Works* (New York: W. W. Norton, 1997) 524-38.

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