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Rethinking the Arts and Sciences:

Institutional Movement and the Formation of Romantic Discourse

A dissertation submitted in partial satisfaction of the
requirements for the degree of Doctor of Philosophy
in English

by

Kiel Steven Shaub

2019

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ABSTRACT OF THE DISSERTATION

Rethinking the Arts and Sciences: Institutional Movement and the Formation of Romantic
Discourse

by

Kiel Steven Shaub

Doctor of Philosophy in English

University of California, Los Angeles, 2019

Professor Saree Makdisi, Chair

Rethinking the Arts and Sciences recovers a crucial and yet neglected history of Romantic involvement with the urban institutional infrastructures of their time. The project draws on research in urban Romanticism and Romantic sociability to intervene in the entrenched view that British Romanticism was a largely rural, individual endeavor, opposed to scientific progress and its institutional projects. In fact, one of these projects, arts-and-sciences institutions such as the Surrey Institution and the Royal Institution of Great Britain, formed a crucial set of venues for Romantic lecturing and sociability. While such research has successfully refocused scholarly attention on the prominent place of Romantic-era writers and artists in the early-nineteenth-century urban imaginary, that recognition has not been adequately registered at the level of our current scholarly treatment of Romantic writing on poetics and critical theory. Through archival research at the Royal Institution, I

have been able to show that these urban spaces were not simply passive settings for communicating Romantic thought, they were instead playing a fundamental role in structuring it.

I claim that British Romantic thought is so tightly enmeshed in the network of arts-and-sciences institutions that sprang up in London from 1799 to 1808, that without understanding how these institutions functioned, we cannot adequately grasp how the Romantics imagined themselves as contributing to their own intellectual milieu. From its beginnings in the fine arts lectures of Samuel Taylor Coleridge and William Hazlitt, I track a Romantic institutional infrastructure as it adheres to the arts-and-sciences procedural demand that lecturers first elucidate the *scientific* “principles” of the subject in question, and then “apply” those principles on behalf of improving the *arts*. After delivering his courses at the Royal and Surrey Institutions, Coleridge would go on to adopt these arts-and-sciences lecturing procedures as the fundamental structuring feature in all of his major works on poetry, criticism, and the imagination, over the next ten years. In the *Biographia Literaria*, for instance, I show how Coleridge’s arts-and-sciences lecturing is largely responsible for the form of his definitions of poetry and the imagination, and even for the basic division between theoretical and practical criticism. This institutional discourse would also go on to structure key works of the second generation. Some would approvingly mimic arts-and-sciences lecturing procedures, as in Percy Shelley’s assertion toward the end of the unfinished *Defence of Poetry* that “the first part of these remarks has related to poetry in its elements and principles,” while “the second part,” alternatively, “will have for its object an application of these principles to the present state of the cultivation of Poetry.” Others, including Mary Shelley, appear to have seen a more ominous tendency in the institutional obsession with principles and application, and I conclude by showing how her portrayal of Victor Frankenstein’s search for what he calls the “principle of life,” along with his fateful application of it to that most profound of arts, the creation of a rational being, stands as perhaps the most severe Romantic critique of this broader institutional return to principle.

The dissertation of Kiel Steven Shaub is approved.

Jonathan H. Grossman

Sarah T. Kareem

Theodore Porter

Saree Makdisi, Committee Chair

University of California, Los Angeles

2019

And now...I bid my hideous progeny go forth and prosper.

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witness, your constant interest, advice, and love, made all the difference in getting it done. I love you.

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INTRODUCTION

Things are preserved from destruction, by bringing them back to their principles.

– Francis Bacon, *The Advancement of Learning*, Book III, Chapter I (1605)

Poetry fetter'd fetters the Human Race. Nations are destroy'd or flourish, in proportion as their Poetry, Painting, and Music are destroy'd or flourish. The Primeval State of Man was Wisdom, Art, and Science.

– William Blake, *Jerusalem*, “To the Public” (1802/4-1820)

Britain's arts-and-sciences Institutional movement, which began in the years of political instability that followed the French Revolution, played a critical and largely unacknowledged role in structuring the Romantic discourses of Poetry and the Imagination.¹ This dissertation attempts to describe the history of that interaction. The first functioning Institution that scholars have recognized in British iterations of this movement is the Andersonian Institute (1796), founded in Glasgow by the Scottish natural philosopher John Anderson.² The second, but certainly better known of these Institutions, is the Royal Institution of Great Britain (RI), established in London in

¹ Attending to the capitalization and non-capitalization of key terms in this dissertation, such as “Institution” vs. “institution,” “Poetry” vs. “poetry,” and “Imagination” vs. “imagination,” will be very important for comprehending my argument. Regarding “I/institution,” I follow Klancher's convention of retaining a capital “I” when referring to formal organizations that have “Institution” in their name and are affiliated with the arts-and-sciences Institutional movement. I will use the lower case “i” when referring to broader discourses of institutions that do not specify the arts-and-sciences Institutional movement. Regarding “P/poetry” and “I/imagination,” in order to clarify the distinct usages that emerge in the course of this dissertation, I have found it necessary to capitalize the terms “Poetry” and “Imagination” when referring to the generic Institutional categories of Poetry and Imagination as proposed by Romantic-era writers affiliated with the Royal Institution. When referring to traditional usages relating to written composition in verse, I use the lower-case “poetry” and “imagination.”

² Jon Klancher, *Transfiguring the Arts and Sciences: Knowledge and Cultural Institutions in the Romantic Age* (Cambridge: Cambridge University Press, 2013), 47-48.

1799.³ Its founders had studied Anderson's model carefully, in order to recreate many of its distinctive features in the metropolis.⁴ Despite extreme organizational volatility in its first decade, the RI model showed enough promise for others to attempt to improve it, inspiring a string of new arts-and-sciences Institutions in London, such as the London Institution (1806), the Surrey Institution (1807), and the Russell Institution (1808). This burgeoning in turn helped to motivate the creation of analogous Institutions in British provincial towns, such as the Liverpool Royal Institution (1814), the Royal Institution of Cornwall (1818), and the Royal Manchester Institution (1823).⁵ Together these establishments, all created in conversation with the RI, and hence indirectly with the Andersonian, formed a loosely articulated network of arts-and-sciences educational Institutions throughout Britain, and are the basis for what I have above called the "arts-and-sciences Institutional movement."⁶

As I shall show, we simply cannot adequately understand British Romanticism without reference to this movement. It has been recognized for some time that many of the most iconic British Romantics seem to congregate around the Royal and Surrey Institutions, but we have never fully grasped the reasons underpinning this association. The tendency has rather been to imagine their participation in the events of these Institutions, in the famous lectures for instance, as a passing interest, one among the multitude of "other public shows," as Wordsworth might have called them,

³ Initially called the "Rumford Institution," its powerful supporters, Joseph Banks, along with the Institution's first president, the Earl of Winchilsea, succeeded in procuring a royal charter for the establishment, after which point its name was changed to the "Royal Institution." Frank A.J.L. James, "'Agricultural Chymistry is at present in it's infancy': The Board of Agriculture, The Royal Institution and Humphry Davy," *Ambix*, 62, no. 4, (2015): 369, 363-385.

⁴ Henry Bence Jones, *The Royal Institution: Its Founder and Its First Professors* (London: Longmans, Green, and Co. 1871), 166.

⁵ Klancher, *Transfiguring*, 44-45.

⁶ See Klancher, *Transfiguring*, 1-2.

with which “The capital city teems.”⁷ A reliance on Wordsworth’s view of London has instead helped to entrench a contrary tradition of imagining the Romantics as secluded rural figures, largely opposed to scientific progress and its institutional projects. Take for instance his famous lines from “Tables Turned,”

Sweet is the lore which nature brings;
Our meddling intellect
Mishapes the beauteous forms of things;
—We murder to dissect.

Enough of science and of art;
Close up these barren leaves;
Come forth, and bring with you a heart
That watches and receives.⁸

While no lines have been more indicative of this opposition than “We murder to dissect,” notice just below that the contempt Wordsworth articulates is not just of science, but crucially “of science *and* of art.” This primarily text-based arts-and-sciences educational discourse, Wordsworth’s “barren leaves,” had been given new vigor in the post-revolutionary moment of the 1790s, and would take a practical turn in the second half of that decade with the foundation of the arts-and-sciences Institutions. Only a few years after Wordsworth had written those lines, however, his friend and collaborator Samuel Taylor Coleridge would take a position as lecturer on the *science*, or scientific “Principles of Poetry” to the Royal Institution, the very exponent of the arts-and-sciences discourse Wordsworth so vehemently decries. In addition to this connection with the Royal, Coleridge had planned other projects with the Surrey and London Institutions, and, as I will show, this interaction would alter the structure of all his major prose publications over the following decade. Shortly after

⁷ William Wordsworth, *The Prelude, 1799, 1805, 1850*, eds. Jonathan Wordsworth, M.H. Abrams, and Stephen Gill (New York: W.W. Norton & Company, 1979), 256, VII, ll. 544-545.

⁸ William Wordsworth and Samuel Taylor Coleridge, *Lyrical Ballads and Related Writings*, eds. William Richey and Daniel Robinson (Boston: Houghton Mifflin Company, 2002), 105, ll. 25-32.

Coleridge's Royal Institution lectures, in 1812, William Hazlitt would begin delivering his own lectures at the Russell, and a few years after that would give his famous courses on the English Poets at the Surrey Institution. John Keats would just as famously attend Hazlitt's later lectures. In 1811 William Godwin would take a fourteen-year-old Mary Shelley to see Coleridge's course on Poetry, and other second-generation Romantics, such as Lord Byron and Thomas Moore, would later also become familiar faces in the audiences of the arts-and-sciences lecturing circuit. Percy Shelley borrows the arts-and-sciences Institutional logic in his own efforts at practical instituting in Ireland, in "Proposals for an Association of Philanthropists" (1812). Robert Southey's pretensions to the status of institutor are evidenced in a file of his correspondence with the Royal Institution, still housed in its archive. Even Wordsworth's addition to the 1802 "Preface" to the *Lyrical Ballads* containing the comparison between the Poet and the Man of Science, appears to have been part of a dialogue between himself and the Royal Institution's new professor of chemistry, Humphry Davy.

If we take seriously the fact that many of these Romantic associations with the arts-and-sciences Institutions depend in some form on the articulation of a *science* of Poetry, recuperating the pedagogical infrastructure of this Institutional movement inevitably transforms how we imagine British Romanticism to function. Indeed, my dissertation argues that the Royal's highly innovative arts-and-sciences design represents a crucial and hitherto occluded institutional infrastructure for British Romanticism. Accessing this infrastructure reconnects British Romantic thought to the very heart of the institutional infrastructure that informs our modern conception of science and technology, and invites us to read them anew, with that infrastructure in mind. I contend further that a major strand of Romantic writing is in fact so tightly imbricated in early nineteenth-century arts-and-sciences Institutional culture that this infrastructure is observable in key works of the period as an emulation of arts-and-sciences lecturing procedures. These demanded, for example, that lecturers first elucidate the *scientific* "principles" of the subject in question, and then "apply" those

principles on behalf of improving the state of the *arts*. We owe directly to his interaction with this arts-and-sciences lecturing infrastructure Coleridge's earliest extant definition of the Imagination, its articulation as a primary *principle* of Poetry (i.e. with a capital "P"), and its *application* on behalf of improving the art of criticism. Coleridge would later adopt this unique signature of arts-and-sciences lecturing as the primary division between theoretical and practical criticism in his *Biographia Literaria*. It explains Percy Shelley's promise, near the end of his unfinished *Defence of Poetry*, that "the second part will have for its object an application of these principles to the present state of the cultivation of Poetry," and shows itself as a more ominous tendency in Victor's search for the "principle of life" in Mary Shelley's *Frankenstein*. So while the Wordsworth of 1798 may have had "enough of science and of art," these other Romantic writers were not only part of the period's sociable world, they were actively attempting to shape how that world educated those subject to it. In order to fully grasp their work, it must be located in the arts-and-sciences Institutional culture out of which it emerged.

The features most fundamental to the innovative character of these new Institutions are in fact indicated by the discursive terms that have been connected with their existence, namely "arts and sciences," and "Institutions." Regarding the arts and sciences, the relevant discourses develop over the seventeenth-and-eighteenth centuries in two related forms. The first is a disciplinary form; the second is associational. Prior to its connection with these post-revolutionary Institutions, and in a manner quite different from its usage in the ancient universities, where it referred to a specific curriculum of education in the "liberal" arts and sciences, the phrase "arts and sciences" was a common feature in the textual tradition associated with the republic of letters.⁹ Within this latter tradition, for instance, had emerged a genre of writing called the dictionary of arts and sciences. These dictionaries typically contained alphabetical entries with summaries, according to Richard

⁹ Klancher, *Transfiguring*, 7.

Yeo, of “facts and theories from the physical and natural sciences and, to some extent, [an] inadequately realized claim to provide accounts of the crafts, trades and mechanical arts.”¹⁰ At the beginning of the eighteenth century, this genre became connected with the encyclopaedic tradition, a discourse ultimately of Greek origin that denotes a “circle of learning,” and at that time still implied an actual course of education.¹¹ As these discourses merged, the “arts and sciences” began to refer not only to its liberal branch in the universities, but also to an idealized course of education in all of those practical and theoretical knowledges that were found capable of articulation as such. This merging informs the title of the seminal work in the genre, Ephraim Chambers’ *Cyclopaedia, or, an Universal Dictionary of Arts and Sciences* (1728), “the Whole intended,” the work’s subtitle describes, “as a Course of Ancient and Modern Learning.”¹² Chambers’ work would serve as the model for more well-known publications within this genre, such as Diderot and d’Alembert’s *Encyclopedie, ou Dictionnaire Raisonné des Sciences, des Arts, et des Métiers* (1751-66) and the *Encyclopædia Britannica; or, a Dictionary of Arts and Sciences* (1768), resulting in a gradual accretion of the coherent genre we know today as the written encyclopaedia.

Other forms in which the republic of letters maintained the discourse of arts and sciences were the associational structures it developed to provide science and art with official support. In

¹⁰ Richard Yeo, *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture* (Cambridge: Cambridge University Press, 2001), 15. John Harris’ *Lexicon Technicum: or, An Universal Dictionary of Arts and Sciences* (1704), is an important work in this genre.

¹¹ OED “Encyclopaedia,” n. - **Etymology:** < late Latin *encyclopaedia*, < pseudo-Greek *ἐγκυκλοπαιδεία*, an erroneous form (said to be a false reading) occurring in MSS. of Quintilian, Pliny, and Galen, for *ἐγκύκλιος παιδεία* ‘encyclical education’, the circle of arts and sciences considered by the Greeks as essential to a liberal education.

¹² Ephraim Chambers, *Cyclopaedia: or, an Universal Dictionary of Arts and Sciences*, 2 vols., (London: J. and J. Knapton, J. Darby, D. Midwinter et al., 1728), title page. The full subtitle reads as follows: “Containing the Definitions of the Terms, and Accounts of the Things Signify’d Thereby, in the Several Arts, both Liberal and Mechanical, and the Several Sciences, Human and Divine: the Figures, Kinds, Properties, Productions, Preparations, and Uses, of Things Natural and Artificial; the Rise, Progress, and State of Things Ecclesiastical, Civil, Military, and Commercial: with the Several Systems, Sects, Opinions, &c. among Philosophers, Divines, Mathematicians, Physicans, Antiquaries, Criticks, &c. the Whole intended as a Course of Ancient and Modern Learning.”

England, these organizations were initially conceived of separately, beginning with the branch associated with science or natural philosophy, *The Royal Society of London for Improving Natural Knowledge*, followed in the eighteenth century by two organizations related to the arts, the *Society for the Encouragement of the Arts, Manufactures, and Commerce* (1754), and the *Royal Academy of Arts* (1768). In the years following the French Revolution, the pan-European network of learned communication known as the republic of letters underwent an acute period of stress, and began to show signs of collapse. This moment of “disaggregation,” as Ian Duncan has called it, triggered a rethinking of the arts and sciences that brought the discourse back to its conceptual foundations.¹³

One of the most profound results of this rethinking was the movement that produced Britain’s arts-and-sciences Institutions. Conceived as a remedy for what by the 1790s had become the socially and institutionally isolated realms of science and art available at the Royal Society of London and the Society for the Encouragement of the Arts, the designers of the arts-and-sciences Institutions sought to realize a Baconian ideal of bringing the arts and sciences into closer Institutional proximity. The founders and first professors of the Royal Institution, for instance, made use of the available older textual and associational precedents to develop a coherent Institutional plan that initially attempted to provide an organizational balance between science and art. Borrowing from the Society for the Encouragement of the Arts, the RI’s designers envisioned a model room and experimental kitchen for the display of inventions in what were then called the “useful” and “mechanical” arts. On the side of science, there would be a curriculum of “philosophical” or “scientific” lectures for teaching courses on natural philosophy, chemistry, and the various arts thought to be closely connected with those sciences. There would also be a laboratory, where the RI professors could conduct original experiments. Any new knowledge

¹³ Klancher, *Transfiguring*, 154-155, 260n. 3.

produced by these experiments would be communicated to the public in the RI's journals, and introduced into the lecture curricula for that year.¹⁴

Comparing the RI's new arts-and-sciences design to its earlier associational precedents, Thomas Young, one of the Institution's first professors and an important coordinator of its various features, describes its underlying logic to the first audiences that had gathered in the recently completed lecture theatre to hear his 1802 "Lectures on Natural Philosophy and the Mechanical Arts":

Societies, which are merely literary and philosophical, have in general principally proposed to themselves, to enlighten the understanding by the discovery of unknown phenomena, and to exercise the reasoning powers, by opening new fields for speculation. Other associations have been more particularly intended for the encouragement of the arts, of manufactures, and of commerce. The primary and peculiar object of the Royal Institution of Great Britain is professedly of an humbler, but not of a less interesting nature. It is, to apply to domestic convenience the improvements which have been made in science, and to introduce into general practice such mechanical inventions as are of decided utility.¹⁵

Organizations like the Royal Society, or its less formal but logically parallel offshoots, the "lit & phil" societies, had according to Young become too exclusively theoretical, while the societies for the encouragement of the arts were in his view merely practical, and lacked the speculative attention to philosophical principles that would supposedly be favorable to mechanical invention. Hence, the logic of the arts-and-sciences Institutions, and the RI more specifically, sought to address this organizational isolation of theory and practice by creating a coherent Institutional structure that brought out the advantages of both. "So that," Young continues, "we must be more practical than academies of sciences, and more theoretical than societies for the improvement of arts."¹⁶ This attempt to achieve an Institutional balance between the arts and sciences, between practice and

¹⁴ Thomas Young, *A Course of Lectures on Natural Philosophy and the Mechanical Arts*, 2 vols., (London: Joseph Johnson, 1807), 3. See also Bence Jones, *Royal Institution*, 350-354.

¹⁵ Young, *Lectures*, 1.

¹⁶ Young, *Lectures*, 3.

theory, informs the full name of the RI, which is stated in Count Rumford's *Prospectus* as the "Royal Institution of Great Britain, for Diffusing the Knowledge, and Facilitating the General Introduction of Useful Mechanical Inventions and Improvements; and for Teaching, by Courses of Philosophical Lectures and Experiments, the Application of Science to the Common Purposes of Life."¹⁷

The passages from Young also show how this movement to achieve an organizational balance between art and science necessitated a clear articulation of how its designers defined those terms. The most succinct definitions connected with this Institutional discourse come from Thomas Webster, the RI architect and designer of its short-lived but pioneering plan for a mechanics school. Webster had left the RI by 1802, but continued to teach artisans and mechanics privately, and produced a textbook for mechanics entitled *Elements of Science and Art: Being a Familiar Introduction to Natural Philosophy and Chemistry, together with their Application to a Variety of Elegant and Useful Arts*.¹⁸ In his section on chemistry, Webster introduces the subject thus:

Chemistry is that science which investigates and endeavours to ascertain the effects of the action of bodies upon each other, to determine their constituent principles, and to form new compounds. It is both a *science* and an *art*; or, it is both *theoretical* and *practical*.¹⁹

Although there is of course some detectible variation in usage, Webster's definitions may serve as a beginning. In uniting science and art, the designers of the Royal Institution sought a communicative ideal that could unite in a single Institutional plan what they understood to be the best interests and motivations underpinning the development of theories and the execution of practices.

¹⁷ *Prospectus of the Royal Institution of Great Britain*, (London: W. Bulmer and Co., 1800), 3.

¹⁸ John Imison and Thomas Webster, *Elements of Science and Art: Being a Familiar Introduction to Natural Philosophy and Chemistry, together with their Application to a Variety of Elegant and Useful Arts*, 2 vols. (London: Cadell and Davies; Longman, Hurst, Rees, and Orme; Richardson; Vernor Hood and Sharpe; J. Walker, J. Murray, S. Bagster; Scatcherd and Co.; Crosby and Co.; R. Scholey; and John Harding, 1808).

¹⁹ Imison and Webster, *Elements of Science and Art*, II, 1.

In addition to aiming at an organizational unity of the arts and sciences, another innovation that has not been sufficiently investigated is the deliberate choice of the term “Institution” to describe that organization. Today we might be inclined to describe every associational structure I have mentioned, whether it be the Royal Society, the Society for the Encouragement of the Arts, or the RI, as an “institution.” However, that generalized sociological usage would have been far from obvious at the turn of the nineteenth century.²⁰ Jon Klancher, whose 2013 book *Transfiguring the Arts and Sciences* serves as the point of departure for my own project, helpfully contextualizes the discourse of “institutions” relevant to the generative period of the arts-and-sciences Institutions as a tension between its verbal and nominal senses. “In *Keywords*,” Klancher begins,

Raymond Williams distinguished between the early modern, active sense of *institution* as a noun or participle of action and process – to name powerful acts of founding, decreeing a law, educating, transmitting a legacy or inheritance, or consecrating a practice that had (or was expected to have) long-term authority and consequence – and the word’s becoming ‘at a certain stage, a general and abstract noun describing something apparently objective and systematic; in fact, in the modern sense, an *institution*.’²¹

Klancher qualifies Williams’ distinction by suggesting that the writings of the Romantic era, so crucial to this transition in meaning, present “a far more mixed picture where the nouns of *structure* intermingle with those of *action* (or agency).”²² My dissertation will give credence to Klancher’s “mixed picture” by focusing on a specifically educational deployment of the word in which the mixture between structure and action is literally true, where a proliferating practice of “institutions” reinforces an emerging structural understanding of the term. The sense that denotes a noun of action appears regularly in the encyclopaedias of the eighteenth century. Chambers’ *Cyclopaedia*, for instance, refers to “INSTITUTIONS” in a “general sense,” as the “the act of ordaining, founding or

²⁰ Klancher, *Transfiguring*, 40.

²¹ Klancher, *Transfiguring*, 39.

²² Klancher, *Transfiguring*, 39.

establishing any thing.”²³ But those same encyclopaedias, which as I have mentioned may be shown to have informed the structure of the arts-and-sciences Institutions, just as regularly carry a distinct definition of the term as it pertains to what Chambers calls “literary matters,” indicating a usage specific to letters, that is, to reading, writing, lecturing, or learning more generally. In these cases, “INSTITUTIONS” instead denotes “a system of the elements, or rules of any art or science; thus physical, or medicinal institutions, are such as teach the necessary praecognita to the practice of medicine, or the cure of diseases.”²⁴ The OED uses Chambers’ entry as an attestation in defining a usage of “institution” that denotes “Usually in *plural*. (a) Elements of instruction; first principles of a science or art; (b) a book of first principles, an elementary treatise; = INSTITUTE n. 3. *Obsolete*.”²⁵ This “literary” usage, in other words, appears to unite the coordinate associational and disciplinary features of the earlier discourse by transforming them into a single, coherent program of systematic instruction in the arts and sciences. Though obsolete today, this usage was still in practice at the turn of the nineteenth century, and clearly informs the basic structure of the scientific lecture curriculum at the Royal Institution. Young declares in the above-cited introductory lecture at the RI, for instance, that “it has therefore always appeared to me, to be not only the best beginning, but also an object of high and permanent importance in the plan of the Institution, to direct the public attention to the cultivation of the elementary doctrines of natural philosophy, as well speculative as practical.”²⁶ If for “speculative and practical” we read “science and art,” we have a virtual quotation of the “literary” usage from Chambers’ *Cyclopaedia*. Despite an increasing scholarly interest in this

²³ Ephraim Chambers, *Cyclopaedia: Or, an Universal Dictionary of Arts and Sciences*, 2 vols., 5th edition (London: D. Midwinter, M. Senex, W. Innys, C. Rivington, T. Longman et al., 1741 and 1743), vol. I.

²⁴ Chambers, *Cyclopaedia*, vol. I.

²⁵ “institution, n.”. OED Online. September 2019. Oxford University Press.
<https://www.oed.com/view/Entry/97110?redirectedFrom=Institution> (accessed October 03, 2019).

²⁶ Young, *Lectures*, 2.

Institutional movement over the past decade, the relevance of this specific usage as it informs practice at the Institutions themselves has gone almost entirely unnoticed.

Attending to this “literary” usage could help distinguish these associations with regard to the naming conventions of the movement itself. Historians of the RI have pointed to earlier precedents such as the Instituto di Bologna (1690), which the *Prospectus* actually names as its predecessor.²⁷ The relative age and broad scope of instruction in the arts and sciences at Bologna formed a sufficiently honorable connection. For the RI’s founders, the Instituto also likely brought to mind Luigi Galvani, its long-time president and the developer of the electro-chemical technique that bears his name, and which the RI would be so essential to improving. It has also been suggested that the RI’s decision to name the Instituto as its predecessor would have helped distinguish it from more radical associations that chose that title, such as the Institut de France, or Thomas Beddoes’ Pneumatic Institution in Bristol. Adding to these views, I think an attention to the “literary” usage specifies a comparatively unproblematic and internationally recognized naming convention that signified instruction informed by reference to principles and elements. This “literary” sense remains fundamentally stable despite the often-opposed views articulated in the texts my dissertation considers. I follow the term as it is adapted from Institutional practice to inform the broader discourse of arts and sciences. If the deployment of the “literary” definition may be understood as evidence of the adoption of a manifestly “institutional” discursive practice, tracking its comparatively stable structure may provide a view from a different angle, which could help to illuminate the means by which the “general” definition transitions from its “active” to its “objective” form.

Alongside the structural attention that the RI lectures give to “elementary knowledge” and the “first principles of a science or art,” Young announces a second goal of the RI lectures, “to

²⁷ *Prospectus*, 5.

apply to practice the newest lights, which may from time to time be thrown on particular branches of mechanical science.”²⁸ Young eventually unites the two to announce the coordinated task of the RI’s scientific lectures: “to consider in detail the principles and application of the philosophy of nature and art.”²⁹ This Institutional focus on “principles and application” stands as the key innovation and signature “object” or goal of the RI’s scientific lectures. In addition to elucidating “principles” and “elements,” the concentration on “application” is inextricably tied to the British arts-and-sciences Institutional movement because it is in applying a systematic knowledge of principles or elements on behalf of improving the arts that the arts-and-sciences Institutions serve their unique and unifying function in the associational milieu of their time and place. In addition to combining the organizational features of art and science, this Institutional goal of “applying” theoretical principles to practice is also pivotal to understanding how the arts-and-sciences Institutional movement contributed to disciplinary reform during what has been called, perhaps inadequately, the “second *scientific* revolution.”³⁰

Uniting the organizational structures of the arts and sciences also brought about a collision of their hitherto isolated communities. And this collision was very much by design, as recounted in an 1810 lecture by Humphry Davy, the famous professor of chemistry to the RI:

The first plan of the Royal Institution was that of a School for promulgating the Knowledge and Use of important Mechanical Inventions: for connecting the Views of Men of Science and Artisans, and for laying open the general Principles, and teaching the Application of all Improvements in the Sciences, in their Connexion with the Arts of Life.³¹

²⁸ Young, *Lectures*, 3.

²⁹ Young, *Lectures*, 8.

³⁰ The phrase is commonly associated with Thomas Kuhn, “The Function of Measurement in Modern Physical Science,” *The Essential Tension: Selected Studies in Scientific Tradition and Change* (Chicago: University of Chicago Press, 1977), 218.

³¹ Humphry Davy, *A Lecture on the Plan which it is Proposed to Adopt for Improving the Royal Institution and Rendering it Permanent* (London: William Savage, 1810), 5.

Uniting the largely upper-class natural philosophical community that had begun to go by the name “Men of Science” with working “Artisans” who might previously have submitted their inventions to the premium-granting Society for the Encouragement of the Arts suggests another fascinating perspective from which to view the effects of the arts-and-sciences Institutional movement. We see this effect most clearly in the sheer diversity of the RI audiences, as recollected for instance in a contemporary account of the excited crowds that came to see Davy’s famous lectures on chemistry:

The sensation created by his lectures at the Institution and the enthusiastic admiration which they obtained is at this period scarcely to be imagined. Men of the first rank and talent, the literary and the scientific, the practical and the theoretical, bluestockings and women of fashion, the old and the young, all crowded, eagerly crowded, the lecture room. His youth, his simplicity, his natural eloquence, his chemical knowledge, his happy illustrations and well conducted experiments excited universal attention and unbounded applause.³²

Perusing the above list drives home the point that this associational variety is in fact one of the key features of the RI’s arts-and-sciences design. Uniquely for British higher education at that time, the RI and other arts-and-sciences Institutions like it invited, women, religious dissenters, and even cisalpine Catholics, groups that had been excluded from the educational opportunities provided by Oxford and Cambridge, to join its membership.³³ The Andersonian admitted women to its lectures, so this openness at the RI has much to do with the precedent it set. The Society for the Encouragement of the Arts also likely played a role, having opened membership to women since its inception in 1754. But it was also a crucial effect of the political unrest characteristic of the revolutionary period. Nearly every document held in the archives of the Royal Institution that relates to the involvement of women in its operations points to a *demand* for education that those in power could no longer ignore. The same would likely have been true for artisans if the experiment to

³² Bence Jones, *Royal Institution*, 328-9.

³³ One important representative of Cisalpinism was Robert Clifford, who will figure prominently in the second chapter of this project.

include them in its proceedings had not almost immediately failed. Yet this failure should not blind us to the associationally radical plan its founders had in mind.

Despite several critical exclusions and failures of implementation that could be cited against it, this novel associational aspect nevertheless connects the arts-and-sciences Institutional movement with an important reassessment of the “common” during this period. The term itself enters into the official purpose of the Institution, which is stated in its name as the “Application of Science to the Common Purposes of Life.” That goal delimited the appropriate subjects for the lectures and informed the obligation of RI lecturers to avoid personal allusions and partisan political argument during the lectures. To improve the purposes, practices, or arts, that were held in common, that could be described as a universal need or utility, and from which all could conceivably benefit, thus became its official motivation, and underpinned much of its initial appeal to British reformers in the wake of the French and American Revolutions.

The revolutionary period in Europe coincided with what Simon Schaffer has recently called a “crisis of facts,” which in the “late eighteenth and early nineteenth centuries was associated with unusually explicit and fraught debates about the basis of public knowledge in times of political and social crisis.”³⁴ These debates brought immediacy to questions about older organizational structures, including those affiliated with science or the arts. “Practices,” Schaffer argues, “till then self-evident were scrutinized, overhauled, and abandoned, while novel principles were institutionalized as natural and allegedly indisputable.”³⁵ But if there were in fact “debates,” as Schaffer claims, how is it possible to contend simultaneously that the “novel principles” which emerged were “indisputable?” My dissertation instead treats the arts-and-sciences Institutions that sought to instill these principles,

³⁴ Simon Schaffer, “Late Enlightenment Crises of Facts: Mesmerism and Meteorites,” *Configurations*, Vol. 26, No. 2, Spring 2018, 120.

³⁵ Schaffer, “Crises of Facts,” 120-121.

not only as an important set of venues for these debates, but also as participants in the debates themselves. They suggested and gave authority to the very order according to “principle” that eventually came to function as an instructional norm. My focus has been on the Royal Institution, the most well-known and only surviving establishment in Britain connected with this movement. To highlight the role of the RI in these debates, I treat the organizational volatility it underwent in its first decades as an index of the contours of this “crisis of facts,” where the Institution’s structural dynamism reflects the very process of debating legitimate intellectual practice.

For example, although its designers initially limited inclusion of arts subjects in the scientific lectures to those branches known as the “useful” and “mechanical” arts (e.g. tanning, dyeing, glass-making, agriculture, and the building of machines), the RI eventually did permit lectures on various fine arts subjects, including architecture, music, painting, sculpture, engraving, poetry, and belles lettres. By 1807, fine arts subjects would account for about half of all the lectures in the RI’s lecture curriculum. And in 1808, the managers would invite Samuel Taylor Coleridge to give a series of lectures “On the Principles of Poetry.” Although the RI’s fine arts lectures maintained this ratio only until 1810, at which point the managers of the Institution gradually overshadowed them with what they called “more Elementary and Scientific Lectures,” it is in understanding this brief period of flourishing that I see as the most significant task of my dissertation.³⁶ Earlier historians of the Royal Institution, such as Henry Bence Jones, have tended to treat this influx of fine arts lectures as a fluke, a momentary aberration toward “fashionable popularity” from an original design that had never thought to include a fine arts curriculum, and never considered it an important part of the plan.³⁷ I will argue that it is a fatal misstep to do so, especially if the goal is to understand the stakes of this Institutional history as it pertains to debates about what should or should not be included in

³⁶ Humphry Davy, *Lecture on the Plan*, 16.

³⁷ Bence Jones, *Royal Institution*, 261.

the disciplinary organization of the arts and sciences, and how they would be organized as the nineteenth century proceeded. In light of these deliberate restrictions on the lectures, the most pressing question becomes, how did the fine arts lectures emerge as permissible lecture topics at all, and how might finding an answer to this question illuminate the shape of the Romantic discourses of Poetry and the Imagination?

Though there were several, the intellectual guide that brings the wide scope of these arts-and-sciences Institutional debates most clearly into focus is Francis Bacon. Much of the scholarship on the Royal Institution mentions Bacon in passing as an intellectual inspiration, but I have found it very helpful to return to the Baconian works that allegedly informed the RI design. In a 1994 collection of essays entitled, *Fact and Feeling: Baconian Science and the Nineteenth-Century Literary Imagination*, Jonathan Smith cites a remark by Henry Hallam, the historian and father of Tennyson's friend, who, "writing in the 1830s, argued that the copious reference to Bacon in both popular and more specialized works of science and philosophy 'is not much older than the close of the last century.'" ³⁸ Indeed, Hallam continues, "I should expect that more have read Lord Bacon within these last thirty years than in the preceding two centuries." ³⁹ This widespread rereading of Bacon, occurring precisely during the formative period of the arts-and-sciences Institutions, has inspired one of the epigraphs to this dissertation. The shock of the French Revolution, and the rethinking of the arts and sciences that it generated, appears to have landed on what was believed to be solid ground in the Baconian arguments concerning the preservation of the institutions connected with them. "Things are preserved from destruction," Bacon maintains in the *Advancement of Learning*, "by

³⁸ Jonathan Smith, *Fact and Feeling: Baconian Science and the Nineteenth-Century Literary Imagination* (Madison: University of Wisconsin Press, 1994), 13.

³⁹ Smith, *Fact and Feeling*, 13.

bringing them back to their principles.”⁴⁰ In addition to following this suggestion quite literally as a formal regulation of the RI’s scientific lectures, the RI’s design manifestly follows the Baconian “imperative,” according to Richard Yeo, “to invite the practical, mechanical arts and crafts into the public domain.”⁴¹ Bacon had long ago “urged that the practices of artisans be brought into dialogue with the sciences because such inventive arts exemplified the progress lacking in traditional natural philosophy.”⁴² With these Baconian arguments in the background, the arts-and-sciences Institutional movement appears to emerge as an attempt, though initiated by necessity, to improve on the arts-and-sciences model by bringing the Baconian collaborative ideal into practice.

In reassessing the Romantic treatment of science in terms of the period’s rereading of Bacon, however, Smith maintains, perhaps surprisingly, that “We don’t need to read Bacon...to talk about what the nineteenth century thought of him. Indeed, rereading Bacon directly is in one sense counterproductive, for it can distract us from the particular elements that different nineteenth-century commentators highlight and emphasize.”⁴³ While I certainly hope to sufficiently distinguish the writers and Institutional designers I discuss in the following chapters, I find Smith’s recommendation rather difficult to abide. First, I think it is possible for good scholarship to do both, to both describe common discursive elements and sufficiently differentiate figures with different ideas and arguments. Second, I wonder how far we can adequately assess any rereading of Bacon if we do not have some relatively clear sense of what Bacon said. How is it possible to adequately identify references to Baconian thought in the nineteenth century if Baconian thought is not at least

⁴⁰ Francis Bacon, *The Advancement of Learning*, ed. Joseph Devey (New York: P.F. Collier and Son, 1902), Book III, Chapter I, 139.

⁴¹ Yeo, *Encyclopaedic Visions*, 146.

⁴² Yeo, *Encyclopaedic Visions*, 146.

⁴³ Smith, *Fact and Feeling*, 14.

superficially recognizable? Attending to overt references to him or his works in the literature of the nineteenth century is not enough, because even a brief acquaintance with the relevant Baconian writings reveals that silent references, quotations, dialogues with, and echoes of his ideas are at least as common as those that are more explicit.

Even a single passage from Bacon's *Advancement of Learning* can be enormously helpful in addressing the opposed views that fought conversely for the inclusion or exclusion of the fine arts lectures. In Book II, Chapter I, Bacon articulates an idealized vision of what he believes to be "the justest division of human learning...that derived from the three different faculties of the soul, the seat of learning: history being relative to the memory, poetry to the imagination, and philosophy to the reason."⁴⁴ In the eighteenth century, the writers of the encyclopaedic dictionaries of the arts and sciences would borrow Bacon's division as a framing device for the general organization of their works.⁴⁵ In borrowing from this tradition, as I will show, the designers of the arts-and-sciences Institutions would similarly deploy this frame to organize its knowledge divisions. Since the form of the RI's lectures falls under the category of natural "philosophy," the specific disciplinary question that the RI managers appear to have been asking was, which subjects could be considered viable candidates for successful scientific theorization? This forced everything discussed within these lectures, whether a subject of "nature" or "art," into a rational frame devoted to the elucidation of scientific principles. And just which arts should be included, though the scheme began primarily on behalf of improving the "mechanical" and "useful" arts, was clearly a matter of debate. Hence, what becomes evident rather quickly is that it is necessary to describe the fine arts lectures that did occur

⁴⁴ Bacon, *Advancement of Learning*, Book II, Chapter I, 93.

⁴⁵ "Observations sur la Division des Sciences du Chancelier Bacon," *Encyclopédie, ou, dictionnaire raisonné des sciences, des arts et des métiers, etc.*, eds. Denis Diderot and Jean le Rond d'Alembert. University of Chicago: ARTFL Encyclopédie Project (Autumn 2017 Edition), Robert Morrissey and Glenn Roe (eds), <https://encyclopedia.uchicago.edu/node/89>.

at the RI as lectures on the “science” or “scientific principles” of the fine arts. This rational frame for the lectures effectively determines the structure of the discussion of the fine arts, which includes an articulation of the “principles” or sources from which works of fine art emerge, namely, in accordance with the Baconian division, the imagination.

What this would mean for the structure of British Romantic discourse is profound, and even profoundly simple. By way of his friendship with Humphry Davy, Coleridge had initially been invited to deliver a course of lectures “On the Principles common to the Fine Arts,” which he had to cancel. Upon being invited to give a second course, Coleridge changes the title of the lectures to “On the Principles of Poetry.” At first it would seem that Coleridge had narrowed the scope of his initial course in order to treat of the specific fine art called “poetry.” My claim, however, is that Coleridge, with strict intellectual precedents in Bacon and Aristotle, understood the word “Poetry” in his lecture title as a replacement term for the broad disciplinary domain that the RI had designated “Fine Art.”⁴⁶ What would become Coleridge’s Poetry (i.e. with a capital “P”) in his later prose works, hence has its roots in the Institutional discourse that sought to bring the arts and sciences into closer proximity. Following out the impact of this Institutional context, both on Coleridge’s later prose and his role in inaugurating the Romantic discourses of Poetry and the Imagination in Britain more generally, is the goal of the second half of this dissertation.

Before reviewing the historiography of the arts-and-sciences Institutions, it is important to note that the experimental character of these Institutions made them famously unstable. Most had either restructured or collapsed by the end of the 1820s. Several of those that survived this early period were absorbed by or became affiliated with the universities that formed from them, and all but one had disappeared by 1940, the Royal being their only remaining representative in Britain.

⁴⁶ Coleridge’s generic usage parallels Aristotle’s categorical handling of the word “Poesis” in the opening of *Poetics*.

Even it became partly absorbed by University College London, which has maintained close ties to the RI since the university's inception.⁴⁷ This early period of volatility and absorption means that detailed records of their existence, rationale, internal and operational structure, have been rather difficult to assemble. As such, the archive available to institutional historians of this period is limited, and it remains an exciting challenge to recapture both the enthusiasm and uncertainty that attended their formation.

Until very recently, the typical way of viewing the RI's early disciplinary history had indeed been to understand the brief flourishing of fine arts lectures there as an aberration of its intended goals. The first extended historical treatment of the RI did not occur until 1871, when Henry Bence Jones, at that time the RI secretary, published *The Royal Institution: Its Founder and Its First Professors* in the Victorian "great man" tradition of historiography. Bence Jones' account of the lives of men connected with important events in the history of the Institution is useful in many respects, but it occludes precisely the kind of organizational instability that I would like to highlight in my own project. Bence Jones wrote the history in connection with the rise of the fundamental research movement in Britain, and it bears some marks of that connection. It is quite clear, for instance, that Bence Jones wanted to convey that, despite some initial indecision and frivolity, the laboratory and the scientific lectures had always really been the defining features of the Institution:

It is clear that Count Rumford and Sir Joseph Banks especially desired the promotion of scientific knowledge among the poor and the rich, and that Mr. Bernard and Sir John Hippesley believed that the success of the Institution depended upon fashionable popularity. For the first three years the advancement of scientific knowledge was the chief object of the Institution; in the fourth and fifth years this object gave way to that of fashionable popularity, which was sought for until the original investigations of Davy again made science, in the noble function of new discovery, the life of the Royal Institution.⁴⁸

⁴⁷ Klaner, *Transfiguring*, 224.

⁴⁸ Bence Jones, *Royal Institution*, 261.

By “fashionable popularity” Bence Jones is principally referring to the period from about 1804-1809 that coincided with the rise of the RI’s fine arts lecture curriculum. Although there is no question that many figures associated with the RI during this period saw what was happening in that way, it is exactly this perception that I would like to trouble.

Many, and especially those not in positions of Institutional power, were quite happy with the rise of the fine arts lectures, and it was this very “popularity” that helped them become viable subjects for the RI lectures. Recent scholarship by Harriet Olivia Lloyd and Sarah Zimmerman has also revealed an important gender dynamic within this attribution of “fashionable popularity.” As Lloyd remarks in *Rulers of Opinion: Women at the Royal Institution of Great Britain, 1799-1812*, subscriptions by women were likely the primary generators of income for the Institution precisely during this “fashionable” period, which means that the Institution likely could not have survived without their support.⁴⁹ And both Zimmerman and Lloyd have suggested that critics of the direction of the Institution during that period tended to use the term as a way of dismissing the importance of its women audiences, and that its lecturers (all men) often decided to negotiate these critiques in less than admirable ways.⁵⁰ Figures as prominent as the Whig reformer Henry Brougham, whom Lloyd calls “the Royal Institution’s severest critic” saw the influx of fashion during this period as part of the “female corruption of science.”⁵¹ Hence, this form of dismissal was evidently a way of managing

⁴⁹ Harriet Olivia Lloyd, *Rulers of Opinion: Women at the Royal Institution of Great Britain, 1799-1812*, (Dissertation, 2019), 15; see also Gillian Russell, “Spouters or washerwomen: the sociability of Romantic lecturing,” in *Romantic Sociability: Social Networks and Literary Culture in Britain 1770-1840*, eds. Gillian Russell and Clara Tuite (Cambridge: Cambridge University Press, 2002), 132.

⁵⁰ Lloyd, *Rulers of Opinion*, 16, 27-33; Sarah Zimmerman, “Romantic Women Writers in the Lecture Room,” in *A Companion to British Literature: Volume III: Long Eighteenth-Century Literature 1660-1837*, eds. Robert DeMaria, Jr., Heesok Chang, and Samantha Zachier (John Wiley & Sons, 2014), 383.

⁵¹ Lloyd, *Rulers of Opinion*, 27, 30.

a perception that a connection between science and fashion threatened to degrade science and destabilize gendered norms of scientific practice.⁵²

Just as Lloyd and Zimmerman have pointed out the various gender biases that entered into contemporaneous assessments of the RI's trajectory during its first decade, I hope my project will help to dignify the disciplinary side of this dismissive historiographical assessment, insofar as it can contribute to a more adequate account of its stakes in the broader arts-and-sciences Institutional movement. Although she does not pursue the disciplinary connection at any length, Lloyd acknowledges that "in the latter half of the eighteenth century, fashion became more valued owing to an association with aesthetic theory."⁵³ So too, both scholars mention Byron's poem "The Blues, A Literary Eclogue" (1821), as part of understanding contemporaneous masculine accounts of the shift toward "fashion" in Romantic lecturing.⁵⁴ Byron describes the character Inkel who, looking into the lecture room, notes that "the benches are cramm'd like a garden in flower,/With the pride of our Belles, who have made it the fashion;/So, instead of 'beaux arts,' we may say 'la *belle* passion' /For learning."⁵⁵ Byron's line is particularly interesting because it notes a transition in interest by fashionable women from "beaux arts" to "learning." This transition hence coincides not only with the very-well-attended chemistry lectures of Humphry Davy, but also with the influx of scientific lectures on the fine arts, considered within the RI context as also a form of "learning." Hence, my treatment views the historiographical accounts of the influx of "fashion" at the RI during this early period as having a dual, coordinated target, one pertaining to gender, and the other to

⁵² Zimmerman, "Romantic Women Writers," 382; Lloyd, *Rulers of Opinion*, 46.

⁵³ Lloyd, *Rulers of Opinion*, 27, 30.

⁵⁴ Zimmerman, *Literary Lecture*, Ch. 7 p. 14 (cite book); Lloyd, *Rulers of Opinion*, 211-212.

⁵⁵ George Gordon, Lord Byron, "The Blues: A Literary Eclogue," *The Complete Poetical Works of Lord Byron*, Volume 6, ed. J. J. McGann and B. Weller (Oxford: Oxford University Press, 1991), ll. 1.3-5.

discipline. Support for this coordinated view is actually attested in the later actions of Henry Brougham, who in founding the London University (now University College London) in 1826, partly on the model of the RI, changed that organizational precedent in two significant ways, first by barring women from enrollment, and second, by excluding subjects related to the fine arts from its curriculum.⁵⁶

Although several smaller studies of the RI occurred after 1871, it would take over a century for scholars to begin seriously reassessing Bence Jones' account.⁵⁷ As an early example of such reassessment, Morris Berman's 1978 study, *Social Change and Scientific Organization: The Royal Institution, 1799-1844*, neatly reverses Bence Jones' focus by arguing that the formation of the RI had far less to do with the "great men" involved in its foundation, and much more to do with contemporaneous material conditions and class interests.⁵⁸ Berman all but ignores Count Rumford, whom Bence Jones had figured as the RI's founder, and instead connects the emergence of the Royal Institution with Eric Hobsbawm's notion of a "dual revolution," where a coincidence of the French and industrial revolutions forced England to walk "a tightrope between economic expansion and social distress." Berman interprets the motivation for an Institution like the Royal primarily in terms of class interest and broad social and economic factors like population increase and enclosure. "For a small segment of English society," Berman suggests, "the dual revolution presented possibilities that tended to coalesce rather than conflict. This small sector of aristocrats, known as "'agricultural improvers', or 'improving landlords,'" made up the bulk of those interested in founding the RI, and this

⁵⁶ Hugh Hale Bellot, *University College London, 1826-1926* (London: University of London Press, 1929), 30-32, 45-46, 79, 367.

⁵⁷ See for instance Thomas Martin, *The Royal Institution* (London: Longmans Green & Company, 1942).

⁵⁸ Morris Berman, *Social Change and Scientific Organization: The Royal Institution, 1799-1844* (London: Heineman Educational Books, 1978).

comparatively small group, according to Berman, found a way to make the dual revolution work in their favor.⁵⁹

In the decades following Berman's account, scholars have mounted serious critiques of his work as well. In his 2015 article, "'Agricultural Chymistry is at present in it's infancy': The Board of Agriculture, The Royal Institution and Humphry Davy," Frank A.J.L James contends that Berman overstates the degree to which the agricultural interest controlled the RI in its early years.⁶⁰ Berman also largely neglects the role women played in the formation and sustenance of the Institution, which Lloyd has commented on in detail.⁶¹ Although Berman's account is still useful in several important respects, his treatment of the RI's role in British imperial history for instance, I will build on James' and Lloyd's critiques in support of my arguments concerning the historiographical neglect of the "arts" associational and disciplinary components of the early RI design.

Jon Klancher's 2013 study, *Transfiguring the Arts and Sciences: Knowledge and Cultural Institutions in the Romantic Age*, began the work of excavating the relations between these Institutions and the broader discourse of the arts and sciences from which they emerged. Klancher's project beautifully maps out the trajectory of this arts-and-sciences discourse as it transformed, or "transfigured," following the destabilization of the communication networks that had defined the early modern republic of letters, into the movement that produced Britain's arts-and-sciences Institutions. I have considered Klancher's argument carefully in my own project because I think his work helps to facilitate the process of moving away from later twentieth-century attempts to defend Romanticism by "neatly revers[ing]" earlier disciplinary histories of science that promoted the "progressivist,

⁵⁹ Berman, *Scientific Organization*, 1.

⁶⁰ James, "Chymistry," 370.

⁶¹ Lloyd, *Rulers of Opinion*, 17-25.

gradualist, functionalist, and positivist” positions they expressed, without actually interrogating the foundations of that disciplinary history.⁶² Instead, Klancher is interested in addressing “the difficult questions of how knowledges differentiate or how cultural and knowledge fields mutually constitute one another.”⁶³ Along with Klancher, I think these two earlier narratives, the “gradualist-functionalist” and the lionizing of its opposite, are actually symptomatic of the very “Two-Cultures” historiography of interdisciplinarity that in many cases contains binary perspectives that can be traced back to the historical trajectory of the arts-and-sciences Institutions.

In my attempt to address these questions, I have tried to understand the early arrangements of the arts and sciences at the Royal Institution as indicators of the direction of a live debate, constantly in motion, rather than from the perspective that seeks to understand organizational changes as aberrations from an original norm. What my historical treatment amounts to is hence a detailed account of the structural dynamism evident in the first three decades of the Royal Institution. I see my approach as a view from the inside looking out, in contrast to Klancher’s more externalized approach. However, my goal in proceeding with such detail is to permit my reading of the RI to be seen as an interpretation of an individual work within that broader national and international oeuvre that Klancher so skillfully describes. In so doing, I believe my dissertation to be the first extended work to give a detailed structural history of the RI as an effect or result of this arts-and-sciences Institutional movement. While my primary investigation will concern the RI in London, I explicitly invite connections between my analysis of this individual Institution and the broader emergence of the arts-and-sciences Institutions in Britain and its colonies.

⁶² Klancher, *Transfiguring*, 126.

⁶³ Klancher, *Transfiguring*, 126.

Part of my interest in studying the new Institutional formations of this period has to do with what I think a judicious reticence on the part of Michel Foucault to deal explicitly with questions of causation insofar as it relates to epistemic change in *The Order of Things* and *The Archaeology of Knowledge*. Foucault thought of earlier historiographical attempts to causally link events as among “the old questions of the traditional analysis.”⁶⁴ And yet, the prospect of eventually taking up questions of causation in relation to epistemic change is in large part what motivates Foucault’s archaeological method.⁶⁵ Amy Allen’s recent book, *The End of Progress*, even outlines a potential role critique could play in this process by exposing the contingency of our historical a priori:

In his later work, Foucault also places more emphasis on the role that critique can and should play in transforming our historical a priori, precisely by revealing it as a contingently emergent way of thinking, experiencing, and acting, in order to open up the space for the possibility of being, doing and thinking otherwise. The historical task of tracing the contingent emergence of our modern historical a priori—an a priori that is both historical and Historical—is a crucial component of this project of critique.⁶⁶

My dissertation agrees that the period from 1770-1830, which Foucault identified in *The Order of Things* as the rift between the classical and modern disciplinary structures, is indeed an important period of epistemic change. I will argue that, in Britain, the arts-and-sciences Institutions that emerge during this period of rift constitute a crucial organ of that epistemic change. While there is always risk of what Foucault calls “embarrassments” in dealing with the multitude of causative forces at play in any given discussion of epistemic change, it may be possible to narrowly discuss a single node within this movement without attempting to solve the causational problem of epistemic change as a whole. Heeding Allen’s caution against falling back into the old Hegelian mode of the “Historical,” which it was Foucault’s goal to expose, this dissertation, in thinking through causative

⁶⁴ Michel Foucault, *The Archaeology of Knowledge* Trans. A.M. Sheridan Smith (New York: Vintage, 2010), 3.

⁶⁵ Michel Foucault, *The Order of Things* (New York: Vintage, 1994), xiii.

⁶⁶ Amy Allen, *The End of Progress: Decolonizing the Normative Foundations of Critical Theory* (New York: Columbia University Press, 2017), 184-5.

epistemic forces, assumes a radical uncertainty of historical unfolding.⁶⁷ While my view ultimately substantiates Foucault's assessment *that* epistemic change occurs, it is less deterministic in the sense that it views his emphasis on geological "catastrophe" and disjuncture as the result of thousands of small shifts in practice. These shifts are possible to visualize, but they are also highly contingent on local circumstances, circumstances that are given a certain gravity and speed by the "catastrophic" moment at the end of the eighteenth century.

In any given period of epistemic change, it would seem to be necessarily the case that new practices, ideas, philosophical principles, ways of categorizing, and of organizing, would need to enter into a legitimized organ of the episteme that had not been part of its composition hitherto. So too, various older practices, ideas, etc. would need to lose their status within the epistemic organ. This sort of epistemic entrance and exit may be understood as points of permeability constitutive of epistemic change. If educational institutions are an important organ of the western episteme, how do we address the notion of epistemic change when the organs themselves experience a period of instability? At that point it would seem that establishing a stable epistemic structure would assume the utmost importance. In the case of Britain's arts-and-sciences Institutions, and more particularly the Royal in London, I have treated the debates concerning its arts-and-sciences structure as essential in delimiting the contours of a new epistemic organ in Britain. While the debate is ongoing, for the RI from about 1799-1826, various arguments that today would seem to pertain to individual disciplines, may actually be shown to have been deployed at the level of Institutional structure. In attempting to address how this entrance and exit occurs during an extended period of institutional

⁶⁷ "Historical" here has reference to the historical a priori of a Hegelian form of "History" as a component of the modern episteme that Foucault's critique is attempting to undermine. From *End of Progress*, 177: "Foucault's critique of History—where History with a capital H refers to the Hegelian account of history as the progressive realization of reason—is central to understanding both his critique of reason and his account of freedom. Indeed, Foucault's historical method cannot be understood except in relation to the Hegelian notion of history that he rejects: the notion of History as the story of reason's dialectical self-realization as it progresses toward Absolute knowing."

controversy, my dissertation follows the new epistemic organ called the Royal Institution, in order to call attention, in an historically specified way, to those points at which demands are recognized, arguments are made, events occur, actions are taken, and are reacted to, sometimes individually, sometimes collectively, which have important and visible consequences for particular epistemic configurations. Attending to the level of Institutional organization has allowed me to treat alternatives that attempt to but do not enter into the epistemic organ, or only partially enter into it, as of equal interest in comparison with those that do. My hope in doing so is to show the presence of contingency within these smaller-scale causative processes of epistemic change, particularly on behalf of revealing organizational models that do not fit well into the narrative that describes the inevitable domination of Whig institutions in the nineteenth century.⁶⁸ Such local concentration, however, means that a project of this sort, if it is hopeful of success, would likely need to be communal, dispersed work that thinks through local epistemic causation in a collaborative way, in conjunction with broader mapping projects like Klancher's.

Hence, like Klancher, in order to adequately account for the early disciplinary history of these Institutions, I too have found it necessary to attempt to overcome traditional divides that have emerged between the humanities and the sciences. Yet my project also differs considerably from Klancher's in several respects. Klancher maps out the various Institutions connected with the

⁶⁸ Foucault includes a retort to critics of his method (i.e. as too deterministic, especially insofar as Foucault himself makes use "of the freedom that you question in others") in the *Archaeology* that actually puts my own view of epistemic change more in line with his than might typically be supposed: "—I'm afraid you are making a double mistake: about the discursive practices that I have tried to define and about the role that you yourself accord to human freedom. The positivities that I have tried to establish must not be understood as a set of determinations imposed from the outside on the thought of individuals, or inhabiting it from the inside, in advance as it were; they constitute rather the set of conditions in accordance with which a practice is exercised, in accordance with which that practice gives rise to partially or totally new statements, and in accordance with which it can be modified. These positivities are not so much limitations imposed on the initiative of subjects as the field in which that initiative is articulated (without, however, constituting its centre), rules that it puts into operation (without it having invented or formulated them), relations that provide it with a support (without it being either their final result or their point of convergence). It is an attempt to reveal discursive practices in their complexity and density...I have not denied — far from it — the possibility of changing discourse: I have deprived the sovereignty of the subject of the exclusive and instantaneous right to it." — *Archaeology* 208-9.

discourse of the arts and sciences during the decades following the French Revolution. While he does highlight the role of the Royal Institution within that discourse, I believe the study of the period could benefit considerably from a more detailed treatment of the internal structure of the RI. My study will show, as clearly as I have been able, how Romantic writers adapt this internal structure to inform the discourse of Poetry and the Imagination for which British Romanticism is so well known. In so doing, it has become possible to address in precise detail the ways in which “knowledges differentiate or how cultural and knowledge fields mutually constitute one another” during this time, and how the Romantics participated in and sought to affect these changes.

As part of this emergent Institutional discourse of the arts and sciences, which had hitherto been dominated by private correspondence, print encyclopaedias and the society traditions of the past two centuries, each arts-and-sciences Institution constituted an individual instantiation of that discourse. As such, Klancher identifies the Institutions themselves as “a new quasi-mediatic form...which one can surely read as ‘media’ in their own right.”⁶⁹ In this dissertation I intend to do just that, to “read” the structure of the arts and sciences at the Royal Institution as if it were a form of media in its own right, in a manner analogous to a scholarly reading of a novel, a poem, a treatise, or even, and with precise historical precedents, an encyclopaedia. I also want to extend this argument to suggest that writers during this period were already quite aware of the ways in which it mediated education, and were themselves reading its novel structure as a sign, for good or ill, of things to come.

Although Klancher does not mention it explicitly, his book is part of a sustained effort to complicate stereotypical accounts of Romantic literary culture that focus on the Romantic Poet as a secluded, predominately rural figure, whose primary interlocutor is the natural world, or to put it

⁶⁹ Klancher, *Transfiguring*, 18.

more crudely, the Lake District. Scholarship on Romantic sociability and urban Romanticism has done a lot to bring a more balanced view to an understanding of the relationship of British Romanticism to the metropolitan urban scene.⁷⁰ Such studies have revealed that the Romantics were quite intimately involved in the sociable networks of London, and that London-based publications such as Pierce Egan's *Life in London* show figures like Hazlitt and Coleridge, particularly in their capacity as lecturers, to have featured prominently in the urban imaginary.⁷¹ In their introduction to *Romantic Sociability*, Gillian Russell and Clara Tuite challenge "Romanticism's traditional identification with the lone poet, withdrawn into productive introspection, with individualism rather than collective activity, and with the cultivation of the authentic rather than the performative self."⁷² Troubling the Habermasian narrative that identifies the 1790s with the decline of enlightenment forms of sociability and the birth of a new counter public sphere, Tuite and Russell argue that "it might be more useful to see this decade as representing an intensified politicization and expansion of the boundaries of the public sphere in which sociability as a value – encoding principles of free debate, openness, harmony between equals – is amplified by the French Revolution and its impact on Britain."⁷³ In chapter 7, "Spouters or Washerwomen: the sociability of Romantic lecturing," Russell specifies the Royal Institution as one of these Romantic and urban sociable spaces, a view that has been seconded and supported by the work of Peter Manning and Sarah Zimmerman.⁷⁴

⁷⁰ See for instance *Romantic Sociability: Social Networks and Literary Culture in Britain 1770-1840*, eds. Gillian Russell and Clara Tuite (Cambridge: Cambridge University Press, 2002); and *Romantic Metropolis: The Urban Scene of British Culture, 1780-1840*, eds. James Chandler and Kevin Gilmartin (Cambridge: Cambridge University Press, 2005).

⁷¹ See Peter Manning, "Manufacturing the Romantic image: Hazlitt and Coleridge lecturing," in *Romantic Metropolis*, 227-229.

⁷² Russell and Tuite, "Introducing Romantic sociability," *Romantic Sociability*, 4.

⁷³ Russell and Tuite, "Introducing Romantic sociability," *Romantic Sociability*, 14.

⁷⁴ Russell, "Spouters or washerwomen: the sociability of Romantic lecturing," *Romantic Sociability*, 123-144; Manning, Zimmerman, "Romantic Women Writers," 380; Manning, "Romantic Image," *Romantic Metropolis*, 227-245.

I think Russell and Tuite are right in their reassessment of 1790s sociability. In fact I think that, in the case of the Royal Institution in particular, this reassessment has not gone far enough. The classic stereotype of Romantic seclusion still persists insofar as it informs recent critical assessments of Romantic writings on Poetry, the Imagination, and Romantic critical theories. In perhaps the most notable of these assessments, Gayatri Chakravorty Spivak describes how she uses Romantic literary criticism and theory as a tool in “promoting the habit of mind that can be open to experience ethics as the impossible figure of a founding gap, of the quite-other,” thereby articulating a practicable path by which it might be “possible to reconcile what I learn in the field with what I teach for a living.”⁷⁵ “And yet,” Spivak writes of the British Romantics, almost regretfully, “the great experiment didn’t work. The poets had no real involvement with infrastructure.”⁷⁶ But what if this is not true? What if the Romantics Spivak mentions, Coleridge, Wordsworth, and Percy Shelley, *did* have a real involvement with infrastructure? What if it is instead the case that the mainstream *institutional* discourse moved on from Romantic arguments? In what follows, I will contend for what I imagine is a surprising position, that it was the peculiar structure of the Royal Institution’s scientific lectures, both directly and indirectly, that in fact provided that Romantic infrastructure.

To help clarify how the Romantics, so critical of utilitarian thought, could have adopted the infrastructure of what became a progenitor of the great institutions of science and technology of the nineteenth century, this dissertation will take the volatility for which the arts-and-sciences Institutions were so well known as its primary subject. Instead of thinking about that volatility as an obstacle to overcome, I will use it to showcase the variety of organizational possibilities that those who were closely connected with the arrangement of the arts and sciences were capable of

⁷⁵ Gayatri Chakravorty Spivak, *An Aesthetic Education in the Era of Globalization* (Cambridge: Harvard University Press, 2012), 97, 111.

⁷⁶ Spivak, *Aesthetic Education*, 112.

envisioning. At the same time, my examination of the internal economy of the RI has allowed me to identify several important features of Institutional practice that remain consistent despite its changing shape from 1799-1826. Following these operational consistencies, I have been able to track quite precisely the ways in which Romantic writing adopts the structures of arts-and-sciences Institutional discourse as a means of contributing to an ongoing organizational debate.

Because financial crisis forced key decisions that would alter its fundamental organizational features, the state of the RI's finances, perhaps surprisingly, has crucial implications for the post-revolutionary arts-and-sciences Institutional discourse. As such, I have used the RI's financial crises to help punctuate the individual chapter divisions. Hence, While the first chapter of the dissertation covers the relevant features of the Institution's history, administration, and structure from 1799-1826, I especially highlight features of the RI's organization that do not survive the first financial crisis (1802-3), such as the model room and the school for working mechanics. I argue that Count Rumford's initial Institutional design sought a communicative ideal between the arts and sciences. I provide a detailed description of his initial plan and highlight salient disciplinary and associational features of that communicative ideal, in order to provide an adequate sense of what is lost after the first financial crisis in 1802. For a complex of reasons, which come to a head during this financial crisis, I argue that the part of the arts-and-sciences Institution devoted to "art" falls out of the Institutional arrangement almost immediately.

The second chapter examines the rise of the RI's scientific lecture program after 1803, and focuses on the emergence of the fine arts lecture curriculum as a consequence of decisions made principally to maintain an income that could match expenditures. I show how the systematic design of the Royal Institution informs its fundamental arts-and-sciences lecturing procedures by a standardized focus on the elucidation of scientific principles and their application on behalf of improving the arts. Examining the lectures at the level of Institutional design exposes the uniformity

of arts-and-sciences lecturing across disciplines, while at the same time offering insights about how these procedures, particularly with regard to questions of “applying” or “illustrating” principles, informs performance in the fine arts lectures of John Landseer and Samuel Taylor Coleridge. The augmentation of the lectures appears to work well enough, but the stream of income resulting from new subscriptions is less than consistent, and the increasingly popular fine arts lectures would appear to many to be taking the RI away from its original goals. The crisis that followed, part financial, part administrative, is visible in the archival sources from about 1808. This second crisis would result in a diminution of the fine arts curriculum in favor of “more Elementary and Scientific Lectures,” and culminate in constitutional reforms to its organization, which were passed by parliament in 1810.⁷⁷

The final two chapters deal primarily with the ways in which Romantic writers employ Institutional forms of discursive practice to both critique and provide alternative visions for the organization of the arts and sciences. Many of these writings occur after the RI’s constitutional reforms that reduced the importance of fine arts lecturing within its walls, which to some degree affected the ability of writers on poetry and the fine arts to be included in these Institutional conversations. As such, these final chapters attempt to locate Romantic connections to the arts-and-sciences Institutional movement by examining how major works of the period are structured according to the procedural norms of arts-and-sciences lecturing.

In chapter three I focus on the position of lecturer, particularly as the strict procedural demands of arts-and-sciences lecturing emerge in the prose works of Samuel Taylor Coleridge and William Hazlitt, both of whom were fixtures in the arts-and-sciences Institution lecturing circuit. I argue that Coleridge adopts Royal Institution lecturing procedures not only in his subsequent courses, but also as a basic structural feature in later published works such as *The Friend*, “Essays on

⁷⁷ Humphry Davy, *Lecture on the Plan*, 16.

the Principles of Genial Criticism,” the *Biographia Literaria*, his introductory “Treatise on Method” for the *Encyclopaedia Metropolitana*, and the revised publication, based on that “Treatise” and appended to the 1818 *Friend*, entitled “Essays on Method.” Hazlitt’s career as a fine art critic, on the other hand, precedes his fine arts lectures, so my reading of his work flows in the opposite direction. I show how Hazlitt stages his intellectual commitments to fine art as an arts-and-sciences Institutional form of Rational Dissent, and in doing so argue for the possibility of seeing what Hazlitt calls “true principles” in fine art as consistent with, rather than opposed to, his democratic politics.

My fourth chapter then moves to questions of audience, and focuses particularly on how addressing these questions can inform our understanding of second generation British Romantic writers, with a specific focus on Percy and Mary Shelley. Despite Percy’s having never met Coleridge, and no evidence of his attendance at an arts-and-sciences lecture, his famous *Defence of Poetry* nonetheless adheres to the strict procedural obligations of a Royal Institution lecture, and follows key principles concerning Poetry and Science, Reason and the Imagination, first laid out by Coleridge. But if Percy’s *Defence* approvingly mimics the form of a Royal Institution lecture, others of the second generation would view this Institutional movement with a more critical eye. Mary Shelley, for instance, appears to have seen a more ominous tendency in the obsession with the discovery of principles that the Royal Institution and its lecture curriculum implied. Mary attended Coleridge’s lectures on Poetry, and records having read Davy in 1816. Davy has often been viewed as a model for professor Waldman in her 1818 novel *Frankenstein*,⁷⁸ but I argue that it is Victor’s search for what he calls the “principle of life,” and his fateful application of it to that most profound

⁷⁸ Mary Shelley, *The Journals of Mary Shelley, 1814-1844*, vol. II, eds. Paula R. Feldman and Diana Scott-Kilvert (Oxford: Clarendon Press, 1987), 228.

of arts, the creation of a rational being, that stands as perhaps the most severe Romantic critique of this broader Institutional return to principle.⁷⁹

1826 marks the point at which Michael Faraday's lectures on chemistry and electricity began to bring permanent financial success to the RI. This success helped to solidify the broadly technological Institutional configuration of the arts and sciences that had developed by that time. By showing how the RI's financial situation affected its arts-and-sciences structure, it becomes possible to see how contingent forces like financial management have had meaningful structural consequences for the formation of arts-and-sciences education. My dissertation attempts to register these consequences in reactions to them by writers associated with the Romantic period, but these crises also appear to have played an as yet obscure role in the way we understand forms of arts-and-sciences education that have persisted into the twenty-first century.

To address this obscurity, my Coda shows how this arts-and-sciences discourse became enmeshed in higher education projects in Britain, British India, the Sierra Leone, and America, and discusses a few ways in which arts-and-sciences lecturing practice still affects us today. The example I am currently working on, particularly relevant to the disciplinary history of English literature, shows how Coleridge's divisions between theoretical and practical criticism in the *Biographia* inform the structural logic of I.A. Richards' *Principles of Literary Criticism* and *Practical Criticism*, making the standard of close reading that we practice today a direct consequence of the arts-and-sciences lecturing procedures first put in place at the Royal Institution of Great Britain. The project concludes by asking whether a rigorous aesthetically-grounded criticism could not be reimagined, to stand alongside Richards' more scientifically-oriented practical criticism, for "application" in the contemporary university classroom.

⁷⁹ Mary Shelley, *Frankenstein: The 1818 Text*, ed. J. Paul Hunter (New York: W.W. Norton & Co., 2012), 31.

CHAPTER ONE

A Cordial Embrace of Science and Art: The Trajectory of a Communicative Ideal in the Arts-and-Sciences Institutional Movement

Royal Institution of Great Britain, for Diffusing the Knowledge, and Facilitating the General Introduction of Useful Mechanical Inventions and Improvements; and for Teaching, by Courses of Philosophical Lectures and Experiments, the Application of Science to the Common Purposes of Life.

—official name of the Royal Institution⁸⁰

My first chapter reviews the history of the various permutations of the Royal Institution's arts-and-sciences design from its foundation in 1799 through to 1826, when Michael Faraday's Friday evening lectures assisted in finally stabilizing the Institution's finances, and in so doing helped to formalize the Institutional structure of the arts and sciences that had developed by that time. In addition to circumscribing the acute period of Institutional volatility that is my focus, that year saw the creation of the closely connected London University (now University College London), so it also marks the beginning of a key period of expansion for the arts-and-sciences Institutional model as a legitimate form of higher education. During the period of acute Institutional volatility, the structure of the arts and sciences as practiced is more or less constantly in flux. Two financial crises punctuate these fluctuations, the first from about 1802-1803, and the second from about 1808-1810. The 1810 reforms to the RI constitution do not immediately solve the financial difficulties, but they do alter the funding structure in such a way as to allow the success of Faraday's lectures to contribute to the Institution's permanent financial stability.

⁸⁰ *Prospectus of the Royal Institution of Great Britain*, (London: W. Bulmer & Co., 1800), 3.

My goal will be to present this historical account of the RI's early fluctuations with a constant attention to its implications for arts-and-sciences Institutional design. In so doing, I hope to elevate to critical awareness the various alternative plans that are left behind in what by 1810 Humphry Davy is able to view as "the progress of the Royal Institution towards its *scientific* form."⁸¹ This chapter contends that its earliest plans represent a more complete arts-*and*-sciences Institutional design, and deserve attention in their own right, despite their failure to produce a financially viable Institutional model. I argue that the initial designs for the RI attempted to strike an Institutional balance, or what I have called a "communicative ideal," between art and science. As such, I treat Davy's notion of "progress" toward a "scientific form" as equally a *loss* of its more 'artistic form.' I argue that its trajectory represents the gradual erosion of the associational features devoted to art, namely the model room and intention to educate artisans, and with them the balanced arts-and-sciences design that its founders had envisioned. As will become clear in the succeeding chapters, each of the organizational features I discuss also constitutes a significant piece of the arts-and-sciences Institutional infrastructure that would eventually inform several of the most iconic discursive practices of British Romanticism.

Founders and First Professors:

The Royal Institution of Great Britain was incorporated by Royal Charter in 1799, with King George III as its patron. Although the charter identifies numerous members of the nobility that had agreed to serve in the management of the Institution, historians typically recognize three founding figures. The first, without whose assistance the RI probably never could have succeeded, is Sir

⁸¹ Humphry Davy, *A Lecture, on the Plan which it is Proposed to Adopt for Improving the Royal Institution, and Rendering it Permanent*, (London: William Savage, 1810), 29.

Joseph Banks. Banks had made a name for himself as a naturalist when he accompanied James Cook on the scientific expedition of the HMS *Endeavour*. An extended stay in Tahiti not only allowed him to study the flora and fauna of the island, but also to spend time with the Tahitian people. While there he “participated enthusiastically in local customs.”⁸² He learned the language, got a tattoo, and importantly for his future work on the RI, thought that “Europeans could benefit from a knowledge of some of the islanders’ practical skills.” On his return to England, it is reported that Banks was received with more excitement than Cook himself.⁸³ In subsequent years Banks would become the most powerful figure of scientific administration in Britain. His association with the King allowed him to transform the Royal Botanic Gardens at Kew from a “royal pleasure garden to a major scientific centre devoted to fostering botanical exchange around the globe.”⁸⁴ Elected to the presidency of the Royal Society of London in 1778, “Banks came to dominate science in Britain and nothing effective could happen without his consent.”⁸⁵ After the French Revolution, Banks’ commitment to preserving the channels of learned communication that had defined the republic of letters led him to accept a membership at the *Institut National* in 1802.⁸⁶ It is this same commitment that made him, only a few years earlier, a founding member of the Royal Institution of Great Britain.

It was at Banks’ residence in Soho Square that the idea for the RI was first outlined. As both the President of the Royal Society and a member of the Society for the Encouragement of the Arts, Banks’ understanding of Britain’s great associations of science and art combined with his scientific

⁸² John Gascoigne, “Banks, Sir Joseph, baronet (1743-1820), naturalist and patron of science.” *Oxford Dictionary of National Biography*. 23 Sep. 2004; Accessed 5 Nov. 2019. <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-1300>.

⁸³ Gascoigne, “Joseph Banks.”

⁸⁴ Gascoigne, “Joseph Banks.”

⁸⁵ *The Common Purposes of Life: Science and Society at the Royal Institution of Great Britain*, ed. Frank A.J.L. James (Burlington: Ashgate, 2002), 343.

⁸⁶ Gascoigne, “Joseph Banks.”

knowledge and appreciation for the “practical skills” of working artists, both at home and abroad, to make his perspective critical to the initial arts-and-sciences design of the RI. However, Banks’ insistence on maintaining the original arts-and-sciences structure of the RI during the 1803 financial crisis made him a vehement opponent of the proposal, which eventually took hold, to augment the scientific lectures. When it appeared clear that his views had not been sufficiently followed, Banks distanced himself from the Institution, and would not return to administrative duties until after the constitutional reforms of 1810.

The second founding member of the RI is Thomas Bernard. Primarily known today as the founder and editor of the reports for the Society for Bettering the Condition of the Poor (SBCP), Bernard was also the founder of over twenty other charitable, welfare, or philanthropic institutions, making him a key administrative figure of this period.⁸⁷ His leading roles in the foundation and management of the RI and the British Institution for the Promotion of the Fine Arts, connected to the RI by common association with Bernard, bring a certain philanthropic angle to the arts-and-sciences mission. As treasurer to both the SBCP and the RI, Bernard was an able and pragmatic financial thinker. His advice to augment the RI’s scientific lecture curriculum, though it plainly conflicted with the initial balance of its arts-and-sciences design, and made him an enemy of Banks, appears to have played an important role in the Institution’s survival. The augmentation of the lectures is responsible for the brief flourishing of the RI’s fine arts curriculum, so Bernard’s role is critical to that development. After the decision to augment the lectures in 1803, the point at which Banks began to distance himself from the Institution, Bernard became an RI manager, probably in order to supervise the implementation of his new plan. He would be ousted as manager in 1809 by a cohort of reform-minded managers and proprietors. Although it is largely recognized that the model

⁸⁷ Klancher, *Transfiguring*, 52.

room had failed by this time, a reenergized focus on original research in the laboratory, and a revised augmentation of the scientific lectures pertaining to the useful arts regains importance over the fine arts curriculum.

Largely in agreement with Banks was the RI's third founding member, Benjamin Thompson, Count Rumford. Rumford's energetic but mercurial character made his presence at the RI simultaneously necessary and short, and his absence disastrous to the survival of the initial plan he laid out in his *Prospectus of the Royal Institution of Great Britain* (1800). Rumford's varied experience as schoolteacher in Connecticut (both he and Bernard were born in the American colonies), a British Spy during the American Revolution, a military officer, an effective if brutal planner of poor relief in Bavaria, and a practically-minded natural philosopher, all assisted him in negotiating the difficult formation of the first arts-and-sciences Institution in London. Much of Rumford's early scientific research had to do with the production and retention of heat, particularly as it applied to different fabrics commonly used in clothing. It was just this combination of research that could be easily applied to both poor relief and the interests of artisans and manufacturers that made Rumford a perfect middleman between Banks and Bernard. With Rumford's help, Banks might have been able to bring the RI's plan for a mechanics school to fruition, but Rumford distanced himself from the day-to-day operations of the Institution after 1801, and departed for France during the Peace of Amiens in the Spring of 1802. After this point Rumford was largely out of the picture administratively, though he maintained reasonably amicable ties with the Institution for the rest of his life.

Before entering into an historical account of the various changes that characterize the evolving shape of the arts and sciences at the RI, I would like to mention a few other figures whose activities and published works provide important information about the structure of the Institution during this initial period of volatility. A figure I will return to throughout this dissertation is one of

the RI's first professors of natural philosophy, Thomas Young. His most recent biographer having called him "the last man who knew everything," Young may be said to be a polymath *par excellence*.⁸⁸ Although trained as a physician, Young maintained scholarly interests in mechanics, optics, physiology, medicine, language, music, and Egyptology. He is most well known today for proposing a revised wave theory of light against the corpuscular tradition of Newton, and for doing the preliminary work to decipher the Rosetta Stone, which Champollion later completed. Yet his fame in these fields has eclipsed what I would call his equally crucial contributions to the arrangement of both the disciplinary and associational elements within what was to that era a new and as yet undefined arts-and-sciences Institutional model. Young's position as an early "superintendent of the house" made him especially important for the implementation of the RI's initial arts-and-sciences design. However, Young would retire as professor only a year after Rumford had left. His introductory discourse to a *Course of Lectures on Natural Philosophy and the Mechanical Arts*, which he delivered at the RI from 1802-3, and published in 1807 with a monumental catalogue of reference, will hence be a primary source in discussing Young's view of the Institution's structure during this early period.

Humphry Davy, the RI's professor of Chemistry and the darling of these early days, took a leading role in promoting the objects of the Institution to the public. His famous chemical lectures and laboratory activities are well known, but he too is an important thinker on the arts-and-sciences Institutional model, and gave several lectures on that subject at critical junctures in the Institution's history, which I will be discussing below. Davy also recruited Samuel Taylor Coleridge to lecture on the fine arts at the RI in 1806, and again in 1808, thus precipitating the poet's career as a fine-arts lecturer.

⁸⁸ Andrew Robinson, *The Last Man Who Knew Everything: Thomas Young, the Anonymous Genius who Proved Newton Wrong and Deciphered the Rossetta Stone, among Other Surprising Feats*. New York: Pearson Education Inc., 2006.

Governance and Finances:

The “Appendix” to the *Prospectus* of 1800 outlines primary sources of funding and governance for the Royal Institution.⁸⁹ Its initial financial structure was initially proprietary. Proprietors paid an amount (the amount listed in the *Prospectus* is fifty guineas, but in reality this amount often changed, with a typical range of 40-100 guineas). The proprietary sum granted an hereditary stake in the property of the Institution. The opinions of the proprietors, as we will see in the example of Robert Clifford below, have to be taken into account by the governors of the Institution, because they were in effect its owners. The proprietors tended to come from the aristocracy, but many of them were natural philosophers in their own right, and the plan for the RI envisioned their role in part as facilitators of original research, by allowing them to suggest inquiries to the managers, which could then be carried out in the laboratory. However, the very fact that the RI had been funded in this way weakened its claim to the status of a public establishment. Ending the proprietorship hence constitutes the primary structural change to the funding of the RI in the Act of Parliament of 1810. The 1810 Bye-laws converted the hereditary proprietorship to a non-transferable membership that required regular payments instead of a single lump sum.

The other primary source of funding was to come from subscription. Life subscribers were admitted at an initial rate of ten guineas, while annual subscribers paid an initial price of two guineas. Although subscribers did not own a share of the Institution, and hence had no say in the election of managers and visitors, subscription gained individuals access to the establishment, “free admission into the Repository, and into the Library of the Institution, and to all public Philosophical

⁸⁹ A full account of the RI’s financial and governing structure is available in *The Royal Institution of Great Britain, Ordinances, Bye-Laws, and Regulations, of the Royal Institution of Great Britain* (London: W. Bulmer & Co., 1800).

Lectures.”⁹⁰ These “three classes of Subscription,” the *Prospectus* declares, “are alike open to Ladies and Gentlemen,” meaning that women were also permitted to own a stake in the property of the Institution. In this way, female proprietors could conceivably have contributed to the direction of original research in the RI laboratory, although I have not yet found direct evidence of such activity.

The governance of “all the affairs and concerns” of the Institution throughout the period I will be considering was conducted by a president and a committee of nine managers.⁹¹ Proprietors also elected from among themselves a committee of nine visitors, “whose business is to assist in the framing the Bye-laws, to inspect the Institution annually in detail, and to examine and audit the accounts of the receipts and disbursements of the Institution.”⁹² Proprietors elected the managers and visitors from among themselves, “three for three years, three for two years, and three for one year; capable however of being *re-elected*.”⁹³ Each of these offices was expected “to be executed without pay, emolument, or any species of pecuniary advantage whatever.”⁹⁴

Both of these committees kept records of their activities in the form of meeting minutes, which function as the foundation of our knowledge of the historicity of the Institution’s day-to-day operations. The minutes of the managers from March 23, 1799, for instance, record the key decision that

Ladies be admitted as Proprietors and subscribers to this Institution, and that they be intitled to all the privileges to which Gentlemen, who are Proprietors and subscribers, are intitled,

⁹⁰ *Ordinances*, 47.

⁹¹ *Ordinances*, 27.

⁹² “Appendix” to the *Prospectus*, 37.

⁹³ “Appendix” to the *Prospectus*, 37.

⁹⁴ “Appendix” to the *Prospectus*, 38.

excepting only that Ladies will not be called on to take any part in the Management of the affairs of the Institution.⁹⁵

“Exceptions” like the one detailed in the above meeting minutes add nuance to our understanding of how documents like the *Prospectus* actually translated into Institutional practice, so I have made plentiful use of them to substantiate historical claims of this nature. In this example, it becomes clear that although stated as a kind of favor, even women who were proprietors could not be considered for the RI’s governing positions.

First Period: 1799-1802

On March 3rd 1810, Humphry Davy delivered to RI audiences *A Lecture on the Plan which it is Proposed to Adopt for Improving The Royal Institution, and Rendering it Permanent*. Davy gave the lecture on behalf of the impending reforms to the RI constitution that would soon need to be passed by parliamentary legislation. In making way for these changes, Davy reviewed the earliest plan for the RI, explaining its arts-and-sciences features and detailing how they were related to the RI’s financial instability. “The first plan of the Royal Institution,” Davy begins,

was that of a School for promulgating the Knowledge and Use of important Mechanical Inventions; for connecting the Views of Men of Science and Artisans, and for laying open the general Principles, and teaching the Application of all Improvements in the Sciences, in their Connexion with the Arts of Life.⁹⁶

In Davy’s view, the whole of the RI design during its earliest phase could be captured by the word “School,” where attention and instruction relative to “Mechanical Inventions” in the arts would be counterbalanced by lecture courses in which the professor would elucidate the scientific principles

⁹⁵ *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of the Managers’ Meetings 1799-1900*, Volumes I-II, (Ilkley: Scholar Press Ltd., 1971), 9: March 23, 1799. The Andersonian Institution at Glasgow also admitted women to the lectures, so this may have contributed to the decision as well.

⁹⁶ Davy, *Lecture on the Plan*, 5-6.

of the subject in question, and apply those principles to an explanation of the various mechanical inventions connected with it. Davy also points out that one of the primary goals of this initial plan was to connect “the Views of Men of Science and Artisans.” This associational innovation was perhaps the most politically radical element within the original plan. It was hence unsurprisingly the first to drop out, but the delicacy of design involved in implementing such a plan remains in the architectural record for the building that would house the RI. The artisans that would be permitted to attend the lectures would be hand-picked by the upper ranks.⁹⁷ In order to avoid potentially awkward encounters between employee and employer, a separate external staircase was built as an entrance for the working artisans, while the proprietors and subscribers could enter through the main entrance. Similarly, once inside the lecture theatre, artisans would be confined to the gallery, so that their lords and ladies would not be forced to see their socially inferior acquaintances in the same educational situation. Although it failed to a large degree, this early plan to bring together the theoretical and the practical branches of society would nonetheless inform the comparatively extreme diversity that we see in the RI audiences, especially during these first years. This is the story that Morris Berman’s sociological method misses because it is interested in identifying majority stakes in RI governance. What it consequently fails to see is that, though the majority stakes and their periodic shifts are significant, they do not capture the point that for its contemporaries, the diversity of the RI audiences was actually one of the main stories.

This early plan for the Institution is most clearly evident in two of its founding documents, both of which have been attributed to Count Rumford. The first is the *Proposals for Forming by Subscription, In the Metropolis of the British Empire, a Public Institution, etc.* (1799). The second is the

⁹⁷ *The Archives of the Royal Institution of Great Britain*, “Autobiography of Thomas Webster,” (Unpublished Manuscript: [RI.CG4/6/1], Dated 1837), 13.

Prospectus of the Royal Institution of Great Britain (1800). The *Prospectus* is notably more nationally oriented and more concise than the *Proposals*, while the comparatively meandering style of the *Proposals* more readily reveals thought-processes at work in the *Prospectus*, but which go unstated. I will draw freely from both, as these differing angles help to illustrate the thinking that remains consistent from one document to the next. The *Prospectus*, noting first that the “successive improvements in the condition of man, from a state of ignorance and barbarism to that of the highest cultivation and refinement, are usually effected by the aid of machinery in procuring the necessaries, the comforts, and the elegancies of life,” suggests that the “preeminence of any people in civilization is, and ought ever to be, estimated by the state” of such “mechanical improvements among them.”⁹⁸ Remembering that “mechanical improvements” may also be rendered ‘improvements in the mechanical arts,’ or the arts connected with the building of machines, this is an early attestation of the logic underpinning support for modern forms of technological innovation. Having stated the premise, the *Prospectus* identifies the problem at hand as the “slowness with which improvements of every kind make their way into common use, and especially such improvements as are most calculated to be of general utility.”⁹⁹ Such slowness, the *Prospectus* continues, “forms a striking contrast to the extreme avidity with which those unmeaning changes are adopted, which folly and caprice are continually bringing forth, and sending into the world under the auspices of fashion.”¹⁰⁰ Such a contrast speaks to the motivations of improvement that underpin the initial plan for the RI’s arts-and-sciences design. It sought to speed up the progress of improvements in the mechanical arts by centralizing inventions thought to be of “general utility,” which would

⁹⁸ Benjamin Thompson Count von Rumford, “Prospectus of the Royal Institution of Great Britain,” *The Complete Works of Count Rumford*, Vol. IV (Boston: American Academy of Arts and Sciences, 1875), 771.

⁹⁹ Rumford, “Prospectus,” *CW*, 772.

¹⁰⁰ Rumford, “Prospectus,” *CW*, 772.

simultaneously curb the intrusion of “unmeaning changes” that had no application to “the common purposes of life.” Those thought to be capable of making disinterested judgments concerning the “general utility” of the particular inventions of artisans, as stated by the *Prospectus*, were those intellectual figures known as “philosophers,” or “men of science.”

Whereas the *Prospectus* treats the idea of connecting the views of men of science and artisans as a solution confident of widespread approval, the *Proposals* state with clarity the great difficulty to overcome:

There are no two classes of men in society that are more distinct, or that are separated from each other by a more marked line, than philosophers and those who are engaged in the arts and manufactures.

The distance of their stations, the difference of their education and of their habits, the marked difference of the objects of their pursuits in life,—all tend to keep them at a distance from each other, and to prevent all connection and intercourse between them.¹⁰¹

The extremity of Rumford’s characterization is at once striking and instructive. These two sentences describe a division within human society that he believes cannot be matched by any other such division. At a time when Britain’s socio-cultural divisions were much more rigid than they are today, the profundity of the barrier described here might seem impossible to overcome. But it is precisely on behalf of overcoming such barriers that the *Proposals* were written. In order then, to sufficiently grasp how fundamental the changes incumbent upon any proposed solution to this divide would have to be, it is crucial to constantly keep in mind the *Proposals*’ expressed view of it. It is also crucial to understand that the Royal Institution is that solution. It is especially notable that this solution is proposed not as an individual acquirement, but as an Institutional structure. The founders of the Royal Institution, in other words, sought to *Institute* this connection between men of science and

¹⁰¹ Rumford, “Proposals for Forming by Subscription, in the Metropolis of the British Empire, a Public Institution,” *The Complete Works of Count Rumford*, Vol. IV (Boston: American Academy of Arts and Sciences, 1875), 743.

artisans by integrating their supposed characters and approved habits into the design of intellectual practices pursued there.

The first divide to overcome was social. “The philosopher,” the *Proposals* argues, who devotes his time to the investigation of the laws of Nature, must necessarily be independent in his circumstances, for he can expect no profit or pecuniary advantage from his labours; consequently he must be excited to engage in these pursuits either by curiosity or by a desire of fame, or by both these motives; and the nature of his occupations, as well as the intense meditation they require, naturally tend to detach his mind from all the common affairs of life.¹⁰²

This view of the philosopher, who by 1800 had also come to be called a “man of science,” is consistent with what has been called in more recent scholarship the “gentleman-amateur” tradition of science. Connected with this gentleman-amateur tradition at that time were associations like the Royal Society of London, or the various smaller associations known as the literary & philosophical (lit. & phil.) societies that emerged in Britain in the second half of the eighteenth century. Such detachment from the “common affairs of life” had created enormous problems for communication between men of science and those who participated in such affairs. By enshrining the parallel phrase, “the common purposes of life” as the primary object or goal of the intellectual pursuits at Royal Institution, the critique evident in the above quotation is that men of science alone are incapable of accomplishing the communicative task that the Royal Institution would set for itself.

“On the other hand,” *Proposals* continues, “those who are engaged in arts and manufactures are seldom disposed to ask, or even to receive, the advice of men of science, with whom they have no connection, and of whose knowledge they seldom entertain any very high respect.”¹⁰³ “Intent only on acquiring wealth,” the views of artisans and manufacturers “are confined to that single object; and as their success depends much on their reputation for ingenuity in their different lines of

¹⁰² Rumford, “Proposals,” *CW*, 743.

¹⁰³ Rumford, “Proposals,” *CW*, 744.

business...they make” the process of that ingenuity “a great mystery.”¹⁰⁴ Seeming to recognize his own biases against these groups, Rumford immediately qualifies his statement. “In making this observation,” he remarks, “I would by no means be understood to call in question the wisdom of granting patents for securing certain privileges and advantages to the authors of new and useful inventions.” Even more, “So far from thinking this system of rewarding ingenuity disadvantageous to society, I am convinced that the present flourishing state of our manufactures, and consequently of our commerce, has been in a great measure owing to its operation.” As if frustrated by his own stumbling remarks, Rumford finally clarifies his virtuous intentions in the next sentences,

I am only desirous that *science* and *art* should once be brought cordially to embrace each other, and to direct their united efforts to the improvement of agriculture, manufactures, and commerce, and to the increase of domestic comfort.

That the proposed Institution would facilitate and consolidate that union is too obvious to require any particular proof or illustration.¹⁰⁵

Such a statement provides the clearest possible evidence that the original plan for the Institution sought a design that would balance the diverse goals affiliated with science and art. The mention here of the “improvement of agriculture, manufactures, etc.” refers to the products of agriculturists, artisans and manufacturers, which also had an associational precedent in the Society for the Encouragement of the Arts (1754), a premium-awarding association for inventions in the arts, founded in London by William Shipley. While the difference Rumford is trying to identify could be more helpfully stated as a division between those who sustain themselves by the income of their work, and those who are sustained by the income from rent, or some other investment, the picture he is painting is one of a communicative division between the arts and sciences that he believes his Institutional plan would help to remedy. This cordial embrace between science and art would bring

¹⁰⁴ Rumford, “Proposals,” *CW*, 743-744.

¹⁰⁵ Rumford, “Proposals,” *CW*, 745.

men of science and artisans into closer Institutional proximity, and doing so, he hoped, would open up channels of communication between the two that would simultaneously benefit the arts and manufactures and strengthen scientific knowledge, all the while preserving, though in significantly altered form, a network of intellectual communication that had defined the republic of letters prior to revolutionary period.

Recalling this early plan for a “cordial embrace” between the arts and sciences, Davy’s 1810 *Lecture on the Plan* remarks that

The great feature of the establishment was intended to be a Collection of Models, of Mechanical Contrivances, and of all Implements employed in the Common Purposes of Life, in their most perfect state; and it was designed to diffuse the knowledge of these, and point out their applications as connected with the general doctrines of science, by courses of Public Lectures.¹⁰⁶

Evident in Davy’s description and in the earliest documents connected with the RI’s design is the emphasis given to the model room, the associational feature adapted from the Society for the Encouragement of the Arts. So what was this model room? How was it supposed to function? How was it conceived as part of the cordial embrace between the arts and sciences that Rumford had proposed? And what was the cause of its demise?

Count Rumford’s *Proposals* describe plans for the preparation of “spacious and airy rooms...for the reception and public exhibition of all such new and mechanical inventions and improvements as shall be thought worthy of the public notice.”¹⁰⁷ The curators of these models would focus their collecting “more especially” on “all such contrivances as shall tend to increase the conveniences and comforts of life, to promote domestic economy, to improve taste, or to promote useful industry,” and all such other models “as are applicable to the common purposes of life.”¹⁰⁸

¹⁰⁶ Davy, *Lecture on the Plan*, 5-6.

¹⁰⁷ Rumford, “Proposals,” *CW*, 755.

¹⁰⁸ Rumford, “Proposals,” *CW*, 755.

The rooms would be subdivided accordingly. A space was to be exclusively devoted to the construction of model or “experimental” kitchens, for which “the most perfect models of the full size will be provided.”¹⁰⁹ The *Proposals* includes plans for two such kitchens, the first “A complete Kitchen for a Farm-house, with all the necessary Utensils,” and the second “A complete Kitchen, with Kitchen Utensils, for the family of a gentleman of fortune.”¹¹⁰ Notable also in the plans is a space devoted to the assembly of “A complete Laundry for a gentleman’s family, or for a public hospital including Boilers, Washing-room, Ironing room, Drying-room, etc.”¹¹¹ Rumford’s special interest in the science of heat informs the *Proposals*’ concentration on constructing an international display of stoves, boilers, and fireplaces, featuring “several of the most approved German, Swedish, and Russian Stoves, for heating rooms and passages.”¹¹² In order to enable visitors “to acquire more just ideas of these various mechanical contrivances,” Rumford proposes that “the machinery exhibited will, as far as it shall be possible, *be shown in action*, or in *actual use*.”¹¹³ Listed as specific examples are “Open Chimney Fire-places,” accompanied by “Ornamental as well as economical Grates,” and also “Ornamental Stoves, in the form of elegant Chimney-pieces, for halls, drawing-rooms, eating-rooms, etc.”¹¹⁴ That these stoves were to be specifically “Ornamental” speaks to an evident though limited role given to neoclassical views of taste and aesthetic pleasure within the

¹⁰⁹ Rumford, “Proposals,” *CW*, 755.

¹¹⁰ Rumford, “Proposals,” *CW*, 755.

¹¹¹ Rumford, “Proposals,” *CW*, 755.

¹¹² Rumford, “Proposals,” *CW*, 755.

¹¹³ Rumford, “Proposals,” *CW*, 756.

¹¹⁴ Rumford, “Proposals,” *CW*, 756.

original plan.¹¹⁵ So we can begin to imagine walking into a space that actually resembled a cottage or the specified rooms in the house of “a gentleman’s family,” completed by a stove or fireplace with actual fires that would be “kept constantly burning...during the cold season.”¹¹⁶

“*Working models*” that could not fit into these spaces would be exhibited “on a reduced scale.”¹¹⁷ These were to include “Brewers’ Boilers,” “Distiller’s Coppers,” and “large Boilers for the kitchens of hospitals, and of Ships’ Coppers,” all equipped with “improved Fire-places.”¹¹⁸ Various inventions thought not appropriate to be displayed in these idealized domestic spaces would be exhibited in a separate “repository of the Institution.”¹¹⁹ This repository was to contain “Models of Ventilators for supplying rooms and ships with fresh air,” of “Hot-houses,” of “Lime-kilns,” of “Boilers, Steam-boilers, etc., for preparing food for cattle that are stall-fed,” of “Spinning-wheels and Looms...for the use of the poor, and adapted to their circumstances, together with such other machinery as may be useful in giving them employment at home,” of “all such new-invented Machines and Implements as bid fair to be of use in Husbandry,” of “Cottages” and “Bridges, on various constructions,” and “of that most curious and most useful machine, the steam-engine.”¹²⁰ In addition to the items specified, the *Proposals* expects “models of all such other machines and useful instruments as the managers of the Institution shall deem worthy of the public notice.”¹²¹ Together

¹¹⁵ The precedent for the inclusion of ornamental design would have been the Society for the Encouragement of the Arts, which always included a fine arts component.

¹¹⁶ Rumford, “Proposals,” *CW*, 756.

¹¹⁷ Rumford, “Proposals,” *CW*, 756.

¹¹⁸ Rumford, “Proposals,” *CW*, 756.

¹¹⁹ Rumford, “Proposals,” *CW*, 756.

¹²⁰ Rumford, “Proposals,” *CW*, 756.

¹²¹ Rumford, “Proposals,” *CW*, 755.

with various apparatus designed explicitly for the laboratory and the experimental demonstrations conducted in the lectures, these items constitute the original plan for the objects desired to be on display at the Institution.

While the buildings of the RI have seen several renovations over its two centuries of existence, Rumford states just prior to his departure that the model rooms had been completed to expectation, and evidence of the attempt to implement these early plans exists in an inventory taken in August of 1803 [see Appendix 1]. From this early list, one of the only models mentioned in the inventory that remains in the RI archive is “Mr. Parkers gate in a box.”¹²² It is a small model of a gate whose hinges sit at an angle so as to close automatically after being passed through. This gate is simple in its principles, but novel in its arrangement, that is, in its angling of the hinges, which indicates how the model rooms were particularly designed to receive novel designs and arrangements thought to be of general utility.

As a key motive for designing the Institution was to contribute to “the speedy and general diffusion of the knowledge of all new and useful improvements,” the framers of the model rooms sought an arrangement that would simultaneously facilitate the reproduction of these models and contribute to the economic benefit of their inventors.¹²³ To that end, *Proposals* states that “each article exhibited should be accompanied with a detailed account or description of it, properly illustrated by correct drawings,” with the “name of the maker and the place of his abode...mentioned in this account, together with the price at which he is willing to furnish the article to buyers.”¹²⁴ If a proprietor or subscriber visiting the exhibition saw an item they thought

¹²² *The Archives of the Royal Institution of Great Britain*, “Inventory of Apparatus belonging to the Royal Institution of Great Britain, Taken Aug t 23rd 1803,” (Unpublished Manuscript: [RI.5/3/4], Dated 1803), 7.

¹²³ Rumford, “Proposals,” *CW*, 755.

¹²⁴ Rumford, “Proposals,” *CW*, 757.

might be useful to themselves or those employed in their homes or on their estates, they could apply to the artisan to commission that item. In this way the RI thought it could supplement older arrangements for the compensation of inventors, which had previously been accomplished by the awarding of premiums and the granting of patents.

These details hint at the distinctively *receptive* design of the RI model rooms. It was initially thought that artisans would contribute their inventions to the Institution in hopes that the managers would elect to display them in the repository, from which the artisans could expect compensation through individual sales. In order to prevent the RI from becoming a commercial showroom, its founders stipulated that the managers, whom the bye-laws state cannot receive compensation for their activities, were to judge the value of the contributed improvement and decide collectively whether it was of general utility, and thus worthy of display. Unlike today's departments of engineering, which predominantly produce their own inventions and improvements, the logic here is the reverse. This aspect is important for many reasons, but one which I would like to highlight is that it creates an avenue of communication between working artisans, individuals otherwise unconnected with the interests and operations of the Institution, and those working on behalf of the Institution's goals. This aspect is important because in some respects I see it as constituting the grounding logic of the arts feature of the Institution. If these model rooms had survived as planned, and had remained "the great feature of the establishment," then the fundamental elements of the "school" would have been the models themselves, the contributions of the working artisans. As such, the eventual demise of this portion of the Institution's arts-and-sciences design would have enormous consequences not only for its proprietors, subscribers, and other attendees, but also for the way in which artisans and manufacturers could contribute to the shape of the Institution.

That this communicative ideal was central to the RI's initial plan is confirmed in Davy's 1810 lecture. According to its founders,

the establishment was equally intended for the instruction of manufacturers and workmen, and for the promotion of the useful arts. It was hoped that the practical man would profit by being instructed as to the correct scientific theories of his peculiar branch of labour, and that he would freely communicate to the philosophical inquirer, the nature of his methods and his operations, that they might be corrected or confirmed by an examination according to strict scientific principles.¹²⁵

Crucially, this passage identifies an early logic for the scientific lectures, the second primary feature of the Institution. The lectures, it was hoped, would provide instruction in “correct scientific theories” and in so doing constitute a productive scientific counterpoint to the arts-oriented model rooms. Just as the men of science who controlled the operation of the Institution would make final decisions as to whether or not to display an artisanal contribution, so they also sought artisans and manufacturers attending the lectures to “freely communicate” his methods to the lecturer in order for those methods to be “corrected or confirmed by an examination according to strict scientific principles.”

The *Prospectus* evinces the goal of realizing such a communicative ideal in even clearer terms:

Every consideration unites in showing how highly important it must be to the progress of real improvements to have some general collection of useful mechanical contrivances, constructed on the most approved principles, and kept constantly in actual use, to which application can be made as to a standard, in order to determine whether the failure of experiments be owing to errors in principle, or to the mistakes of workmen employed in the construction, or to those of the servants intrusted with the management of the machinery.¹²⁶

This passage highlights what Anna Maerker has called the emphasis on “mutual visibility” in Rumford’s Institutional thought. Such mutual visibility can be seen in contrast to the institutional thought of more classically utilitarian thinkers like Jeremy Bentham, who advocated a “unidirectional visibility” in institutional designs such as the Panopticon.¹²⁷ The mutual visibility that Rumford’s

¹²⁵ Davy, *Lecture on the Plan*, 6.

¹²⁶ Rumford, “Prospectus,” *CW*, 778.

¹²⁷ See Lloyd, *Rulers of Opinion*, 104.

design encouraged coincides with his attempt to realize a communicative ideal between art and science. While science could of course critique art, what was novel about Rumford's plan is that it acknowledged that science could very well be incomplete, and a genuinely balanced arts-and-sciences design could contribute to the improvement of science, by identifying "errors in principle," just as it could contribute to the improvement of the arts. Yet, it is crucial to recognize that, however well-intentioned and balanced the initial plan, the effective authority in determining the limits of that balance lay with the managers and the "philosophical inquirer," rather than with the artisan or manufacturer. Although it is mostly unacknowledged, it seems reasonable to assume that this power relation played a role in the demise of the model rooms and the subsequent rise of the scientific lectures.

Describing the initial plan for the primary scientific features of the Institution, namely the lectures and laboratory, the *Proposals* show how the communicative ideal translated into Institutional design:

In order to carry into effect the second object of the Institution, namely, TEACHING THE APPLICATION OF SCIENCE to the USEFUL PURPOSES OF LIFE, a lecture-room will be fitted up for philosophical lectures and experiments; and a complete LABORATORY AND PHILOSOPHICAL APPARATUS, with the necessary instruments, will be provided for making *chemical* and other *philosophical experiments*.¹²⁸

The *Proposals* emphasizes the "strictly scientific" status of the lectures, and explicitly adds the restriction that the lecture theatre "will never be used for any other purpose than for giving lectures in Natural Philosophy and Philosophical Chemistry."¹²⁹ The purpose of these lectures had to be explicitly detailed because its framers understood the design of the lectures and the lecture theatre as an experiment in education, requiring explicit guidelines. Lectures were of course not new, but their

¹²⁸ Rumford, "Proposals," *CW*, 757.

¹²⁹ Rumford, "Proposals," *CW*, 757.

prominence as a regular method of scientific education was not as obvious as it would appear to us. Oxford and Cambridge operated on a tutorial model, so its professors would give lectures on occasion, but not necessarily as a core feature of their employment.

The arts-and-sciences style of lecturing proposed for the RI lectures was also highly novel, even unique at that time in England. In its emphasis on applying the principles of science to the useful arts, the RI lecturers and professors would make use of the various models in the repository as a means of *demonstrating* or *illustrating* their scientific principles. The managers minutes even record a paid position whose duty was to transfer these models and experimental apparatus to the lecture theatre. And in 1813 Humphry Davy would recommend that they hire a young Michael Faraday for the position.

Although the RI was never a degree-granting association, and its lecture courses were often such as to solicit popular appeal, it must be emphasized that its founders were very serious about hiring respected natural philosophers, and maintaining high scientific standards for the lectures themselves. “In engaging lecturers for the Institution,” the *Proposals* state, “care will be taken by the managers to invite none but men of the first eminence in science to officiate in that most important and most distinguished situation.”¹³⁰ Further, “no subjects will ever be permitted to be discussed at these lectures but such as are strictly scientific, and immediately connected with that particular branch of science publicly announced as the subject of the lectures.”¹³¹ It would be the duty of the “managers to be responsible for the strict observance of this regulation.”¹³²

¹³⁰ Rumford, “Proposals,” *CW*, 757.

¹³¹ Rumford, “Proposals,” *CW*, 757.

¹³² Rumford, “Proposals,” *CW*, 757.

The *Proposals* list a number of potential subjects for the lectures, including “Of Heat, and its application to the various purposes of life,” “Of the Principles of the Warmth of Clothing,” “Of the Methods of procuring and preserving Ice in Summer; and of the best principles for constructing Ice-houses,” “Of the Chemical Principles of the process of Tanning Leather,” and “Of the Chemical Principles of the art of making Soap.”¹³³ Evident in these early lecture titles is a correspondence between their arts-and-sciences design and that of the models rooms. Whereas the model rooms would show the models themselves in “*actual use*,” and provide details concerning their dimensions and the artisans who invented them, the scientific lectures would provide the philosophical principles underpinning the construction and use of these various inventions. It is in this way that the initial plan for the Institution sought to implement its communicative ideal between men of science and artisans as a fully integrated feature of its arts-and-sciences Institutional design.

The RI laboratory was also groundbreaking, and connected in very interesting ways with its arts-and-sciences design. Its history and the history of those famous figures connected with it have been treated of in great detail in other scholarly works. So I will focus more narrowly on its position within the arts-and-sciences design. As the *Proposals* mention, the eighteenth-century man of science was usually of independent means. Original research had traditionally been a highly individual endeavor, in which natural philosophers would construct private laboratories to carry out experiments that were of interest to them. The RI laboratory was part of a more general departure from this mode of experimental inquiry that may be fruitfully tied to the rethinking of the arts and sciences precipitated by the impending disintegration of the republic of letters. RI professors, though men of science, would now be compensated for their research, and in this respect can be understood to have occupied the position, however respectable, of an artisan, conducting research

¹³³ Rumford, “Proposals,” *CW*, 757-758.

based in part on the interests of the proprietors. In 1818 Samuel Taylor Coleridge could still refer to this profession as a “scientific artist,” though by 1831 William Whewell, partly on Coleridge’s suggestion, would combine the terms to coin what became the modern word for this occupation, a “scientist.”

The communicative ideal of the original plan also features prominently in the RI’s novel conception of audience. As a key feature of the initial design for the RI was also to join the different communities from older associational structures like the Royal Society of London and the Society for the Encouragement of the Arts, its arts-and-sciences Institutional structure made possible several new and profound opportunities for higher education. The Institution opened its doors to religious dissenters, women, and, during its earliest period, from about 1800 to 1802, working artisans and tradesmen. Thomas Young, one of the Institution’s first professors, even asserts in one of his introductory lectures that “the Royal Institution may in some degree supply the place of a subordinate university, to those whose sex or situation in life has denied them the advantage of an academical education in the national seminaries of learning.”¹³⁴ Although it would be misleading to characterize the RI as having pretensions to university status, there is no question that the arts-and-sciences Institutions saw their activities as potential models for university reform, and took their educational role very seriously.¹³⁵ For those who were not permitted to enroll at the ancient universities, the courses of scientific lectures that the arts-and-sciences Institutions offered constituted their only opportunity at anything like formalized higher education. So it is unsurprising to find that many of the attendees from these formerly excluded groups taking their lecture subscriptions as seriously as they would an enrollment in a university. While the most famous evidence of the results of this inclusive gesture are the meticulous notes of Michael Faraday, who

¹³⁴ Thomas Young, *A Course of Lectures on Natural Philosophy and the Mechanical Arts* (London: Joseph Johnson, 1807), 3.

¹³⁵ Klancher, *Transfiguring*, 47.

attended Davy's chemistry lectures while working as a bookbinder, there is little indication that his enthusiasm was atypical of RI audiences. Henry Bence Jones, a former secretary of the RI and its first historian, records a note from one of Davy's friends attesting to the excitement with which this new arts-and-sciences audience attended the lectures:

The sensation created by his lectures at the Institution and the enthusiastic admiration which they obtained is at this period scarcely to be imagined. Men of the first rank and talent, the literary and the scientific, the practical and the theoretical, bluestockings and women of fashion, the old and the young, all crowded, eagerly crowded, the lecture room. His youth, his simplicity, his natural eloquence, his chemical knowledge, his happy illustrations and well conducted experiments excited universal attention and unbounded applause.¹³⁶

This snapshot of the RI audiences underscores their role as a key feature of its arts-and-sciences design. In addition to records of vigorous note taking, several RI audience members are known to have published works based on these lectures. The most well-known are two works by women attendees, *Conversations on Chemistry*, by Jane Marcet, and *The Veils, or The Triumph of Constancy*, by Eleanor Anne Porden. Understanding how the audiences of the RI fit into its arts-and-sciences design helps to make sense of their peculiar enthusiasm for the scientific lectures and can even assist in the interpretation of their own literary and scientific productivity.

In considering the various groups that composed the RI audiences, I want to begin by highlighting the manner in which the founding documents envision the Institution as “intended for the instruction of manufacturers and workmen.” Davy’s use of the word “manufacturer” may be taken to encompass the artisan, and “workmen” would have encompassed both skilled and unskilled trades. The initial intention to include artisans and unskilled laborers as part of the RI’s lecture audiences deserves special mention. These groups are effectively excluded from the RI’s plan after 1803, in a kind of tacit coordination with the elimination of the model rooms, so their early role in

¹³⁶ Bence Jones, *Royal Institution*, 328-9.

the Institution can tell us a lot about the breakdown and subsequent trajectory of the communicative ideal between art and science over the Institution's first decades.

In September of 1799, before the RI had appointed its first professor, Count Rumford hired a man named Thomas Webster as the "Clerk of the Works and Clerk to the Royal Institution." Born in the Orkney Islands, Scotland, Webster had attended the University of Aberdeen, where he studied natural philosophy.¹³⁷ While there Webster assisted the professor Patrick Copland, a noted popularizer of science and pioneer of experimental demonstration.¹³⁸ From there Webster worked briefly as a tutor in Dublin, after years of which he moved to London to study architecture, at first privately, and from 1793 at the Royal Academy.¹³⁹ Webster's most well known achievement at the Royal Institution is his design for its first permanent lecture theatre, which Michael Faraday described as.... However, it is an astonishing and comparatively unknown fact that, during his brief tenure as an employee of the RI, Webster also developed the first extant plan for a mechanics school, or what would several decades later come to be known as a mechanics institute.

As clerk of the works, Webster assisted Rumford in the renovation of the houses of the Institution on Albemarle Street in Mayfair. In addition to designing the theatre, Webster also appears to have overseen the various "workmen" or "mechanics" employed to carry out the renovations. While the evidence is scarce, it appears that many of these workmen stayed on after the completion of construction as part of the crew that would receive commissions to make copies of the various models in the model rooms. This group appears to have formed one portion of the workmen intended to have been instructed by the RI's courses of lectures.

¹³⁷ Nicholas Edwards, "Webster, Thomas (1771-1844), geologist," *Oxford Dictionary of National Biography* (23 Sep. 2004; Accessed 6 Nov. 2019), <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-28945>.

¹³⁸ Edwards, "Webster."

¹³⁹ Edwards, "Webster."

If proprietors or subscribers noticed any “ingenious artists”¹⁴⁰ in their employ, they could also recommend to the managers that “such artists and mechanics as may derive advantage from the public Lectures delivered at the Institution” be granted admittance.¹⁴¹ For this purpose Rumford and Webster had actually constructed a separate entrance to the gallery of the theatre, which they had designed so as to allow both employer and employee to avoid “embarrassments” occasioned by what was evidently an awkward co-educational situation. In February of 1802, the Managers granted special tickets for this purpose, which would give artisans “admittance to the Gallery only, of the Great Lecture Room, and to no other part of the House.”¹⁴² These tickets were to resemble those of the Proprietors, “excepting only that they be blue, instead of being red.”¹⁴³

However, what both Rumford and Webster appear to have recognized from the outset, is that many of these workmen would require remedial education just to reach a point where they could sufficiently comprehend the public lectures. Webster already had a plan for a school that would supply such education, so when Rumford hired him as clerk of the works, he also likely envisioned Webster’s role as the director of this distinct mechanics school. In a letter to Rumford recorded in the managers’ minutes of September 14, 1799, Webster outlines the plan in accordance with the early goals of the RI:

To disseminate in the most effectual manner Mechanical Knowledge among all Ranks of People, I conceive to be the Object of the Royal Institution. And the Lectures on Practical Philosophy will, no Doubt, be well calculated to convey useful Information to the Subscribers & such others as are likely to attend them. But Workmen in general are too ignorant of the Elements of Knowledge, to benefit so much from Philosophical Discourse as might be wished – Their minds must be previously prepared, & this can only be done in a

¹⁴⁰ Young, *Lectures*, 11.

¹⁴¹ *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of the Managers’ Meetings 1799-1900*, Volumes I-II, (Ilkley: Scholar Press Ltd., 1971), 235.

¹⁴² *Managers’ Meetings*, I-II, 235.

¹⁴³ *Managers’ Meetings*, I-II, 235.

school; where they can have an Opportunity of bestowing a Sufficient Portion of Time upon each Subject, & of asking such Questions as they may wish.¹⁴⁴

Webster's conception that the RI's primary object was to educate "all Ranks of People" would not last long, but it is worth highlighting here because at this early stage, that more radical leveling expression of the Institution's goals is precisely what made it exciting, new, and even, to some, potentially dangerous. It also happens to be exactly in accord with the notion of uniting the distinct communities associated with the arts or sciences. Webster thought that educating working mechanics in the elementary principles of science was critical to achieving Rumford's vision of a cordial embrace between the arts and sciences. "Philosophers & Men of high Scientific Information," Webster's letter continues, "are frequently too little acquainted with the mechanic Arts, to make the best use of their ingenious Speculations by reducing them to Practice."¹⁴⁵ In this respect, the model rooms may be understood as providing men of science with an adequate practical education in these matters, and so become more beneficial to the improvement of the arts. By the same token, the

Workmen who are in Possession of Knowlege also of the most valuable Kind, acquired by the Exercise of their several Trades, for Want of a little Knowlege of the Principles of Science, are not only incapable of improving & shortening their various Processes, in the most effectual Manner, but even of communicating readily the Knowlege they have acquired, or of profiting by that of others.¹⁴⁶

From this and the above quotations, it is evident that Webster sees the remedial scientific education he was to offer in the mechanics school as a crucial part of realizing the communicative ideal between the arts and sciences that Rumford had envisioned for the Royal Institution. Without such elementary education, workmen would not be capable of "communicating readily" with men of

¹⁴⁴ *Managers' Meetings*, I-II, 59-60.

¹⁴⁵ *Managers' Meetings*, I-II, 59.

¹⁴⁶ *Managers' Meetings*, I-II, 59.

science, both as a means of conveying their own practical knowledge, and receiving scientific instruction. Without this ability, communication flows in only one direction, from science to art, and cannot flow from art to science. Theoretical knowledge cannot be “disseminated” to the mechanics if they are unable to understand it as a mode of communication, and they cannot effectively disseminate their practical knowledge unless they are able to communicate it in a theoretical or scientific manner. This communicative problem is what makes the demise of the mechanics school so crucial in understanding the social and disciplinary implications of the RI’s trajectory toward a “more scientific form” in the years to come.

Initially both Webster and Rumford had great hopes for its success. After overcoming “a few political scruples” expressed by Joseph Banks, “everyone seemed to rejoice in the prospect that opened of adding to the Royal Institution a decided proof of liberal feeling.”¹⁴⁷ The RI even published the plan, thereby ensuring that “the news reached every corner of the kingdom that the managers of the Royal Institution of Great Britain, among whom were persons of the highest rank, instead of being adverse to the diffusion of knowledge, had actually formed a school for the instruction of the mechanical classes.”¹⁴⁸ Yet, as promising and as integral to the goals of the RI as this plan might seem, it was soon to be completely abandoned.

Although Webster had the support of Rumford, Banks, and perhaps initially Thomas Bernard, Rumford would begin to distance himself from the Institution’s day-to-day operations after the completion of the building renovations. In April of 1802, during the Peace of Amiens, Rumford would leave for France, never to return. Without Rumford present, Banks and Webster appear to

¹⁴⁷ “Autobiography of Thomas Webster,” 11-12.

¹⁴⁸ “Autobiography of Thomas Webster,” 12.

have had trouble defending the initial Institutional design. With regard to the mechanics school, Webster details its demise in the following way:

‘This project for improving mechanics, well intended as it was, which promised to be so useful, and which had already gained for the Institution ‘golden opinions,’ was doomed to be crushed by the timidity (for I shall forbear to speak more harshly) of a few. I was asked rudely (by an individual whom I shall not now name) what I meant by instructing the *lower classes* in science. I was told likewise that it was resolved upon that the plan must be dropped as *quietly as possible*. It was thought to have a dangerous political tendency, and I was told that if I persisted I would become a marked man! It was in vain to argue—the time was unfavourable—and I found the necessity of yielding. No notice was ever given publicly that the idea of instructing the mechanic was abandoned, and I have no doubt but that in many parts of the kingdom the Institution got the credit of great liberality long after the mechanics’ school had become extinct.¹⁴⁹

Webster would push back against the accusations against him, but to no avail. By April of 1802 Webster had been granted a leave of absence, and would not return. What Rumford had initially called a “seminary” for mechanics, had become after his departure a site of potential political combination and insurrection. With the failure of the mechanics school, Rumford’s vision for realizing a communicative ideal between art and science was effectively dead. For a short period of time, the managers issued a “limited Number of Tickets for this Season, for the Gallery only, for Artists, at One Guinea each,” and the proprietors did remain in possession of the “blue tickets” for the admission of promising artisans, but the discontinuation of the mechanics school meant that the remedial education many of them required to sufficiently understand the scientific lectures was no longer available.¹⁵⁰ As such, the foundation on which the communicative ideal could most likely be realized had dissolved, and the fate of the plan to educate artisans was all but sealed.

The deathblow came with the RI’s first financial crisis, which the Visitors reports begin to acknowledge in 1802-3, meaning that it unfortunately coincided with Rumford’s departure for

¹⁴⁹ “Autobiography of Thomas Webster,” 13-14.

¹⁵⁰ *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of the Managers’ Meetings 1799-1900*, Volume III, (Ilkley: Scolar Press Ltd., 1973), 102-103: February 7 1803.

France. A sub-committee of Managers and Visitors formed to review the finances and suggest changes that could help to stabilize the Institution. The crucial meeting occurs on March 7, 1803. Two resolutions are taken consecutively. The first states “that, on account of the increased number of Persons at present attending the Lectures, the execution of the Seventh Article of the Report of the Committee, relative to the admission of Artists at One Guinea each, be suspended.”¹⁵¹ The second, “that it be recommended to the Managers to call in the Blue Tickets, issued to Proprietors for the admission of artists, and to give notice that they will not be admitted after the 12th Day of March next.”¹⁵² With these two resolutions, the initial plan to educate working artisans came to an end.

Later in the minutes for that same meeting, the managers detail the effect such a change will have on the structure of the Institution:

It has been deemed necessary to recall the Blue Tickets for Artists, and it may be expected that the demand for places in future, at the lectures, will be such, as to exclude, during the winter and Spring, any general accommodation of Artists, Tradesmen, and Mechanics, at a reduced Subscription. This, if not otherwise provided for, will occasion a considerable diminution of those useful purposes which were to be attained by the Institution, in extending among individuals of that class, the application Science (sic) to the Common Purposes of Life. To remedy this, it is suggested that there shall be a course of Evening Readings in the Months of October, November, and December, for Persons of that description in which the Application of Science to Trades, Manufactures, agriculture and Domestic Life, shall be the exclusive objects, and to which (though the Proprietors may retain a Right of Personal Admission) it will be necessary none of the Tickets either of Proprietors or subscribers be admissible. If these Lectures should merely pay the Expense of the Lecturer, Attendants, etc. it is submitted that, even under these circumstances only, they would be desirable, on account of their Public Benefit and Utility: but the Committee thinks that the Proprietors may count on a surplus of profit beyond the Expenses.¹⁵³

¹⁵¹ *Managers' Meetings*, III, 92.

¹⁵² *Managers' Meetings*, III, 92.

¹⁵³ *Managers' Meetings*, III, 102-103.

Although the managers suggest a plan for autumn mechanics courses, I have been unable to find evidence that these courses ever took place. The managers themselves are clearly aware that the prospect of excluding artists from the RI would contradict the Institution's goals, but the financial difficulties of the RI, combined with managers' political anxieties about educating the lower ranks of society, meant that, given the options, they considered the education of the artists and mechanics as the most expendable feature of its composition.

Second Period: 1803-1810

The March 7, 1803 meeting thus marks the end of the attempts to implement Rumford's original vision of a cordial embrace between science and art. Morris Berman and others since have explained the failure of these arts-oriented Institutional designs in terms of the economic threat it represented to the capitalist market economy. The notorious example in favor of this view is a letter written by Matthew Robinson Boulton, son of the well-known manufacturer, making a case against permitting the steam engine to be displayed in the model rooms on grounds of intellectual property infringement.¹⁵⁴ While Berman views the demise of the model rooms as an inevitable outcome of the rise of bourgeois capitalism, which to some extent it certainly was, I actually don't think this rationale is worthy grounds for dismissing the integrity and interest of the initial plan, or even its failure for that matter. Writing to Count Rumford in 1804, Joseph Banks remarks, "Had my health and spirits not failed me, I could have kept matters in their proper level, but, sick, alone, and unsupported, I have given up what cannot now easily be recovered."¹⁵⁵ Nor do I think the traditional explanation sufficiently explains why what happened next could happen at all. The

¹⁵⁴ Berman, *Scientific Organization*, 76; Klancher, *Transfiguring*, 62.

¹⁵⁵ Bence Jones, *Royal Institution*, 193.

features of the initial plan that remained would help to shape the RI over the coming years, so the detailed understanding of that early phase that I have tried to provide is no less important for understanding what the RI would become.

After the departure of Rumford in April of 1802, there appears to have been a struggle for control between the RI's remaining founders, Joseph Banks and Thomas Bernard. While Banks' power lay in his status within the scientific establishment, Bernard's rested in his understanding of the RI's financial situation. Bernard had been the RI's treasurer during its early phase, so he had an especially good sense of its various expenses and sources of income. While Banks evidently fought to sustain Rumford's vision, Bernard appears to have sought a more pragmatic solution to the RI's financial woes. Bernard was evidently acting on such pragmatic motives as early as January of 1803, when he proposed a resolution to augment the lectures on natural philosophy and chemistry.¹⁵⁶ The previous year would have done a lot to convince Bernard that an augmentation of the lecture curriculum could, if sufficiently attended, provide a steady source of income to alleviate the RI's financial woes. The sharp rise in the popularity of the lectures was primarily due to Humphry Davy's courses on chemistry. Davy's lectures had begun to draw large and consistent crowds, so large in fact, that Albemarle Street had to be converted into London's first one-way road in order to avoid the congestion that had increased dramatically as the crowds flooded in to see the professor of chemical philosophy. Bernard understood this, and acted accordingly.

In this way, the March meeting that concluded one era in the Institution's history also inaugurated another. Affirming the January augmentation of the lectures, the minutes of March 7, 1803 suggest that "the Lectures [be] made as attractive, interesting, and useful as they may be."¹⁵⁷

¹⁵⁶ *Managers' Meetings*, III, 70-73: January 17, 1803.

¹⁵⁷ *Managers' Meetings*, III, 103.

This short note about the lectures appears to have been the beginning of the Institutional movement to incorporate a much wider variety of subjects within its lecture curriculum. Hitherto it had been confined, in accordance with Rumford's *Proposals*, to natural philosophy, chemistry, and the useful arts connected with them. In addition to these subjects, the RI would now begin engaging lecturers on subjects such as moral philosophy, physiology, natural history, the history of English literature, as well as numerous subjects pertaining to the fine arts, such as architecture, painting, poetry, engraving, music, and *belles lettres*.

However, it would be too simplistic to consider Bernard's financial rationale as a sufficient explanation for the emergence of these new lecture subjects, or the striking predominance of fine arts subjects within that more general augmentation. The managers minutes record several proposals for lecture courses, public speaking for instance, that they denied because they did not "come within the Plan of the Institution," so there is quite obviously a logic to the subjects admitted.¹⁵⁸ The important questions thus become, what was the logic that determined whether or not a subject could be admitted? What audiences were considered key to making the lectures a financial success? And how could financial amelioration contribute to the development of a new communicative ideal?

I would like connect all of these questions by thinking in a coordinated way about the expansion of disciplines and audiences that followed the initial augmentation of the lectures. Featuring prominently in the scholarly and contemporaneous commentary on this period of the RI's history are its women audiences. The admission of women was part of the same arts-and-sciences Institutional movement that sought to make a scientific education available to artisans and religious dissenters. These groups had all formerly been excluded from formalized higher education at the ancient universities, so I think it is important to view their presence at the RI in that context. The

¹⁵⁸ *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of the Managers' Meetings 1799-1900*, Volume IV, (Ilkley: Scolar Press Ltd., 1971), 126: December 23, 1805.

Andersonian in Glasgow, as well as the Society for the Encouragement of the Arts, each of which served as precedents for the RI, had both encouraged Women's membership. Women's interest in the Andersonian's lectures gave promise that such openness could help to drive the success of a similar Institution in the metropolis. The Royal Institution's first professor, Dr. Thomas Garnett, had been a lecturer at the Andersonian, and the Managers of the RI record in their minutes that "our Professor informs us, that the Fair Sex constituted a large proportion (& not the least observant) of his numerous Auditory, which sometimes bordered on 1000 Persons."¹⁵⁹ So too, despite the fact that critics often looked down on the RI for including women in scientific education, and dismissed its popular lectures in part on this basis, the evidence suggests that these lectures actually maintained a consistently high intellectual standard. And Thomas Young's claim that the RI could "supply the place of a subordinate university to those whose sex or situation in life has denied them the advantage of an academical education" applies most obviously to women, so Young's view should always be kept in mind when thinking about the role its women audiences played in the development of the Institution.¹⁶⁰

Unlike the artisans, women had access to all of the same subscription options as men. They could become annual subscribers, life subscribers, and even proprietors, meaning that during this early stage the RI could at least potentially serve as a form of property available to women. Under such conditions, subscriptions by women were in high demand. Yet, however open this arrangement may seem for its time, there was a strict gendering of its governing structures. A resolution from the Managers' minutes of March 23, 1799 tells us

that Ladies be admitted as Proprietors and subscribers to this Institution, and that they be intitled to all the privileges to which Gentlemen, who are Proprietors and subscribers, are

¹⁵⁹ *Managers' Meetings*, I, 93: January 27, 1800.

¹⁶⁰ Young, *Lectures*, 3.

intitled, excepting only that Ladies will not be called on to take any part in the Management of the affairs of the Institution.¹⁶¹

Although phrased as a sort of favor to its female members, the stipulation nonetheless limits their access to roles of governance. With that said, the managers did resolve to put especially prominent women within the Institution in a role of unofficial but real power. To avoid admitting “improper” lady subscribers, women proprietors were given “books” in which they could write down the names of other “ladies” whom they wished to and were desirous of becoming subscribers.¹⁶² While unfortunately none of these books have been found,¹⁶³ the managers minutes report that the ladies' names would be entered into these books, “and no Lady is to be admitted a Subscriber but upon the recommendation of one of the Ladies holding Books for that purpose.”¹⁶⁴ These books would be read to the Managers who would then vote to admit or deny their request (although denial was rare given the status of the recommenders). The following is an early list of “ladies holding books:”

Duchess of Devonshire, Piccadilly.
Marchioness of Stafford, Cleveland Square.
Countess Spencer, St. James's Place.
Countess of Bessborough, Cavendish Square.
Hon. Mrs. Barrington, Cavendish Square.
Lady Hippisley, Lower Grosvenor Street.
Lady Campbell, Wimpole Street,
Lady Sullivan, Grafton Street,
Mrs. Bernard, at the Foundling,
Mrs. Crewe, Lower Grosvenor Street.¹⁶⁵

¹⁶¹ *Managers' Meetings*, I-II, 9.

¹⁶² The Archives of the Royal Institution, “Guard Book I,” (unpublished set of documents relating to the Royal Institution of Great Britain: [RI Guard Book I]), 5: Resolution of February 24, 1801 by the Managers that Ladies desirous of subscribing must be recommended by other ladies (given the books) to avoid improper subscriptions by Ladies “improper Female Name.”

¹⁶³ See Lloyd, *Rulers of Opinion*, 13.

¹⁶⁴ “Guard Book I,” 15 (Recto).

¹⁶⁵ “Guard Book I,” 15 (Recto). By 1803, the Countess of Sutherland and Viscountess Palmerston had been added to this list, while the Marchioness of Stafford had been removed from it.

Immediately discernable is the gradation of rank and the predominance of the nobility. The ladies given books tended to be related to the Managers, Visitors, or Proprietors, and since these groups were dominated by the nobility, so too were the lady recommenders. Less obvious is the predominance of the house of Spencer. The Countess Spencer is the mother of both the Duchess of Devonshire and the Countess of Bessborough. Earl Spencer was an early Manager and president of the RI from 1813-1825. Together the house of Spencer likely exerted the most influence on the composition of the female audience of any single family associated with the Institution.

In addition to standard subscriptions, the Managers resolved that “any Lady subscribing to the Lectures and Public Experiments only” would be given a “ticket...for the personal admission of herself, and of any one of her Daughters accompanying her, for the ensuing Season, at Two Guineas.”¹⁶⁶ Likewise, “to any Lady so subscribing for herself and friend, a Ticket shall be given, for the personal admission of herself, and of any one Lady accompanying her, for the ensuing Season, at Three Guineas.”¹⁶⁷ By December 1803 a report of the Visitors notes that “there has been since the commencement of the present season, the addition of 3 Proprietors, 3 Life Subscribers, 175 Annual Subscribers and 242 Ladies and Young Persons subscribing to the Lectures only.”¹⁶⁸ Because of circumstances which I will describe below, the 1803 numbers may be uncharacteristic of earlier patterns in women’s subscription at the RI, but all the same the numbers give some indication of a significant demand on the part of women to attend the course offerings in the RI curriculum.

Harriet Lloyd has made a convincing case for the role of upper-class women audiences at the RI in helping to drive the augmentation and direction of its lecture curriculum after 1803.¹⁶⁹ Lloyd

¹⁶⁶ *Managers’ Meetings*, III, 74: January 17, 1803.

¹⁶⁷ *Managers’ Meetings*, III, 74.

¹⁶⁸ “The Annual Report of the Visitors, on the Accounts of the Institution to the 31st of December, 1803, and on the Progress and State of the Institution,” in “Guard Book I,” 25 (Recto).

¹⁶⁹ Lloyd, *Rulers of Opinion*, 44-45.

has also connected the increasing presence of women in the RI audiences with contemporaneous commentary associating this period with the brief but controversial rise of “fashion” at what was supposed to be a “scientific” Institution. Henry Brougham, the Whig reformer who would eventually go on to found the London University (now University College London), spoke of the degradation of science at the Royal Institution during this period, while Francis Horner described the association between fashion and chemistry as “very incongruous.”¹⁷⁰ The early historiography of the Royal Institution also generally assented to this view. Henry Bence Jones summarized the period from about 1803-1810 in the following way:

For the first three years the advancement of scientific knowledge was the chief object of the Institution; in the fourth and fifth years this object gave way to that of fashionable popularity, which was sought for until the original investigations of Davy again made science, in the noble function of new discovery, the life of the Royal Institution.¹⁷¹

In response to criticism of this kind, RI lecturers often chose to distinguish between the “scientific” and “fashionable” components of their audience, a distinction, as Lloyd suggests, “that was drawn along gender lines.”¹⁷²

I entirely concur with Lloyd’s assessment. However, in detailing the direction of women’s interest in the RI lectures, Lloyd focuses rather exclusively on the chemical lectures delivered by Humphry Davy. Lloyd argues that the relationship between Davy and the RI’s female audiences played an important role in dissociating chemistry from the radical thought of the 1790s and making it a more respectable subject of conversation. Davy’s lectures were of course an enormously popular driver of attendance at the Institution during this period, and I find Lloyd’s argument convincing.

¹⁷⁰ Lloyd, *Rulers of Opinion*, 46.

¹⁷¹ Bence Jones, *Royal Institution*, 261.

¹⁷² Lloyd, *Rulers of Opinion*, 46.

Yet it is also very interesting that the augmentation of the lectures that takes place after 1803 coincides with a set of *fashionable disciplines* that emerge within the RI lecture curriculum at this time. These disciplines are those associated with the fine arts. Intriguingly, criticisms directed at the rise of these disciplines are of almost the exact same tenor as those connected with the increasing presence of women in the audience.

Beginning with Reverend Crowe's course on the "Scientific Principles of Architecture," by 1807 the lectures on fine arts subjects had come to constitute about half of the lecture topics for the RI's Winter lecture season. By 1808, lectures on subjects that had not been permitted prior to the 1803 augmentation outnumbered the lectures on subjects like natural philosophy and chemistry, which fell under the initial purview of the Institution. The augmentation of the lectures would peak during the 1808 seasons, after which point a more utilitarian and reformist coalition would be elected to replace Thomas Bernard. Although they would continue to implement the strategy of augmenting the lectures, they would take that augmentation in what Davy called a "more Elementary and more Scientific" direction.¹⁷³

In 1810, a constitutional reform of the RI, which this new group of managers supported, was passed by an act of parliament. The reforms sought a structural fix to the Institution's chronic financial instability, and in doing so shifted the focus of the lecture augmentation away from its more lucrative fine arts lectures back to a concentration on the useful arts. Accordingly, we see a concurrent movement to return the lecture schedule to subjects that fit more exactly the initial confines of the RI lectures, with the exception that it would now allow previously excluded subjects such as natural history, anatomy & physiology, zoology, and botany. A comparison of the lecture schedules for the 1809 Winter and Autumn seasons reveals just how stark these changes were:

25th February, 1809

¹⁷³ Davy, *Lecture on the Plan*, 16.

Mr. Davy, a course on Chemistry.
Mr. Davy, a course on Electro-chemical Science.
Mr. Pond, on Astronomy.
Mr. Wood, on Perspective.
Mr. Samuel Wesley, on Music.
Rev. Mr. Crowe, on History and Poetry.
Mr. Este, on Animated Nature.
Mr. Fletcher, on Natural Philosophy.
Mr. Allen, on Mechanical Philosophy.
Rev. Mr. Dibdin, on English Literature.
Dr. Smith, on Botany.

27th November, 1809

Mr. Davy, on Electro-chemical Science.
Mr. Davy, on general Chemistry, and its applications to Nature and Art.
Mr. Dalton, on Natural Philosophy.
Mr. Allen, on Practical Mechanics, and Mechanical Inventions.
Mr. Pond, on Physical Astronomy, and its Applications.
Mr. Pond, on Popular Astronomy.
Dr. Smith, on the Philosophy of Natural History.¹⁷⁴

An 1810 series of letters and documents by Michael Lambton Este confirms that the managers indeed initially sought to eliminate fine arts subjects from the RI curriculum. Este, who had lectured on physiology at the Institution in 1809, had suggested reforms to the RI curriculum that would limit allowable subjects to “experimental philosophy, astronomy, chemistry,” and “physiology.”¹⁷⁵ Este complains that while his recommendations had in fact been adhered to, his own lectures had regretfully not been included as part of those reforms. The marked decline in fine arts lectures evident in the November 1809 season speaks to the increasing political power of utilitarian thought during this time, and is no doubt the impetus for the 1809 restatement in the managers minutes of the purposes for which the RI lectures were exclusively intended: “In the Theatre Annual Courses of

¹⁷⁴ Michael Lambton Este, *Letter Concerning the Royal and Other Scientific Institutions: Respectfully Addressed to Their Managers, Proprietors, and Subscribers* (London: James Ridgway, 1810), 8-9.

¹⁷⁵ Este, *Scientific Institutions*, 8.

Lectures are delivered on the most useful branches of Experimental Science, by the Professors to the Institution; and Lecturers are engaged from time to time, in different branches of general Science, and the Philosophical principles of the useful Arts.”¹⁷⁶

Speaking directly to the audiences gathered in the lecture theatre to hear about the coming reforms, Davy says of the reforms in his *Lecture on the Plan* that “the New Plan of the Royal Institution is intended to exalt and enlarge all those parts of the establishment which are acknowledged to be useful and profitable...for the advancement of every species of useful knowledge.”¹⁷⁷ The adjective “useful” should by now be familiar insofar as it is opposed to the adjectives “ornamental,” “refined,” or “fine,” knowledge that does not have a defined “use.” Davy continues, “In addition to the popular philosophical lectures which have been annually delivered, it is proposed, that there shall be more Elementary and more Scientific Lectures, which may afford the rudiments of instruction to the uninformed.”¹⁷⁸ From this evidence it appears that the reforms would continue to augment the lecture curriculum, but would do so by expanding those “more Scientific” lectures exclusively, while the number of “popular” lectures, which encompassed those on the fine arts, would remain the same. In this way, the RI’s plan would seem not to eliminate the fine arts lectures, so much as it sought to drown them out by adding to its curriculum of natural philosophical and chemical lectures. The change would assist in reviving the concentration on the useful arts that had formed part of the RI’s initial plan, only this time without reference to the model rooms which had formed the original balance between its arts-and-sciences Institutional features. Interestingly, Davy appears to be worried that this change will negatively affect attendance by

¹⁷⁶ *Managers’ Meetings*, IV, 495: Nov. 27 1809.

¹⁷⁷ Davy, *Lecture on the Plan*, 16.

¹⁷⁸ Davy, *Lecture on the Plan*, 16.

women audience members. “I may venture to hope,” he appeals, “that even the female parts of our audiences, will not diminish, and that they will honour the plan with an attention which is independent of fashion, or the taste of the moment, and connected with the use, the permanence, and the pleasure of intellectual acquisitions.”¹⁷⁹ In 1815 the Visitors would confirm this gendered disciplinary association by proposing that the Managers consider “the revival of a Course of Lectures on Music” which they understood as a “mark of respect to the Ladies,” and which they hoped would “induce the attendance of an additional number of Ladies.”¹⁸⁰ This coincidence of the shifting direction of the RI after 1810 to focus on the experimental natural sciences and the useful arts (i.e. to what would eventually become known as science and technology), with the attempt to eliminate the lectures on the fine arts, and Davy’s worries about women’s attendance, all suggest that these reforms did indeed do much to promote the “progress of the Royal Institution towards its scientific form.”¹⁸¹

Third Period: 1810-1826

For fifteen years the RI would struggle to stay afloat. The changes to the bye-laws stipulated the formation of three separate scientific committees, in order to replace the single committee of science that had overseen the augmentation of the lectures from 1803-1808. Joseph Banks would return to become a manager in April of 1811. But the initial move to eliminate the fine arts lectures, along with those other subjects not capable of adequate “demonstration,” appears to have faltered, again on behalf of financial expediency. New lecturers on fine arts subjects would begin to appear by

¹⁷⁹ Davy, *Lecture on the Plan*, 37-38.

¹⁸⁰ “Guard Book I,” 145.

¹⁸¹ Davy, *Lecture on the Plan*, 29.

1811, though in a slightly limited and more orderly form. The Scottish poet Thomas Campbell would be engaged as the lecturer on poetry, the position formerly held by Samuel Taylor Coleridge, while earlier fine arts lecturers would be rehired, such as William Marshall Craig and John Landseer.

However, this fact does not change the continued augmentation of the “more Scientific and more Elementary” lectures in a generally utilitarian direction. With the departure of Humphry Davy in 1813, the apothecary and experimental chemist William Thomas Brande would take over as professor of chemistry. Brande established a course for medical students within the Royal Institution, presumably as part of this more utilitarian plan for the lectures.¹⁸² In that same year Michael Faraday would become the RI’s lecture and laboratory assistant.¹⁸³ Both figures to some degree, but Faraday in particular, came from artisan backgrounds. Faraday had been an artisan bookbinder prior to his engagement with the Royal Institution, so his eventual assent to the Fullerian professorship in chemistry would represent a vestige of the RI’s initial mission to invite artisans to participate in scientific inquiry.

Around 1826 the Institution’s finances begin to improve, and the Visitors reports for that year state that the principal reason for this is the “judicious arrangement of the Evening Meetings of the Members.”¹⁸⁴ 1826 was the year that the RI began its Friday evening meetings of the members. These meetings were intended for both social interaction and scientific discussion. Each meeting featured a lecture by one of the RI’s professors. As soon as Michael Faraday begins to deliver his evening discourses, the Visitors register an immediate change in the RI’s financial outlook. The Visitors minutes make a point of attributing the end of its financial struggles to the enormous

¹⁸² *The Common Purposes of Life: Science and Society at the Royal Institution of Great Britain*, ed. Frank A.J.L. James (Burlington: Ashgate, 2002), 350.

¹⁸³ James, *Science and Society*, 358.

¹⁸⁴ See “Visitors Report of 15 April, 1826,” in “Guard Book I,” 177.

success of these newly inaugurated Friday evening meetings of the members, and name Faraday as deserving special thanks for services to the Institution.¹⁸⁵ The Visitors also remark that the Friday evening meetings remind them of the gatherings once held at the house of the late Joseph Banks, one of the RI founders.¹⁸⁶ By recalling Banks in this way, the Visitors almost seem to be expressing a sense of satisfaction in recuperating something lost, as if the Friday evening meetings had somehow revived the original spirit of the Institution, and justified the many years of uncertainty that accompanied its birth.

Although the fine arts lectures would remain a steady part of the curriculum until at least 1848, at which point they appear to drop off sharply, the RI lecture curriculum as a whole appears to become overshadowed at this point by the successes of Faraday. His Friday evening discourses evidently garnered enough excitement to create a steady increase in membership, and their regular payments resulted in the first period of extended financial success for the Institution. In addition to his Friday evening discourses, Faraday's monumental achievements in electro-chemical research would continue to elevate the reputation of the RI laboratory for original research. While Faraday's success appears to have obscured this early history of the fine arts lectures, his accomplishments helped to solidify the legacy of the arts-and-sciences Institutional movement in his role as the preeminent "scientific artist" of the Victorian period.

Appendix 1: "Inventory of Apparatus belonging to the Royal Institution of Great Britain, Taken Aug t 23rd 1803"¹⁸⁷

¹⁸⁵ See "Visitors Report of 15th April, 1826," in "Guard Book I," 177.

¹⁸⁶ See "Visitors Report of 15th April, 1826," in "Guard Book I," 177.

¹⁸⁷ *The Archives of the Royal Institution of Great Britain*, "Inventory of Apparatus belonging to the Royal Institution of Great Britain, Taken Aug t 23rd 1803," (Unpublished Manuscript: [RI.5/3/4], Dated 1803).

Fergusons Models –

[8] "Dr. Young's Pulleys"

[9] Portfolio containing various engravings of Bridges etc. etc.

3 Black diagram Boards & easel

"Attwoods Machine with weights etc

Model of Mr. Parkers gate in a box

Model of Hook's universal Joint

Model of a catch lock

Model of a Spiral pump

Model of a fire Engine

Glass model of a Forcing pump

Model of a [Rope] Pump

Model of Mr Buchanan's Ship Pump

[11]

-Apparatus for illustrating some expt in Magnetism-

Musical Reeds

Harmonic Sliders

App for expts on sound

p. 12 Model of a German Stove

Do of a Glass House

Do of a Rumford Fireplace with a grid iron grate

Do of a Mill for Grinding [Clay]

Map of the Orbits & Periods of Comets

[12]

Model Room

- Whirling Table -

2 Globes

-Model of the [Hepian] Wheel

-do-- of London Bridge Water Works

- do -- of an Ebbing & Flowing Spring

- Archimedes Screw

- Model of a Pump -

-A fine Hydrostatic Balance-

-Filtering [Vase]-

-A Fountain --

-- do ----

- Centrifugal Pump-

- Apparatus for [Bentonics] expts-

- A Water guage -

-Hydrostatic paradox -
-Large plate Glass in a frame for [...] expts on [...]

[13]

[...]- Vessels for [Sparking] fluids
- Fountain of Compression -
-Condenser to do-
-Hydrostatic Bellows-
-Box with 3 compartments-
-Perspective diagram-
-Electric Battery-
-Stand & Conductors for Large Machine-
-Coated Stand & Coated Plates-
-Statuary (Stationary?) Compas with 2 plaster
Smeatons Block & Pulleys
-Small Electrical Machine
2 Models in Park Board of dials
inclined plane with carriages & weights
Scheme for perpetual motion
[Catalinian] Arch
Model for Expts with the axis of the Earth
Model of a Pile Engine
Painted Boards exhibiting various [...]for drawing the Teeth of Wheels
Frame of Collision Balls
4 Plated Concae Reflectors
Deal Stand & Screen Showing the plan [...] the descent of Bodies
Various Boards expts - he d
Painted Ships with the Frames of the Ancient Philosophers
Large Gazometer with two Air Holders attached

[14]

Large inclined Plane
Model of a Spiral Pump
do of a large Center Bit
do of a Machine to try the Strength of Timber
a Parrallel Motion
Oil Bags to prevent drowning
Model of a large pump
Do of a Bedstead
11 Painted Diagrams on [Paste] Board
Large Screen
Apparatus for Solar Microscope
[Varleys Pneumometer]
Models of Parkers Hinges (in a Box)
Instrument Illustratg Compound Motion
Model of [Tarpits]
Do of Hollow Masts in a Box
Models of framings of Roofs

7 Specimens of [Cordage]
A Screen
A Single String & [...] Instrument
Tin Cans for Warming Rooms
Model of a Windmill
Do of Sugar Boilers
Patent Brick [Humps]
2 Small models of Rumford Roasters
Large Ru Roaster

[15]
1 Rumford Raoster from Edinburgh
1 Grid Iron Grate
1 15 in Boiler with Steamers
1 13 do do do
1 Cottage Oven
1 Frying Pan
1 Copper Tea Kettle
2 Japaned Do
1 Tin do
Cast Iron Stewing Plate
1 Tin Boiler for Do
Model of Furnace & Boiler
2 Copper Stew pans & Covers
1 Digestor
1 Cast Iron pot in a [wrot] Iron frame
1 Copper saucepan do do
2 Tin do do do
Set of Wedgwood Steamers do do
Wedgwood pan & Cover do do
4 Portable furnaces
1 Earthen do
2 Doors & Registers for Furnace
1 Tin Pot for heating Water
2 Registers
6 Cast Iron [Bars] for Stove furnace

CHAPTER TWO

Toward a Science of Poetry: System and Infrastructure in the Arts-and-Sciences Institutional Movement

It became also a serious Consideration whether it would not be more advisable to suspend the greater Part of the Preparations, until a general & comprehensive Plan could be devised, combining all the leading Objects of the Prospectus, & meeting the fair Expectations of the Public with a complete *Systematic Arrangement*, not unworthy a great National Establishment, incorporated by Charter, under the immediate Patronage of the Sovereign. For here it becomes necessary to state, that when the Plan of the Institution was laid before his Majesty, by the President, the King was specially pleased to become the Patron, & to allow it to be denominated the Royal Institution of Great Britain.

—Royal Institution of Great Britain, Managers' Minutes¹⁸⁸

In the previous chapter I highlighted an initial Institutional design that envisioned a communicative ideal between *art and science*, and followed the alterations to that ideal over the RI's first decades of existence. This chapter seeks to understand what was particularly *Institutional* about the arts-and-sciences Institutional movement. Following the "literary" definitions of institution that featured regularly in the eighteenth-century encyclopaedia tradition, I treat "institution" in this chapter in the sense that denotes tuition by means of elucidating the "elements" and "first principles of a science or art."¹⁸⁹ Significantly, this tuition could take the form either of "a book of first

¹⁸⁸ *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of the Managers' Meetings 1799-1900*, Volumes I-II, (Ilkley: Scholar Press Ltd., 1971), 111. Royal Institution Managers Report and Charter from the 3rd of February, 1800.

¹⁸⁹ "institution, n.". OED Online. September 2019. Oxford University Press. <https://www.oed.com/view/Entry/97110?redirectedFrom=institution> (accessed November 7, 2019), "†5: Usually in plural. (a) Elements of instruction; first principles of a science or art; (b) a book of first principles, an elementary treatise."

principles, a elementary treatise,” or that of “instruction.” This chapter will begin by showing how men of science involved with the design of the Royal Institution employed precedents set by late-eighteenth-century systematic encyclopaedias, wherein such subject-based “elementary treatises” could serve as a model for curricular design. The second half of the chapter shows how that design emerges as a fundamental structural feature of pedagogical practice in the RI’s scientific lectures. This institutional practice, of elucidating elements and principles, combines with the art-and-sciences design by way of an additional expectation that RI lecturers “apply” their principles on behalf of improving the arts. Together, these two requirements constitute the fundamental arts-and-sciences infrastructure of the RI’s scientific lectures. The conclusion of this chapter attempts to show how this infrastructure enters into Romantic discourse by way of Coleridge’s position as lecturer on the fine arts in the first years after the RI decided to augment its scientific lecture program to include fine arts subjects. As such, Coleridge’s lectures serve as the key bridge by which an arts-and-sciences Institutional infrastructure comes to inform the Romantic discourses of Poetry, criticism, and the Imagination.

Section I: Institution as Encyclopaedia: Or, The Royal Institution “par Ordre des Matieres”

On June 12th 1802, Robert Clifford, a proprietor of the Royal Institution and a figure that probably deserves more study than he has been given, wrote a letter, likely to the Managers of the RI, concerning the arrangement of its library catalogue, of which the following fragment survives:

...has been done on that branch by an alphabetical list. The Royal institution is at present in [its] infancy; it will be <no> more trouble to class the different works under their proper header[s] than under the letter of the alphabet.

The Catalogue of the Institution being in that form, may perhaps give the hint to many public and private Libraries. Men of Science may [then] become possessed of what is at present hidden [at] the Museum, the Royal, or antiquary societies... They will know what has been done in each branch, & their labours will not run the risk of being vain.

I therefore, as a proprietor of the Royal Institution, submit “Whether it would not be advisable to have the catalogue of the library made par ordre des matieres or classed according to the different subjects, & under different heads.”

About a year ago I gave Mr. Savage a rough [plan] for that purpose, in hopes of its being [perfected] by some men of science, but it does not appear to have been followed. I therefore have troubled you with these remarks and with due respect & submission

Remain,

Gentlemen

Yours &c &c &c

Robt Clifford

Edward St. Portman Sqr

No. 5

June 12. 1802¹⁹⁰

As is quite clear from Clifford’s letter, the RI’s library had thus far been arranged and catalogued alphabetically. The 1801 plan he mentions had seemingly not been acted upon, and this letter registers what Clifford had in mind, containing at least a partial rationale for that particular choice of arrangement. He seems to see an opportunity to showcase a new method for cataloguing that might set an example for the consequent arrangement of private libraries and older philosophical societies like the “Museum, the Royal, or antiquary.” The crucial phrase, which Clifford himself underlines, occurs when he suggests that the “catalogue of the library” be arranged “par ordre des matieres.” This recommendation seems sensible, and at first perhaps uninteresting. In contrast with the alphabetical arrangement used at the RI up to 1802, Clifford suggests that the RI library catalogue (and presumably the library itself) be arranged according to subject matter, in order that visitors might find authors and works affiliated with the specific subject in which they are interested, rather than having to know the name of the author or work. Yet the explicit use of the French “par ordre des matieres” is a reference to the *Encyclopédie* tradition, specifically to the massive *Encyclopédie Méthodique par Ordre des Matières*, published in 210 volumes from 1782 to 1832 on the plan of Charles-

¹⁹⁰ *The Archives of the Royal Institution of Great Britain*, “Letter from Robert Clifford, June 12, 1802,” (Unpublished Manuscript: [RI AD/03/1/02, Folder 02], Dated 1802).

Joseph Panckoucke. With this reference, Clifford engages an important and ongoing philosophical debate about organizing the arts and sciences that has direct implications for their structure within the Royal Institution.

I will argue that Clifford's letter is a crucial early indicator that the RI, as an arts-and-sciences Institution, saw its own organization and function as intimately bound up with and informed by the encyclopaedia tradition in Britain and France. Richard Yeo's 2001 book, *Encyclopaedic Visions*, studies the history of encyclopaedias in Britain and France from the middle ages to the nineteenth century, with special attention to the pioneering example set in 1728 by the English writer Ephraim Chambers' *Cyclopaedia: Or, Universal Dictionary of the Arts and Sciences*. Yeo argues that the work of Chambers was part of a significant departure from medieval and early renaissance notions of "encyclopaedia," which typically indicated an actual course of study, a "circle of learning." This medieval understanding pertained to "the circle of arts and sciences considered by the Greeks as essential to a liberal education."¹⁹¹ The initial impetus to resort to written forms described by some variant of the Greek phrase was in part due to a perception in Europe "before the end of the seventeenth century...that complete knowledge of all the arts and sciences was beyond the capacity of any individual."¹⁹² "This did not mean," however, "that the goal of universal knowledge was abandoned, but it did call for new ways of conceiving this, and for new strategies to achieve it."¹⁹³

Yeo argues that this earlier understanding of encyclopaedia as a course of study informs some of the major structuring components of Chambers' *Cyclopaedia*. These include the title itself (i.e. *Cyclopaedia*) and the component of its subtitle that figures the work as "a course in Ancient and

¹⁹¹ OED "Encyclopaedia," n. - Etymology: < late Latin *encyclopaedia*, < pseudo-Greek *ἐγκυκλοπαιδεία*, an erroneous form (said to be a false reading) occurring in MSS. of Quintilian, Pliny, and Galen, for *ἐγκύκλιος παιδεία* 'encyclical education', the circle of arts and sciences considered by the Greeks as essential to a liberal education.

¹⁹² Richard Yeo, *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture* (Cambridge: Cambridge University Press, 2001), 93.

¹⁹³ Yeo, *Encyclopaedic Visions*, 93.

Modern LEARNING.” With specific but uneven attention to Francis Bacon’s call for the open communication of natural knowledge, early encyclopaedists sought, along with Bacon,

to invite the practical, mechanical arts and crafts into the public domain...to rescue these activities both from the derogatory attitudes of learned elites and from the self-imposed secrecy of artisan guilds. He urged that the practices of artisans be brought into dialogue with the sciences because such inventive arts exemplified the progress lacking in traditional natural philosophy.¹⁹⁴

Yet, despite the *Cycloaedia*’s claim to the status of a “Universal Dictionary of the Arts and Sciences,” Yeo points out that the sections devoted to “accounts of the crafts, trades and mechanical arts,” in Chambers’ work and those modeled on it, tend to be “inadequately realized.”¹⁹⁵ Because of this, these works were often called simply “scientific dictionaries,” a descriptive phrase that survives well into the nineteenth century. What I hope became evident enough in my first chapter is that this “inadequate” realization of attempts by natural philosophers to include “the crafts, trades, and mechanical arts” (the encyclopaedias typically contained engraved images of inventions in the arts), also occurred in the Institutional movement to unite the arts and sciences in the form of the “inadequately realized” repository and model rooms.

The various eighteenth-century compilers and editors of dictionaries of arts and sciences, from Chambers in England and Diderot and d’Alembert in France (who explicitly based their project on that of Chambers), to later extensions and reformations of these works by figures like Abraham Rees and Charles-Joseph Panckoucke, each negotiated this call for an integration of natural knowledge and the “practical, mechanical arts and crafts” in markedly different ways. One of the structural features that appears to some degree in all of these encyclopedic endeavors, though always with shifting emphasis and rationale, is an effort to achieve a systematic arrangement of the

¹⁹⁴ Yeo, *Encyclopaedic Visions*, 146.

¹⁹⁵ Yeo, *Encyclopaedic Visions*, 15.

entries. At the same time, this feature is counterbalanced by an ideal of accessibility. The arrangement most closely linked with system is an arrangement according to subject matter, “par ordre des matieres,” while the arrangement most closely linked with accessibility tends to be alphabetical arrangement.¹⁹⁶

Since Bacon’s call to include the practical and mechanical arts within that “circle of learning,” the dilemma of proper arrangement would continue to be a live issue into the nineteenth century. How can a work of this sort give systematic treatment to each subject within the circle of arts and sciences without rendering it inaccessible? It was thought that a serious reader of the *Cyclopaedia* should at once be able to enter at the most elementary level and advance progressively toward an understanding of the whole science in which they are interested. Systematic study implies first that the reader be guided from the most appropriate elementary principles of a science to the most complex. So too, each of these sciences, treated as individual systems, was designed to be considered in relation to other sciences, the result of which, usually rendered visually in what has been called a “stemmatic analysis,” was to retain the ideal of a full circle of education in the medieval and ultimately Greek sense, while acknowledging that the typical individual would be concerned with only one or a few of these sciences.¹⁹⁷

Which manner of organization was considered most practicable depended importantly on the intended audience. For understanding the sciences as systems of knowledge, treated within a given encyclopaedia, it was typically thought that the best arrangement, in keeping with a notion of the “circle of learning,” was by subject.¹⁹⁸ However, a systematic treatment of a subject often

¹⁹⁶ Yeo, *Encyclopaedic Visions*, 25-7.

¹⁹⁷ Yeo, *Encyclopaedic Visions*, 132.

¹⁹⁸ Yeo, *Encyclopaedic Visions*, 136.

resulted in confusion for those who had no prior knowledge of the terms connected with it. And there existed scholastic precedents for considering the alphabet as an elementary form of education (i.e. one had to learn the alphabet to read anything), so this was considered a appropriate method of arranging a work that had pretensions to be open to all.¹⁹⁹

There is hence a loose but I think real generalization that can be made about these two forms of organization. First, the effort to arrange systematically, or according to a given subject or science, appealed to the learned, it appealed to natural philosophers and those who would by 1800 be called “men of science,” as Robert Clifford’s letter attests. These readers already had enough education in the arts and sciences to understand where a given entry might be located within an arrangement of entries by subject. Alternatively, an alphabetical arrangement would tend to indicate an effort to accommodate those who would most likely inquire about particular terms, and might not know precisely where to find them if the dominant arrangement were by subject.²⁰⁰ So it is possible to say that alphabetical arrangement takes into account the needs of those not formally trained in natural philosophy, namely those affiliated with the arts and manufactures. The result in actual practice, as dictionaries of the arts *and* sciences, was some mixture of both.

Chambers, for instance, finds a solution whereby an alphabetical arrangement would be counterbalanced against

a course of references, from generals to particulars; from premises, to conclusions; from cause, to effect; and vice versa, i.e. from more, to less complex, and from less, to more; a communication might be opened up between the several parts of the work; and the several articles be, in some measure, replaced in their natural order of science, out of which the alphabetical order had removed them.²⁰¹

¹⁹⁹ See Yeo, *Encyclopaedic Visions*, 25-7.

²⁰⁰ Yeo, *Encyclopaedic Visions*, 26.

²⁰¹ Yeo, *Encyclopaedic Visions*, 137.

Alternatively, while Diderot and d'Alembert resort to a more pronounced alphabetical ordering, their plan for the *Encyclopédie* retains a claim to systematic arrangement by devising a stemmatic analysis in precise accordance with Bacon's intellectual division of disciplines [see Figure 1].²⁰² Panckoucke's extension of Diderot and d'Alembert's work attempts to "methodize" its alphabetical entries by arranging them under their "proper headers," and this process elevates the individual arts and sciences but deemphasizes the Baconian categories, such that the *Encyclopédie's* general category of "Poesie" is replaced by tomes relating to the "Beaux Arts." In addition, Panckoucke would commission systematic treatises as introductions to each *matière* (e.g. Mathematics, Mechanics, Fine Art), with the terms pertaining to that *matière* listed in alphabetical order. By the time Panckoucke began publishing the *Méthodique* in 1782, "par ordre des matieres" would constitute the latest effort to emphasize system and method over the alphabetical arrangement of its immediate predecessor, the *Encyclopédie*.

In the RI's library catalogue of 1810, the category used to describe these works is "Dictionaries of Arts and Sciences" rather than "Encyclopaedias," suggesting that "Dictionary of the Arts and Sciences" was in fact an appropriate way to identify and categorize these works into the early nineteenth century. Under this category in the 1810 catalogue, the *Encyclopédie Méthodique*, to which Clifford alluded in his letter, appears as the first entry in a catalogue that is in fact arranged "par ordre des matieres" instead of by the letters of the alphabet. The *Méthodique* is followed by Chambers' *Cyclopædia* and the *Encyclopædia Britannica*. Interestingly, the *Encyclopédie* of Diderot and d'Alembert does not appear in the catalogue, suggesting that the *Méthodique* would have been understood as a less politically charged text than that of its predecessor. Cross-references to the

²⁰² "Observations sur la Division des Sciences du Chancelier Bacon," *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, etc.*, eds. Denis Diderot and Jean le Rond d'Alembert. University of Chicago: ARTFL Encyclopédie Project (Autumn 2017 Edition), Robert Morrissey and Glenn Roe (eds), <https://encyclopedia.uchicago.edu/node/89>.

relevant volume of the *Méthodique* appear throughout the 1810 catalogue, usually in the first position as a reference for those seeking general information concerning the subject “header,” such as “Fine Art,” “Pneumatics,” etc. The near ubiquitous presence of the *Encyclopédie Méthodique* in the 1810 catalogue suggests that Robert Clifford’s 1802 request may indeed have been followed. In addition to making works and authors more easily accessible, the arrangement “par ordre des matieres” could also limit any politically suspicious associations that Rumford’s alphabetical arrangement may have garnered, particularly after he departed for France in the spring of 1802, just prior to the date of Clifford’s letter.

Returning to Clifford’s letter to the RI Managers, then, it is worth asking the question, why refer to the *Encyclopédie Méthodique* specifically? To what extent was it actually used in developing the structure and function of the RI? Although Yeo’s book only mentions the *Méthodique* as a precedent for the inclusion of specialist introductory treatises in the important third edition of the *Encyclopaedia Britannica*,²⁰³ recent scholarship on the *Méthodique* by Martine Groult and Kathleen Hardesty Doig has situated Panckoucke’s plan relative to its direct predecessor (the *Encyclopédie* of Diderot and d’Alembert) and the cultural milieu from which it emerged.²⁰⁴ In her book, *From Encyclopédie to Encyclopédie méthodique: revision and expansion*, Doig describes the importance of arrangement in the *Méthodique* in terms recognizable from Yeo. Calling Panckoucke’s “philosophical conception...innovative, an original encyclopaedic structure that had never been attempted and which would not be replicated in any future encyclopaedia,” Doig discusses the difficulties Panckoucke encountered in attempting to rearrange on a systematic plan “the disorder inherent” in

²⁰³ Yeo, *Encyclopaedic Visions*, 250.

²⁰⁴ Kathleen Hardesty Doig, *From Encyclopedie to Encyclopedie methodique: revision and expansion*, (Oxford: Voltaire Foundation, 2013); Martine Groult, *Savoir et Matieres: Pensee scientifique et theorie de la connaissance de l'Encyclopedie a l'Encyclopedie methodique* (Paris: CNRS Editions, 2011).

the “alphabetical arrangement” of the *Encyclopédie*. Panckoucke’s “solution” to this problem, Doig continues, “was simple in conception, if not in realization,”

separate dictionaries with overviews or treatises at the beginning of each series (although they sometimes appeared at the end, or not at all), followed by alphabetised entries on relevant terms. The *Méthodique* would thus provide treatises while also supplying dictionaries in the many areas where none existed...He also tasked his editors with composing reading outlines, generally placed at the end of a series and consisting of a recommended order for reading articles. Although compliance in this matter was imperfect after approximately the first decade of the enterprise, the outlines that were drawn up generally provide a clear notion of the hierarchy of, and relations among, the terms covered in the dictionary.

The addition of these various companion paraphernalia would restore the circle of knowledge, the encyclopaedia, to the *Méthodique*. The general treatises and the reading outlines would fashion each series into a kind of sub-encyclopaedia. Most importantly, a ‘Vocabulaire universel’ of terms from all the dictionaries of the *Méthodique* would knit the entire work together with a general nomenclature that could guide the reader to the right series for the concept or object he or she sought. The reader would also be exposed to the multiple meanings of a term that appeared in more than one dictionary.²⁰⁵

Doig’s description of the changes made to the ordering of the *Méthodique* makes two things clear.

First, that Panckoucke understands alphabetical and systematic (Panckoucke in fact calls systematic order ‘l’ordre encyclopaedique’) ordering as opposed to each other, but not in ways that he deems insurmountable.²⁰⁶ The alphabetical ordering works well if one is simply interested in single terms, but if one wishes to understand an entire science, say optics, there is a problem of method because all of the connected terms are “disordered” according to the alternate ordering structure of the alphabet, so the opposition is one of competing arrangement. Alphabetic order assumes a baseline

²⁰⁵ Doig, *Encyclopedie to Encyclopedie methodique*, 3-4: “Panckoucke’s insistence that this ‘Vocabulaire’ was essential to the project was in the end bootless, for when the Methodique finally drew to a close thirty-three years after his death, it contained no such vocabulary.”

²⁰⁶ See *Prospectus. Encyclopédie Méthodique, par Ordre des Matières, ou Bibliothèque Complete de Toutes les Connoissances Humaines, par une Société de Gens de Lettres, de Savans et D’Artistes, etc.*, (Paris: M. Ansiaux, 1783), 14: “Chacun de ces dictionnaires sera précédé de discours préliminaires, lesquels seront suivis de tableaux d’analyses, qui indiqueront l’ordre encyclopédique de tous les mots de chaque dictionnaire. M. d’Alembert a fait voir, dans le discours qui est à la tête de la première édition de l’Encyclopédie, en quoi consistoit l’ordre encyclopédique, & de quelle manière il pouvoit s’allier avec l’ordre alphabétique.”

of accessibility for the individual terms, while systematic ordering assumes a baseline of accessibility for students wishing to understand a given science in particular.

But why is it even important to accommodate the latter? Isn't alphabetical ordering enough for a dictionary of the arts and sciences? Here again it is important to keep in mind that the very effort to combine the terms "dictionary" and "encyclopaedia" implies an attention to combining what was understood by these terms. As Yeo has pointed out, "encyclopaedia" ultimately referred back to a circle of education, an actual progression of coursework that a student must undergo if he or she is to be considered learned. So in trying to embody this in written composition, Panckoucke and others before him had to make it possible for the composition to emulate this ideal, to at least symbolically make it possible for a student to attain encyclopaedic education.

Second, Panckoucke actually did devise a solution to these issues, regardless of their adequacy or implementation. For the encyclopaedic component, Panckoucke hired members of the French academies to write extended systematic (though introductory) treatments of each particular "matiere" or subject. It is possible to think of this as an introductory lecture or course that both the scholar and the philosopher could use for understanding or reviewing a given subject theoretically (i.e. *as a science*).²⁰⁷ The decision to include introductory treatises at the beginning of each "matiere" (e.g. Physique) is thus the primary "encyclopaedic" component within each subject grouping, while the terms themselves are ordered alphabetically within each "matiere." The alphabetical component relates most to the notion of a dictionary. In cases where a single word would need to appear within many different "matieres," or had different senses according to the "matiere" to which it was being applied, Panckoucke proposed a section to be called "vocabulaire universel" that would have preceded the "matieres" and would have added references for their application to the various

²⁰⁷ i.e. in the manner of the "literary" usage of "institution" that denoted "a book of first principles, an elementary treatise."

subjects to which they were connected. Such organization would ideally prevent repetition of entries, but it would also ensure that those interested in approaching the *Méthodique* by means of terms (i.e. by means of the alphabet) would have some way of thinking about the different “matieres” in relation to each other. Thus, although the *Méthodique* gives precedence to systematic arrangement, the reader approaching the work alphabetically can still think about arrangement by seeing how individual terms are common to multiple sciences.

Although Yeo mentions the *Méthodique* only briefly, he comments extensively on the trend in the later eighteenth century toward treating individual subjects systematically by means of specialist treatises, rather than the “stemmatic” arrangement of knowledges as a whole, as was common earlier in the century. Where Yeo does mention the *Méthodique*, it is primarily to cite it as an important example of this trend. “Indeed,” Yeo writes, “from 1782 the massive *Encyclopédie Méthodique* (the successor to the *Encyclopédie*), was really a set of specialist treatises arranged alphabetically, so that, in the words of one reviewer, ‘every science will have its dictionary, or system, apart!’”²⁰⁸ The reviewer’s assertion here is of course true in the sense that Panckoucke organized the *Méthodique* by commissioning systematic treatises to introduce each subject, but Yeo’s characterization here is a bit problematic.²⁰⁹ By indicating that the *Méthodique* is part of a movement toward abandoning stemmatic analysis and treating individual subjects systematically instead, Yeo also indirectly occludes the manner in which the *Méthodique* still does participate in the ordering of the “matieres” themselves. If the title claims that the arrangement is “par ordre des matieres,” what is it that determines that order?

²⁰⁸ Yeo, *Encyclopaedic Visions*, 192.

²⁰⁹ To say that the *Methodique* is “really a set of specialist treatises arranged alphabetically,” as far as I can tell, is inaccurate. The arrangement of the treatises accords with the arrangement of the “matieres” which are by definition not organized alphabetically. What is organized alphabetically are the terms within each “matiere,” so unless Yeo is arguing that each entry is essentially a specialist treatise, I do not think I can agree with him on that point.

Doig provides a point of departure:

The new encyclopaedia thus differed radically from its predecessor. The *Encyclopédie* broke knowledge apart artificially according to the alphabet, but maintained the encyclopaedic circle by attaching each entry to the ‘Système figure des connoissances humaines’. This panoramic structure, inspired by Francis Bacon, is conceived from the vantage of humans attempting to discover truths about the world by using their memory, reason and imagination. The various branches under each of these faculties name the different disciplines such as history, mathematics and poetry. As the title of the tableau indicates, it is systematic, a construction imposed on its objects. In the *Méthodique*, the panoramic structure consists of the array of subject dictionaries. Each subject was to be treated thoroughly and comprehensively, each would fit into the ‘encyclopédie’ of the title through its representation in the collective terminology of the ‘Vocabulaire universel’.²¹⁰

As I have already mentioned, I think the ‘Vocabulaire universel’ does indeed provide a relational structure between the different “matieres,” but I actually think this is only one of the possible ways of thinking about the *Méthodique* as a unified whole, and likely the secondary one. The primary organizing factor, I would argue, is indicated by its “panoramic structure,” the “ordre des matieres” itself. Though to my knowledge there is no specific reference back to the *Encyclopédie*’s Baconian organizing principle,²¹¹ it is quite clear that the “matieres” included in the *Méthodique* are in fact ordered upon a comparable plan.

Though the examples are too plentiful to think of individually, the order of the *Méthodique*’s publication, like the order of subjects in its preliminary discourse, exhibit the “precedence” style of

²¹⁰ Doig, *Encyclopédie to Encyclopédie méthodique*, 4.

²¹¹ See Francis Bacon, *The Advancement of Learning*, ed. Joseph Devey (New York: P.F. Collier and Son, 1902), Book III, Chapter I, 139: “The justest division of human learning is that derived from the three different faculties of the soul, the seat of learning: history being relative to the memory, poetry to the imagination, and philosophy to the reason. By poetry we understand no more than feigned history or fable, without regard at present to the poetical style. History is properly concerned about individuals, circumscribed by time and place; so likewise is poetry, with this difference, that its individuals are feigned, with a resemblance to true history, yet like painting, so as frequently to exceed it. But philosophy, forsaking individuals, fixes upon notions abstracted from them, and is employed in compounding and separating these notions according to the laws of nature and the evidence of things themselves. Any one will easily perceive the justness of this division that recurs to the origin of our ideas. Individuals first strike the sense, which is as it were the port or entrance of the understanding. Then the understanding ruminates upon these images or impressions received from the sense, either simply reviewing them, or wantonly [94] counterfeiting and imitating them, or forming them into certain classes by composition or separation. Thus it is clearly manifest that history, poetry, and philosophy flow from the three distinct fountains of the mind, viz., the memory, the imagination, and the reason; without any possibility of increasing their number. For history and experience are one and the same thing; so are philosophy and the sciences.”

ordination that was common in many aspects of European life. The order that appears in the “Prospectus” to the *Méthodique* lists mathematics and physics as the first “matieres,” and generally the subjects that follow are most closely affiliated with Bacon’s designation “natural philosophy.”²¹² In his introductory treatise to mathematics, the first “matiere” in the *Méthodique*, D’Alembert (whom Pancoucke commissioned for Mathématiques) says “le nom seul des Mathématiques, qui, dans son étymologie, veut dire *Instruction*, *Science*, peint d’une manière juste & précise l’idée noble qu’on doit s’en former.”²¹³ So there is also an argument to be made that the first component of the *Méthodique* is broadly concerned with “*Science*,” and “*Instruction*” according to “*Science*,” scientific instruction, instruction by means of systematic treatment or theory. And mathematics is supposed by d’Alembert to be the pure form of “*Science*,” particularly in the sense that it is not “mixed” with the world, hence it is the pure science of the mental faculty of Reason. Thus mathematics in this rendition is the form of science and scientific instruction *par excellence*. The second grouping is most closely connected to Bacon’s notion of natural history, while the third is affiliated with the arts. So too, in the same sense that the *Encyclopédie*’s Baconian “Système Figuré des Connoissances Humaines” was ordered according to the mental faculty presumed to be most closely associated with a given subject, the mental faculty given pride of place within the *ordre* of the *Méthodique* is, in the same manner as the *Encyclopédie*, the mental faculty of Reason. Next is Memory, followed by Imagination.

Doig then describes a rationale for Panckoucke’s desire for methodical arrangement that has crucial implications for its role in the formation of the Royal Institution:

²¹² See *Prospectus. Encyclopédie Méthodique, par Ordre des Matières, ou Bibliothèque Complete de Toutes les Connoissances Humaines, par une Société de Gens de Lettres, de Savans et D’Artistes, etc.*, (Paris: M. Ansiaux, 1783), 18, 22, 26, 29, 33, 37, 47, 54, 66, 69, 73, 77, 81, 83, 88, 92, 95, 98, 101, 104, 105, 107, 108, 111, 116, 120, 127, 129, for header divisions.

²¹³ *Méthodique*, Tome I. “Mathématiques,” i.

The ‘method’ of the title speaks to the new encyclopaedia’s intended instructional role. Each dictionary was to provide what can be described as a self-study course in its area of knowledge, with the introductory overview, an analytic outline organising the articles on the subject, and the alphabetised articles themselves. Editors and collaborators were engaged in a civic intellectual activity, just as many of them were simultaneously engaged in political or other public activities. As Groult notes, a fundamental aspect of the evolution that occurred towards the end of the eighteenth century concerned the expectation that the specialist would explain his knowledge to a wider public. In the sciences, the grouping of subjects for which *Méthodique* is the most renowned, Groult credits it with preparing the ‘développement des institutions et de l’enseignement général des sciences’. As we shall see, several of the non-scientific parts of the *Méthodique* also appear to have contributed in an influential way to this goal of instruction. Panckoucke did not position the *Méthodique* as a *machine de guerre* that would change the way of thinking, a major goal of the *Encyclopédie*. Rather, the *Méthodique* was designed in large part to provide instruction to a literate public desirous of a solid grounding in particular areas. The attentive reader with a good general culture and willing to invest some effort could understand even the technical and scientific texts; a possible exception is *Mathématiques*, which appears to require at least a certain amount of advanced study.²¹⁴

Recalling the letter from Robert Clifford that I quoted at the outset, I think Doig’s point here, along with Groult’s claim about the *Méthodique*’s significance regarding the institutionalization and teaching of the “sciences,” may offer some way of understanding why Clifford quotes the *Méthodique* specifically in requesting an alteration to the arrangement of the library catalogue for the Royal Institution. Contemporaries understood the *Méthodique* as essentially supplying a model for converting the written encyclopaedia genre, as it had become connected with the dictionary of arts and sciences tradition in the eighteenth century, *back* into the earlier sense of the encyclopaedia’s capacity to form a “circle of education,” a program of actual coursework. And as Doig suggests, the figures discussing the potential of the *Méthodique* as a model of order for an arts-and-sciences educational Institution can be thought of as “engaged in a civic intellectual activity, just as many of them were simultaneously engaged in political or other public activities.” In this sense the emphasis on “administration” that Jon Klancher mentions with regard specifically to the administrative figures associated with the early arts-and-sciences Institutions may need to be understood within the

²¹⁴ Doig, *Encyclopédie to Encyclopédie méthodique*, 4.

context of the encyclopaedic “editor” and “specialist” contributors coinciding with the trends of the *Méthodique* and *Britannica* toward specialist contribution.²¹⁵

I would now like to inquire concerning the extent to which administrators of the RI were evidently engaged in debate about the ordering of the curriculum and whether that debate bears any discernable relation to the encyclopaedic tradition of the previous century. An administrative position I will focus on is the RI office of “superintendent of the house.” Count Rumford, who had hitherto been closely overseeing all the operations of the RI, departed for France near the end of April 1802, during the Peace of Amiens. In addition, the RI’s first professor, Thomas Garnett, had fallen out with Rumford and resigned by June of 1801.²¹⁶ In their absence, Thomas Young, the professor of natural philosophy to the RI from 1802-1803, appears to have taken on some of the duties that they could no longer perform, among them “the superintendence of the house.”²¹⁷ Young, who had determined to take the position more seriously than Garnett “ever appear[ed] to have done,” would begin by outlining its official responsibility.²¹⁸ According to Young’s description, the “superintendant of the house is charged with the regulation of its internal economy.”²¹⁹ I want to

²¹⁵ Klancher, *Transfiguring*, 5.

²¹⁶ Bence Jones, *Royal Institution*, 177.

²¹⁷ Bence Jones, *Royal Institution*, 417: Letter from Young to Rumford, July 1801.

²¹⁸ Bence Jones, *Royal Institution*, 417.

²¹⁹ Bence Jones, *Royal Institution*, 207; See for clarification “economy, n.” OED Online. September 2019. Oxford University Press. <https://www.oed.com/view/Entry/59393?redirectedFrom=economy> (accessed November 07, 2019): Etymology: < Middle French *yconomie*, *economie*, French *économie*, †*oeconomie* management of a household or of its expenses or of domestic or familial matters (c1370), order according to which things are administered or organized (15th cent.), good use of a thing (15th cent.), economy or restraint in expenditure (c1510), good order in conduct and administration with regard to production and consumption (17th cent.), harmonious disposition of the parts of a whole (17th cent.), harmony in the different parts of an organized body (1671), order of things as established by Providence as regards salvation by Christ (1721) and its etymon classical Latin *oeconomia* (in post-classical Latin also *economia*, *yconomia*, *iconomia*) arrangement of material by an author, in post-classical Latin also organization of the Trinity (early 3rd cent. in Tertullian), plan, dispensation, providential arrangement (4th cent.), (administration or management of a) household (from c1356 in British sources), husbandry (from 1436 in British sources) < ancient Greek *οἰκονομία* management of a household or family, husbandry, thrift, arrangement, in Hellenistic Greek also administration, principles of government, arrangement of a literary work, stewardship (Septuagint, New Testament), plan, dispensation (New Testament), prudent handling or explanation of doctrine < *οἰκονόμος* house-steward (see OECONOMUS n.) + *-ία* –Y suffix.. Compare

suggest that the “internal economy” Young refers to is analogous to the organizing plans of the encyclopaedic editors, and in addition that the position of the superintendent is as much one of implementation as of planning. So Garnett’s superintendence likely amounted to realizing and harmonizing the different points of organization described in Rumford’s plan for the RI, while Young appears to have overseen the implementation of its more systematically oriented plan, as indicated by the letter of Robert Clifford.²²⁰

But as we can see, the plans for the Institution are in flux during this early period, particularly after Rumford’s departure. It is this flux, captured in local “crystallizations” like Clifford’s letter, which I am trying to highlight in this chapter.²²¹ Contingent elements like the RI’s declining financial situation, as well as Rumford’s unexpected departure, contributed to an intra-Institutional volatility that affected some of its most important designs for balancing the arts and sciences. Though the role of superintendent may have been created officially only after Rumford left, his strict control over every aspect of the establishment during his tenure made him the *de facto* superintendent prior to Garnett. As such, a whole host of features falls away from the plan for the RI after the departures of Rumford and Webster. Included in this list of defunct plans is most likely the arrangement of the library, which, if we take Clifford’s letter as evidence, Rumford had decided to organize alphabetically. If we take the differences in organization between the *Encyclopédie* and the *Méthodique* as a rough guide, it becomes possible to see that following through on Clifford’s suggestion means turning the RI’s priorities toward system, “par ordre des matieres,” while shifting them away, if only slightly, from alphabetical and access-driven ordering.

Italian *economia* (a1540). Forms with initial *y-* or *i-* in post-classical Latin (and hence such forms in French and English) reflect contemporary pronunciation of the Greek word. On the pronunciation history in English compare note at ECONOMIC *n.* and *adj.*

²²⁰ The vote to implement Rumford’s plan survives in the *Managers’ Meetings*, I-II, 21: Resolution 17.

²²¹ I borrow the term “crystallizations” from Klancher, *Transfiguring*, 127.

Although Young would only have performed the duties of superintendent from the middle of 1802 until his resignation on July 4 of 1803, so much is happening administratively during this time that Young's contribution to the structure of the arts and sciences at the RI remains crucial to understanding how the Institution functioned during this early period. A preface Young wrote (probably in 1802) for the unpublished second volume of the *Journals of the Royal Institution* reveals how he is trying to achieve an harmonious arrangement of the various components of the Institution in a way that mirrors the arrangement of the *Méthodique*.²²² After a brief description of the primary objects of the Institution, Young states the various means of achieving those objects. The

²²² *The Archives of the Royal Institution of Great Britain*, "Plan and Regulations of the Royal Institution: Submitted to the Opinion of the Managers by Dr. Young," (Unpublished Manuscript: [RI.5/14/1], Undated), Full Transcription: "[1] The professed object of the Royal Institution is the diffusion of useful knowledge, derived from science, and applicable to the purposes of life.

"The means proposed for attaining this end are,
 "first, an annual delivery of lectures on the various branches of natural philosophy and chemistry, familiar enough to be intelligible to moderate capacities, and intensive enough to comprehend the most important applications of theory to practice; secondly, the furnishing of a spacious repository with models of such machines (letter struck out) and apparatus <instruments and utensils> as, after sufficient experimental examination, can with sufficient confidence be recommended for introduction into common use; thirdly, the establishment of a chemical laboratory, with proper apparatus and material, to be employed in such investigations as are of the greatest practical utility; fourthly, the provision of reading rooms, supplied as well with (beginning of illegible word struck out) periodical publications, relative to science as with works of acknowledged merit, particularly relative to the sciences and the arts; and lastly, the extension of the benefits derived which are the objects of <from> the Institution, by publishing from time to time, in its Journals, such improvements as may either have been made by its means, or may have been otherwise suggested by individuals, in foreign countries or in our own.
 [2]

"These objects are indeed of too great magnitude to be completely obtained at once; but a considerable progress has already been made in the pursuit of them, and a continuance of the public support alone is required, for rendering the Royal Institution as well a national ornament as a private accommodation.

"The lectures are already established on an unprecedented scale <in the order of the systematic compendiums which have been published; and weekly notice is given- to the subscribers of the subjects of each lecture."

philosophical lectures “on the various branches of natural philosophy and chemistry” were to be, in a manner not unlike Doig’s description of the *Méthodique*, “familiar enough to be intelligible to moderate capacities, and intensive enough to comprehend the most...important applications of theory to practice,” while a “spacious repository” was to be built “with models of such machines...instruments and utensils as, after sufficient experimental examination, can with confidence...be recommended for introduction into common use.”²²³ Explaining how much progress had been made in implementing this goal, Young continues, “The lectures are already established on an unprecedented scale in the order of the systematic compendiums which have been published; and weekly notice is given to the subscribers of the subjects of each lecture.”²²⁴ While the “systematic compendiums” to which Young refers are not specified further, the only sort of thing it could be aside from something like the *Encyclopédie Méthodique* is a syllabus of the upcoming lectures, which the grammar of the statement and one other piece of external evidence makes more likely.²²⁵ This syllabus, as a systematic compendium, is in accord with the precedent of systematic arrangement set by the *Méthodique*. From what remains of these syllabi, they appear almost as small text books for following the main points of the lectures, very little resembling the modern syllabus that indicates a schedule of readings and class meetings.²²⁶ This evidence supports the idea that Young decided on a systematic arrangement of the lectures on natural philosophy and chemistry,

²²³ Young, “Plan and Regulations,” 1.

²²⁴ Young, “Plan and Regulations,” 2.

²²⁵ Bence Jones, *Royal Institution*, 192. Thomas Young - “Not that anything like an abstract is intended, for this may be found in the compendiums already published; but it may be the more proper to notice some experiments as it has not been possible to introduce an enumeration of experiments into those compendiums.”

²²⁶ “syllabus, n.” OED Online. September 2019. Oxford University Press. <https://www.oed.com/view/Entry/196146?redirectedFrom=syllabus> (accessed November 07, 2019), “Syllabus: a. A concise statement or table of the heads of a discourse, the contents of a treatise, the subjects of a series of lectures, etc.; a compendium, abstract, summary, epitome.”

inclusive of the “useful” and “mechanical” arts connected with those sciences (At that time these subjects constituted the RI’s entire lecture curriculum), which in Panckoucke’s parlance is the same as saying Young arranged the lectures encyclopaedically (Panckoucke’s “l’ordre encyclopaedique”). This arrangement answers to the ordering of the lectures, but it only hints at a concern with systematic arrangement in the “internal economy” of the RI as a whole.

In 1807 Young produced a two-volume publication of the lectures he gave on natural philosophy and the mechanical arts at the RI from 1802-1803, about the same time he would have written of the “systematic compendiums” for his lectures.²²⁷ Remembering that “encyclopaedia” is commonly rendered in English as “circle of knowledge,” the lectures themselves provide explicit evidence that Young is in fact organizing his course as an encyclopaedic endeavor:

We have to extend our views over *the whole circle of natural and artificial knowledge*, to consider in detail the principles and application of the philosophy of nature and of art. We are to discuss a great number of subjects, to each of which a separate title and rank among the sciences has sometimes been assigned; and it is necessary, in order to obtain a distinct conception of the foundation and relation of each subdivision, to pay particular attention to the order in which the sciences are to be treated, and to the connexion which subsists between them, as well as to the degree of importance, which each of them claims, with regard either to theory or to practice. To insist on the propriety of a distinct and logical order is unnecessary; for however superfluous we may deem the scholastic forms of rhetoric, it is confessedly advantageous to the judgment as well as to the memory, to unite those things which are naturally connected, and to separate those which are essentially distinct. When a traveller is desirous of becoming acquainted with a city or [p. 9] country, before unknown to him, he naturally begins by taking, from some elevated situation, a distant view of the distribution of its parts; and in the same manner, before we enter on the particular consideration of the subjects of our researches, it may be of use to form to ourselves a general idea of the sciences and arts which are to be placed among them.²²⁸

Passages such as this show almost undeniably that among the most important models for the arts and sciences at the Royal Institution are the eighteenth-century systematic encyclopaedias. Young’s insistence on the importance of “pa[y]ing particular attention to the order in which the sciences are

²²⁷ Thomas Young, *A Course of Lectures on Natural Philosophy and the Mechanical Arts* (London: Joseph Johnson, 1807).

²²⁸ Young, *Lectures*, 8, (my emphasis).

to be treated, and to the connexion which subsists between them” suggests a meticulous arrangement intended to be understood as a hierarchy of knowledges. In addition, Young has also arranged the subject matters according to the “degree of importance, which each of them claims, with regard either to theory or to practice.” As I have discussed in some detail above, this reference to theory and practice is part of the intention to establish a communicative ideal, indicative of the degree of balance between science and art, that the Royal Institution’s lecture curriculum sought to achieve. The “distant view” from which Young intends to describe the “distribution of its parts” accords not only with encyclopaedic precedents of stemmatic analysis, but also looks forward to his own arrangement of science and art at the Royal Institution.

Although the 1807 publication is nominally a collection of his natural philosophy lectures, Young also includes in volume II a massive catalogue of sources related to all the subjects of natural philosophy and the useful and mechanical arts, arranged according to subject rather than the alphabet. In addition, this second volume provides mathematical demonstrations in support of all the experimental demonstrations he made in the theatre of the RI during the lectures themselves.²²⁹ The preface to the first volume also refers to his concern with systematic arrangement:

The arrangement of the whole work is probably different in many respects from any other that has yet been adopted; the extent of the subjects, which have been admitted, rendered it necessary to preserve a very strict attention to a methodical and uniform system; and it is presumed, that this arrangement will be considered as in itself of some value, especially in a work calculated to serve as a key, by means of which, access may be obtained to all the widely scattered treasures of science; and which will enable those, who are desirous of extending their researches in any particular department, to obtain expeditiously all the information that books can afford them.²³⁰

Clifford’s suggestion that a library catalogue “par ordre des matieres” would allow “Men of Science” to “become possessed of what is at present hidden [at] the Museum, the Royal, or antiquary

²²⁹ Young, *Lectures*, Vol. II.

²³⁰ Young, *Lectures*, Vol. I. x.

societies,” to more easily learn “what has been done in each branch,” so that “their labours will not run the risk of being vain,” clearly resembles Young’s comment here. Taken together as “the arrangement of the whole work,” Young had “calculated” the work “to serve as a key, by means of which, access may be obtained to all the widely scattered treasures of science.” This evidence at least suggests a connection between Clifford’s letter and Young’s position as superintendent, wherein Young, upon the approval of the Managers, would have been in charge of implementing a plan of arrangement for the RI’s “internal economy” that accorded with the will of systematically-inclined proprietors like Clifford. While the above passage from Young refers specifically to his book, rather than the “internal economy” of the RI, I would argue that these two things operate in conjunction with one another, and hence their arrangements would be nearly the same. And if we take into account that Young also says in his introductory lecture that he had arranged the library and the lectures according to a unified plan in order for the lectures to act as an elementary stepping stone to more advanced independent study in the library, the connection between the published lectures, catalogue, and mathematical demonstrations, and the Institutional organs called the scientific lectures, the experimental demonstrations, and the library and catalogue of reference, becomes all the more clear.²³¹ Thus, aside from editorial changes, if the lectures delivered were produced in accordance with the “systematic compendiums,” and the order of those lectures is preserved in the ordering of the lectures in Young’s published work, then his consideration of system in the whole work may serve as an analog to the actual organization of the arts and sciences as practiced at the Royal Institution.

Section II: “Principle and Application in the Philosophy of Nature and Art”: An Institutional Infrastructure for the Arts and Sciences

²³¹ Young, *Lectures*, Vol. I, 5.

Such is the Outline of ye Measures adopted, & the Opinions which have influenced the Managers, with Respect to the Approximation of the House of the Institution in its actual State; And while they are directing their Attention, on the one Hand, to ye Consideration of present local Convenience & future Accomodation, commensurate to the Pursuit of an Establishment of such eminent public Utility, their Endeavours, on ye other Hand, have been [...] to secure such able professional & scientific Assistance as might afford the Institution the Means of diffusing the Knowledge of the [valuable] Improvements in the Arts, & thereby fulfilling the second Object of its Establishment, that of "teaching the application of Science to the useful Purposes of Life.

—Royal Institution of Great Britain, Managers' Minutes²³²

If the Managers did indeed seek a complete systematic arrangement for the Royal Institution, another question immediately arises: how would that systematic arrangement enter into the structure of the various aspects of arts-and-sciences Institutional practice? This section will address that question as it pertains to the RI's famous curriculum of lectures. I will begin by linking the Institutional feature called the "philosophical lectures" as described by the *Prospectus* and *Royal Charter* with the actual structure of the lectures delivered at the RI. After 1803, these lectures are increasingly called "scientific," rather than "philosophical," so for consistency I have elected to call them the "scientific" lectures throughout. At the turn of the nineteenth century, men of science had begun to use "scientific" as a term implying systematic treatment, and at its foundation, systematic

²³² *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of the Managers' Meetings 1799-1900*, Volumes I-II, (Ilkley: Scholar Press Ltd., 1971), 108: A transcription of the Royal Institution Managers Report and Charter from the 3rd of February, 1800.

treatment implied procedure according to “principle,” or “a set of principles.”²³³ In what follows, I will show how this systematic procedure informed the basic Institutional function of the RI’s scientific lectures.

I will then turn my attention specifically to the lectures on the arts. These lectures, importantly on the scientific principles of the arts, are one of the principal pedagogical innovations of the arts-and-sciences Institutions. Prior to 1803, the arts lectures at the RI included only the branch called the “useful” arts, or the arts understood to have a determinate use, such as tanning, dyeing fabrics, agriculture, and the building of machinery.²³⁴ After its first financial crisis in 1802-3, however, Thomas Bernard and other RI managers would lead an effort to augment the lucrative popular lecture curriculum to include the fine arts, as well as other subjects that had hitherto fallen outside the scope of the Institution, such as moral philosophy, physiology, and botany. This initial augmentation coincides with what many historians of the RI have dismissively called its period of “fashionable popularity,” during which the Managers apparently lost track of its scientific mission. This section attempts to contest that historiographical account by showing how arts-and-sciences lecturing procedures during this period, including those on the fine arts, remain identical across disciplinary boundaries, suggesting that the dismissive attitude toward this period has more to do with biases against the fine arts, and as Harriet Lloyd has recently argued, against the influx of women attendees as a result of the augmentation, than with a putative neglect of scientific rigor.²³⁵

²³³ “system, n.” OED Online. September 2019. Oxford University Press.
<https://www.oed.com/view/Entry/196665?redirectedFrom=system> (accessed November 16, 2019).

²³⁴ Today these arts are typically called “craft” practices, and have developed within scientific institutions as “technology.”

²³⁵ See Harriet Olivia Lloyd, *Rulers of Opinion: Women at the Royal Institution of Great Britain, 1799-1812*, (Doctoral Thesis: University College London, 2019).

The largest portion of this section will track the short period from about 1803-1810 during which the fine arts emerged, briefly flourished, and were finally overshadowed by the introduction of what Humphry Davy called “more scientific and more elementary” lectures. I am particularly interested in the fate of the fine arts curriculum at the RI because I think it helps to generate certain distinctive features of British Romantic criticism on fine art and poetry. Some of these features have long been a primary concern for scholars of the Romantic period in Britain, such as an invigorated discourse on the intellectual philosophy of the “Imagination” and its peculiar relationship to a specifically Romantic use of the word “Poetry,” which I will discuss in detail toward the end of this chapter, and throughout chapter III. As I have argued above, the encyclopaedic precedents for the RI curriculum, and the ways in which that tradition tended to take less seriously subject matters associated with the faculty of imagination (i.e. the fine arts), inform the trajectory of the subjects variously included and excluded from its arts-and-sciences structure. Hence, what is at stake in the decline of the fine arts curriculum at the RI is the role of the imagination and its products in the institutionally sanctioned intellectual life of Britain.

Other features of Romantic discourse that the fine arts curriculum helps to generate are more surprising. Kurtis Hessel, for instance, has recently argued that it is the methodological collision between chemistry and poetry at the RI that is in large part responsible for elevating the intellectual method of “analysis,” which had been so successful in Davy’s attempts to isolate the chemical elements, as a valid literary-critical method for isolating fundamental categories of meaning in literary texts.²³⁶ In this chapter, Hessel’s argument becomes one important piece of a perhaps even more surprising story. I suggest instead that the special use of the word “Institution,” current as early as Chambers’ *Cyclopædia*, to denote the “Elements of instruction; first principles of a science or

²³⁶ Kurtis Hessel, “The Romantic-Era Lecture: Dividing and Reuniting the Arts and Sciences,” *Configurations*, 24:4 (2016), 501-532; 517-521.

art,”²³⁷ informs the very search for “elements” and “principles” on behalf of which Davy would test out the effectiveness of the analytical method. Hence, I will be arguing that it is the structure of the Institution itself that determines the direction of inquiry toward elements and principles broadly conceived. From this perspective, the RI acts as the Institutional venue within which Davy’s method of analysis could begin to take a successful and transferable form.

The first professor of the Royal Institution was a little-known figure named Thomas Garnett. Garnett had been a lecturer on natural philosophy at the Andersonian Institution in Glasgow before Count Rumford hired him to teach at the RI.²³⁸ He was hired as professor of natural and experimental philosophy and chemistry, and initially, it seems the managers thought one professor would be sufficient to teach the entire RI curriculum.²³⁹ Within a year, however, it was clear that natural philosophy and chemistry would have to be taught separately.²⁴⁰ Garnett stayed on briefly to acquaint Thomas Young and Humphry Davy with their new positions at the Institution, but after a falling out with Rumford and an illness that would eventually take his life, Garnett took a leave of absence from which he did not return.²⁴¹ By August 2, 1802, Dr. Garnett was dead, Davy

²³⁷ “institution, n.” OED Online: “†5. Usually in *plural* (a) Elements of instruction; first principles of a science or art; (b) a book of first principles, an elementary treatise; = INSTITUTE *n.* 3. *Obsolete*.”

²³⁸ Managers give permission to Count Rumford to hire Dr. Garnett on September 14, 1799. See *Managers’ Meetings*, I-II, 57. Before Garnett, the Managers inquired about a Cambridge lecturer named Reverend Fayrish – April 24, 1799; *Managers’ Meetings*, I-II, 27: Resolution 3. Hippisley enquires about Rev. Mr. Fayrish’s (already lecturer at Cambridge) qualifications in considering him as a potential lecturer at the RI; *Managers’ Meetings*, I-II, 31: Resolution 2. May 4 1800 Mr. Fayrish “seemed not disinclined to offer his Services towards the End of the year; probably from about the middle of December to the middle of Feb.y.”

²³⁹ *Managers’ Meetings*, I-II, 57. The exact wording of Garnett’s appointment says “Professor of experimental Philosophy, Mechanics, & Chymistry, & also as Scientific Secretary to the Royal Institution, & Editor of the Journals, at a Salary of 330£ [per] An.”

²⁴⁰ I am speculating, but this expansion of the professorship may have to do with the success of the lectures relative to the model rooms.

²⁴¹ *Managers’ Meetings*, I-II, 189-190. June 15 1801 is the date of approval of Garnett’s resignation.

had been elevated from lecturer to professor of chemistry, and Thomas Young had become the new professor of natural philosophy.²⁴²

When Young was hired as professor of natural philosophy and superintendent of the house, he began, as might be expected, “to prepare a course of lectures on natural philosophy.”²⁴³ But in doing so, he realized that “the plan of the Institution required something more than a mere compilation from the elementary works at present existing; and that it was [his] duty to collect from original authors, to examine with attention, and to digest into one system, every thing relating to the principles of the mechanical sciences, that could tend to the improvement of the arts subservient to the conveniences of life.”²⁴⁴ Young’s cataloguing efforts resulted in a massive catalogue of reference for the reading room of the RI that consulted and arranged over twenty thousand sources to be found both in the RI and elsewhere in London institutions such as the British Museum, the Royal Society, and the Society of Antiquaries.²⁴⁵ In accordance with the request of Robert Clifford mentioned in the previous section, Young organized this catalogue according to the encyclopaedic arrangement “par ordre des matieres,” which is to say, according to subject matter rather than the letters of the alphabet.

Young’s published lectures, and as he suggests, the lectures as delivered at the RI between 1802 and 1803, follow essentially the same structure as the catalogue, where the division of science is described first, followed by the arts thought to be most closely connected with them. In his capacity as superintendent of the house, Young conceived of the lecture program and the reading room as

²⁴² For Garnett’s death see *Managers’ Meetings*, III, 55; Davy’s Elevation occurs May 31 1802, see *Managers’ Meetings*, III, 43; Thomas Young is appointed professor July 6 1801, *Managers’ Meetings*, II, 203.

²⁴³ Thomas Young. *A Course of Lectures on Natural Philosophy and the Mechanical Arts*, Volume I, (London: Joseph Johnson, 1807), v.

²⁴⁴ Young, *Lectures*, Vol. I, v.

²⁴⁵ Young, *Lectures*, Vol. I, vi.

two gradations of an essentially coherent educational arrangement.²⁴⁶ The lectures represented the elementary component of coursework, while the reading rooms would be reserved for the more advanced scholars. In order to create a seamless transition from one level to another, Young thought it best to order both features of the RI according to the uniform structure of the catalogue.²⁴⁷ In his introductory discourse to *A Course of Lectures on Natural Philosophy and the Mechanical Arts*, Young describes his systematic arrangement in the following way:

We have to extend our views over the whole circle of natural and artificial knowledge, to consider in detail *the principles and application of the philosophy of nature and of art*. We are to discuss a great number of subjects, to each of which a separate title and rank among the sciences has sometimes been assigned; and it is necessary, in order to obtain a distinct conception of the foundation and relation of each subdivision, to pay particular attention to the order in which the sciences are to be treated, and to the connexion which subsists between them, as well as to the degree of importance, which each of them claims, with regard either to theory or to practice. To insist on the propriety of a distinct and logical order is unnecessary; for however superfluous we may deem the scholastic forms of rhetoric, it is confessedly advantageous to the judgment as well as to the memory, to unite those things which are naturally connected, and to separate those which are essentially distinct. When a traveller is desirous of becoming acquainted with a city or [p. 9] country, before unknown to him, he naturally begins by taking, from some elevated situation, a distant view of the distribution of its parts; and in the same manner, before we enter on the particular consideration of the subjects of our researches, it may be of use to form to ourselves a general idea of the sciences and arts which are to be placed among them.²⁴⁸

This paragraph contains references to most of the important organizational features of the philosophical lectures considered in this section. Young's Anglicization of the word "encyclopaedia" into "circle of...knowledge," as well as his references to the "connexions" between the various sciences, and his concluding analogy to a "traveller," should now be familiar as indicators that the systematic encyclopaedia indeed informs the intellectual frame, the *scientia scientiarum*, of the RI lectures. By making explicit his, and insofar as he speaks for the RI, the Institution's goal of

²⁴⁶ Young, *Lectures*, Vol. I, 5.

²⁴⁷ For catalogue and content list, see Young, *Lectures*, II, 87-520.

²⁴⁸ Young, *Lectures*, I, 8 (my emphasis).

considering “in detail the principles and application of the philosophy of nature and art,” Young provides a crucial indication of the precise conceptual structure of the arts and sciences within the RI lecture program. In a manner consistent with many British intellectuals at the turn of the nineteenth century, Young’s usage of the term “philosophy” is functionally synonymous with a notion of “system” or “science”²⁴⁹ that had begun to take shape along similar lines as the German “Wissenschaft.”²⁵⁰ As “philosophy” blended with “science” to denote “system,” or a systematic pursuit of knowledge, it gradually lost its connection to the notion of a dialectically grounded love of wisdom. Such blending can even be seen to have taken place within the RI lectures themselves. Take for instance the case of John Landseer, who, in the published version of his *Lectures on the Art of Engraving*, first delivered at the RI in 1805, provides a note of clarification concerning his use of the word “philosophy.” “Aware,” Landseer remarks, “that this word originally meant the love of wisdom, it may not be unnecessary to apprise the reader that I here use it to denote the science of connecting principles, which, as nearly as I can ascertain, is its modern acceptance.”²⁵¹ Hence, when Young describes a “philosophy of nature and art,” he is articulating the connection between the portion of the arts-and-sciences Institutional structure devoted to “Science,” namely the lectures,

²⁴⁹ During the early nineteenth century, the word “science,” as it began to inherit the traditional forms of inquiry called natural philosophy, maintained a general analogy to the word “system,” as in the following passage from Andrew Bell’s *The Madras School, Or, Elements of Tuition* (London: J. Murray, 1808), 49-51: “[Practices] differ from the system, as art does from science. The system, consisting of a series of consecutive laws, linked together in the closest union, and depending on a common principle, assimilates itself to a science, however humble that science may be. Its general laws apply alike to every stage and branch of elementary Education. The practices which follow are of a widely different description. Circumscribed in their operation, each of them applies solely to the peculiar step in the progress of elementary Education for which it is framed. Consisting of a set of subordinate devices or helps in tuition, and not depending on the general principle of conducting Education through the agency of the scholars themselves, they may be said to constitute an art, as that word is used, in contradistinction to science, to denote a bare collection of rules or instructions. But this will be better understood when we have explained the nature, the use, and the peculiar advantages of these alphabetical, syllabic, and other initiatory processes, by means of which the art of reading, spelling, writing, and arithmetic is facilitated and expedited.”

²⁵⁰ See Chad Wellmon, *Organizing Enlightenment: Information Overload and the Invention of the Modern Research University* (Baltimore: Johns Hopkins University Press, 2015), 13, 36.

²⁵¹ John Landseer, *Lectures on the Art of Engraving, Delivered at the Royal Institution of Great Britain*, (London: Longman, Hurst, Rees, and Orme, 1807), 108.

and the scope of the objects that fall within the purview of its consideration for systematic treatment, namely the objects of “nature,” and those of “art.”²⁵² If, in the specific context of the RI lectures, the “scientific” and the “philosophical” had become interchangeable, where the “scientific” referred to the system, knowledge, or “science” of “connecting principles,” then the systematic element embedded in Young’s description of the RI lecture structure is available via the emphasis he puts on the identification of “principles” for reasoning on a given subject, whether it be “nature” or “art.” Hence, as I proceed to my discussion of the RI lectures on the arts, I will understand the effort by RI lecturers to make explicit the fundamental or connecting “principles” of their subject as an indication that the lectures are attempting to conform to the Institutional demand that its subjects be treated in a “strictly scientific” manner, and thus must be understood as lectures on the “science” of the arts.²⁵³

Young’s emphasis on “application” insofar as it “could tend to the improvement of the arts subservient to the conveniences of life” points to the second fundamental feature of the RI lectures. Where Young claimed that older society models like the Royal Society of London had, at least by the time Young delivered his lectures in 1802, neglected the question of utility in favor of pure speculation, a renewed concentration on questions of “application” constitute the uniquely “practical” appeal of the lecture form available at the RI and other arts-and-sciences Institutions like it. The RI lecturers whose lectures have survived all note the importance of this novelty and evidently appreciate the opportunities it makes possible. These possibilities find their instantiation in two recognizable forms. The first is external, and is related, obviously enough, to highlighting the

²⁵² Landseer’s acknowledgement of a shift in usage helps to explain the increasing tendency of the RI’s managers, lecturers, and associates, after about 1803, to refer to the lectures as “scientific” rather than “philosophical,” and that shift is the justification for my own decision to default to the phrase “scientific lectures” throughout this chapter.

²⁵³ Although this understanding of what is happening may already be obvious, I think it is nonetheless important to maintain a clear picture, in light of the failure of the repository and model rooms, of the specific feature of the arts-and-sciences Institutional configuration that supports the lectures (i.e. that feature affiliated with “science”).

potential uses of the knowledge provided in the lectures for the broader community. The second is internal, and finds its instantiation in the use the RI lecturers make of the available apparatus, by which they can alternatively “demonstrate” or “illustrate” their scientific principles. Together, Young’s invocation of “principles and application” functions as the signature of the unified arts-and-sciences structure of the RI’s scientific lectures. In the following sections I will describe the ways in which these Institutional requirements emerge in the courses delivered there, first with respect to the useful arts, and then the fine arts. With all of this in mind, it is now possible to see how the emphases in the full name of the Royal Institution act as a synecdoche for actual Institutional practice: *The Royal Institution of Great Britain, for Diffusing the Knowledge, and Facilitating the General Introduction of Useful Mechanical Inventions and Improvements; and for Teaching, by Courses of Philosophical Lectures and Experiments, the Application of Science to the Common Purposes of Life.*

Section III: A Science of the Useful Arts:

Prior to the development of the RI’s fine arts curriculum, the only arts permitted as subjects for the scientific lectures would have been those denominated “useful arts,” or the arts understood to have a determinate use, such as tanning, dyeing fabrics, agriculture, and the building of machinery. It will be important to understand precisely how the useful arts fit into the lecture scheme, as that would provide the precedent for the fine arts curriculum. In his introductory discourse, Young, apparently feeling the novelty of his Institutional situation, explicitly defends the necessity of developing general theories of the arts, and cautions his audience against relying too heavily on philosophical speculation:

Upon the advantages of mathematical and philosophical investigation in general, it is unnecessary to enlarge, because no liberal mind can require any arguments to be convinced how much the judgment is strengthened, and the invention assisted, by habits of reasoning with caution and accuracy. The public opinion is rather, on the contrary, in danger, at least in some parts of the world, of being too exclusively biassed in favour of natural philosophy; and has sometimes been inclined to a devotion too much limited to science, without a

sufficient attention to such literature as an elegant mind always desires to see united with it. As to the practical importance of *philosophical theories of the arts*, it may have been overrated by some, but no person is authorised to affirm, that it has been too highly estimated, unless he has made himself master of every thing that theory is capable of doing; such a one, although he may in some cases be obliged to confess the insufficiency of our calculations, will never have reason to complain of their fallacy.²⁵⁴

Young's warning against favoring natural philosophy too exclusively, while defending literature and theories of the arts from potential detractors, exhibits a characteristic arts-and-sciences defense of the RI's scientific lectures. His description with respect to public opinion (which judging indirectly from this passage is an overestimation of the value of theories of "nature," and an underestimation of theories of "art") unites the philosophy of nature and art into a coherent whole. The very fact that "philosophical theories of the arts" constitute one half of the logic underpinning the lectures provides a clear indication of the Institutional scope of developing theories of art at the RI.

Yet, as I mentioned above, the divisions of Young's large catalogue of reference "follow very nearly the same order as the text of the lectures, so that there has been no occasion for any references from one to the other."²⁵⁵ Just as in the *Encyclopédie Methodique*, the basic arrangement of subjects in the catalogue appears as a stemmatic analysis of the arts and sciences, with mathematics appearing as the fundamental science, followed by the general heading of natural philosophy, under which appear the sciences of Mechanics, Hydrodynamics, Pneumatics, and Physics (i.e. Astronomy). What is particularly interesting is the structure of the arts and sciences embedded in Young's systematic catalogue. Within each division of science, we find those useful arts that Young supposes to be most closely connected with it.²⁵⁶ Hence, under "Mechanics" (Practical Mechanics) appear the

²⁵⁴ Young, *Lectures*, I, 8.

²⁵⁵ Young, *Lectures*, II, iii.

²⁵⁶ See for instance Young, *Lectures*, I, 11: "Introduction: Such instruments and machines as are more or less immediately subservient to mathematical purposes, will be the first in order, including all the mechanism of literature, the arts of writing, engraving, and printing, in their various branches, and the comparison of measures, with each other and with different standards; the principles of perspective will also form a useful appendage to the description of geometrical instruments. The determination of weights, and of the magnitude of moving forces of various kinds, constituting the

arts of engraving and etching, of printing, architecture, carpentry, wheelwork, rope making, timekeeping (clock making), etc. Under “Hydrodynamics” appear the arts of naval architecture, shipbuilding, fountain making, while the category of “Pneumatics” contains the arts of building steam engines, gun making, and musical instrument making, among others.²⁵⁷

So too, one of Young’s primary goals in this introductory lecture is to give the various mechanical arts their proper subordination within the science of mechanics. In articulating the means by which he supposes these general theories of the arts might be developed, Young reinscribes their dependence on the knowledge, or theories of “nature,” such as in his attempt to attach a general theory of building construction to the principle of “gravitation” in the following passage:

All these [natural] subjects are in part preparatory to the immediate examination of the mechanical arts and manufactures, which are so numerous and complicated as not to admit of regular arrangement without some difficulty: they may however be divided into such as are principally employed for resisting, for modifying, or for counteracting, any motion or force; thus architecture and carpentry are chiefly intended to resist the force of gravitation: these comprehend the employments of the mason, the bricklayer, the joiner, the cabinet maker, and the locksmith. In these departments it is often of the utmost importance to the mechanic, to recur, especially in works of magnitude, to philosophical principles; and in many other cases, where there is no need of much calculation, we may still be of service, by collecting such inventions of ingenious artists, as are convenient and elegant, and which, although simple in their principles, are not obvious in their arrangements; and in the same manner we may be able, in taking a general view of other arts and manufactures, to explain their principles, where theory is concerned, and to exhibit practical precedents, where the nature of the subject requires no refined investigation.”²⁵⁸

Although it is evident from the preceding passage that a discourse had already emerged concerning the question of theorizing the arts, Young’s preliminary attempt is particularly interesting because of its Institutional context. Thinking through Young’s first general grouping, the “resisting” arts of

science of statics, will be the next subject, and will be followed by the consideration of the retarding force of friction, and of the passive strength of the various materials, that are employed in building and in machinery.”

²⁵⁷ See Young, *Lectures*, II, 87-103.

²⁵⁸ Young, *Lectures*, I, 8.

architecture and carpentry, and the subordinated manual arts connected with them, all fall under that head, and may be theorized as a mode of resistance to the science of mechanics pertaining to gravitation. What are the arts whose common principles involve resistance to gravitation? Young's description, presented to the RI audience in 1802, prioritizes theory very deliberately, as he of course still thinks of these scientific lectures as one of the three primary features of the RI, the others being the chemical laboratory and the model rooms, also called the arts repository. But with the imminent failure of the model room, which Young understands as providing what is insufficient about the scientific lectures, namely, "inventions of ingenious artists...which, although simple in their principles, are not obvious in their arrangements," the scientific lectures and the laboratory would become the primary structural features of the RI over the next twenty-five years.

* * *

That Young's procedural emphasis on "principle and application" is in fact a regular aspect of RI lecturing practice becomes clear in the literary remains of the lectures themselves. Important primary evidence of the organization of the courses that Humphry Davy taught at the RI, for instance, comes from a "Syllabus of a Course of Lectures on Chemistry" (undated but likely delivered regularly from 1802), and "Outlines of a Course of Lectures on Chemical Philosophy" (dated 1804), both included in volume II of his *Collected Works* (1839-1840).²⁵⁹ The "Syllabus" indicates that "Division I" of the first part of the course would concern "the Chemical Powers, and the modes of their application," while "Division II" proposes to treat "Of Undecomposed Substances or Simple Principles."²⁶⁰ Part III of the course would be devoted to "The Chemistry of

²⁵⁹ Humphry Davy, *The Collected Works of Humphry Davy*, ed. John Davy (London: Smith, Elder, and Co., 1839-1840). See also Davy's lectures on geology, Humphry Davy, *Humphry Davy on Geology: The 1805 Lectures for the General Audience*, eds. Robert Siegfried and Robert H. Dott (Madison: University of Wisconsin Press, 1980).

²⁶⁰ Davy, "Contents," *CW*, II, xi.

the Arts,” wherein Davy could apply the natural operations of chemistry to the various “useful” arts of agriculture, tanning, bleaching, dyeing, metallurgy, glass-making, and the preparation of food.²⁶¹

Distinctions from the “Syllabus,” such as Davy’s assertion that “the simple principles of the chemists are substances which have not been hitherto composed or decomposed by art; and they are elements, only in relation to other known substances,” subtly describe how the principles stand in relation to elements as the “sensible agents of chemistry” to their material substrate.²⁶² Oxygen, for instance, is the element common to the principle or sensible action of oxidation. But Davy’s assertion also acknowledges that the distinctions remain relative to the development of chemical inquiry, and are occasionally interchangeable, as exemplified by Davy’s tendency to describe the material bases of chemical action as “elementary principles.”²⁶³

This meticulous attention constructing theories of art, to elements, principles and their application to both nature and art, would emerge as a basic point of pedagogical practice in the publications Davy based on his Royal Institution lectures, as for instance in his comments on the art of tanning in his famous “Discourse Introductory to a Course of Lectures on Chemistry” (1802):

Tanning and the preparation of leather are chemical processes, which, though extremely simple, are of great importance to society. The modes of impregnating skin with the tanning principle of the vegetable kingdom, so as to render it strong and insoluble in water, and the methods of preparing it for this impregnation have been reduced to scientific principles. And if the improvements resulting from new investigations have not been uniformly adopted by manufacturers, it appears to be owing rather to the difficulty occurring in inducing workmen to form new habits, to a want of certain explanations of the minutiae of the operations, and perhaps in some measure to the common prejudice against novelties, than to any defect in the general theory of the art as laid down by chemical philosophers, and demonstrated by their experiments.²⁶⁴

²⁶¹ Davy, “Contents,” *CW*, II, xii.

²⁶² Davy, “Syllabus,” *CW*, II, 333.

²⁶³ Davy, “Outlines,” *CW*, II, 441-442.

²⁶⁴ Davy, “Discourse Introductory,” *CW*, II, 317.

The “scientific principles” of *art* that define the best “methods of preparing [skin] for...impregnation” deploy the “tanning principle” (i.e. the sensible action of tanning) occurring in *nature* as a means to an end, as an “application” of “science to the common purposes of life.” So a science of the art will to some degree always be dependent on the science of nature for its improvement. This way of thinking about the application of nature’s principles toward the improvement of the science of art forms the underlying logic of the RI lectures.

Davy would continue to clarify this relation between elements, principles, and their application to the arts in the two books he based in part on the RI lectures, as for instance in “Lecture I” of his *Elements of Agricultural Chemistry* (1813), in which he comments

that the study ought to be commenced by some general enquiries into the composition and nature of material bodies, and the laws of their changes. The surface of the earth, the atmosphere, and the water deposited from it, must either together or separately afford all the principles concerned in vegetation; and it is only by examining the chemical nature of these principles, that we are capable of discovering what is the food of plants, and the manner in which this food is supplied and prepared for their nourishment. The principles of the constitution of bodies, consequently, will form the first subject for our consideration.

By methods of analysis dependent upon chemical and electrical instruments discovered in late times, it has been ascertained that all the varieties of material substances may be resolved into a comparatively small number of bodies, which, as they are not capable of being decomposed, are considered in the present state of chemical knowledge as elements.

Davy would repeat this pedagogical point in the *Elements of Chemical Philosophy* (1812), when he synchronizes the Institution’s lecturing procedure with its constituent analogies in nature, proposing that the science of chemistry could be most quickly taught by “recurring to its general principles, so as to ascertain the powers and properties of matter, which are the causes of the phenomena of chemistry; and of applying these principles to the actions taking place between the various substances existing in nature, or produced by art.”²⁶⁵ Together, these examples from Davy show how the structural obligations of the RI lectures inform his lecturing practice, and even hint at how

²⁶⁵ Davy, *Elements of Chemical Philosophy*, in *CW*, IV, 44.

these procedural features of RI lecturing begin to radiate out or “diffuse” into the broader community by way of his published books and lectures.

Section IV: A Science of the Fine Arts:

Although an explicit accommodation of the fine arts within the RI lecture program appears nowhere in its founding documents, the initial augmentation of the lectures after 1803 enabled the emergence of a fine arts curriculum that, until the reforms of 1810, would come to compete with and even threaten to overshadow its initial curriculum of natural philosophy, chemistry, and the useful arts. An interesting and particularly arts-and-sciences feature of these fine arts lectures is that they were all taught by practicing fine artists. The RI invited prominent figures affiliated with the Royal Academy, such as John Opie, to deliver lectures on painting. The royal painter William Marshall Craig’s lectures on drawing, painting, and engraving, were a regular feature of the arts-and-sciences Institutional circuit. The Oxford poet and orator Reverend Crowe would deliver lectures on poetry and architecture. Organist and composer Samuel Wesley would give courses on music, a Mr. Hewlett on *belles lettres*, and a Mr. Wood on perspective.²⁶⁶ In 1805 the Managers would arrange for a course of lectures on engraving considered as a fine art by the royal engraver John Landseer. In that same year they also engaged the by-then-famous poet and co-author of the *Lyrical Ballads*, Samuel Taylor Coleridge, to deliver a course of general lectures on behalf of justifying the curriculum as a whole, entitled “On the Principles common to the Fine Arts.”²⁶⁷ Although Coleridge would

²⁶⁶ The course on English Literature given by T.F. Dibdin, as it primarily concerned the history of reading, writing, and publishing in England, would likely have been included in the category of history.

²⁶⁷ For information on these proposed lectures, see Samuel Taylor Coleridge, “1806 Proposed Lectures on the Fine Arts (Royal Institution),” in *Lectures 1808-1819 On Literature*, ed. R.A. Foakes, vol. V of *The Collected Works of Samuel Taylor Coleridge* (Princeton: Princeton University Press, 1987), part 1, 3-8.

eventually have to cancel these lectures, the RI would invite him again in 1808 to give instead a course on the “Principles of Poetry.”

Just as Thomas Young had claimed “principle and application” to be the primary Institutional focus in developing theories of the useful arts, I will provide evidence to show that the RI was thinking of the fine arts in an analogous way. I argue that Count Rumford’s initial restriction concerning the scope of this branch of the Institution, that “no subjects will ever be permitted to be discussed at these lectures but such as are strictly scientific,” applies to all of the lectures conducted at the RI, including those on the fine arts. This restriction circumscribes the initial binary outlining the principles of “nature and art” that both Rumford and Young describe as the fundamental categories of knowledge amenable to natural philosophical investigation relevant to the Institution’s goals. As such, the inclusion of the fine arts would simply shift the focus to deriving *their* scientific principles, in addition to those pertaining to the useful arts, which Young and Davy had already defined in their own lectures.

The decisive March 7, 1803, meeting of the managers that resulted in the augmentation of the lecture curriculum and temporarily averted the RI’s financial crisis registers the emergence of its fine arts curriculum. Alongside other newly admitted lecture courses offered at the RI, such as botany, zoology, history, and moral philosophy, lectures on fine arts subjects like painting, poetry, architecture, music, *belles lettres*, and engraving began to occupy an ever larger proportion of the lecture schedule. Like the lectures on the useful arts, the titles of the lectures on the fine arts often evince an attention to identifying scientific principles, as in the following examples gathered from the managers minutes:

June 29, 1801

Davy: On the Chemical Principles of the Art of Tanning

Davy: On the philosophical and chemical principles of the Art of Dyeing, and Staining

~Lecture Augmentation of March 7, 1803~

Jan. 2 1804

Crowe, *Public Orator of the University of Oxford: Scientific Principles of Architecture*

October 20, 1806

Coleridge: *On the Principles common to the Fine Arts (Not Delivered)*

July 6, 1807

Craig: *On the Principles and Practice of Drawing, Painting, and Engraving*

November 23, 1807

Coleridge: *On the Distinguished English Poets, in Illustration of the General Principles of Poetry*

June 27 1808

Craig: *On the Principles of Painting (Proposal Declined)*²⁶⁸

Davy reinforces these apparent disciplinary plans for the fine arts in his *Lecture on the Plan* of 1810.

“One of the most celebrated orators of modern times,” Davy begins, possibly referring to either Reverend Crowe or Coleridge, “owed a great part of the effect he produced to the copiousness of his instances, to the fullness, variety, and minuteness of his knowledge respecting the Scientific Principles of the refined and common Arts.”²⁶⁹ Such vocabulary shows that the disciplinary structure that sought to develop general theories of the mechanical and useful arts by elucidating a connected set of scientific principles appears to have been imported by direct analogy to the lectures on the “refined” or fine arts. Beginning with Reverend Crowe’s 1804 course on the “Scientific Principles of Architecture,” by 1807 the scientific lectures on fine arts subjects would come to constitute about half of the lecture topics for the RI’s winter lecture season. By 1808, lectures on subjects that had not been permitted prior to the 1803 augmentation outnumbered the lectures on subjects like natural philosophy and chemistry, which fell under the initial purview of the Institution.

²⁶⁸ Collected for breadth from *The Archives of the Royal Institution of Great Britain, in facsimile, Minutes of Managers’ Meetings 1799-1900*, vols. I-IV (Menston: The Scholar Press, 1971, 1973), vols. I-II 197-198; vol. III, 186, 302; vol. IV, 9-10, 207, 270, 272, 283, 365.

²⁶⁹ Davy, *Lecture on the Plan*, 37.

The augmentation of the lectures would peak during the 1808 seasons, after which point a more utilitarian and reformist coalition would be elected to replace Thomas Bernard. Although they would continue to implement the strategy of augmenting the lectures, the managers would take that augmentation in what Davy called a “more scientific and more elementary” direction.²⁷⁰ By this the RI management appear to have envisioned the elimination of the fine arts lectures, as is evident in comparing the winter and autumn lecture schedules from 1809:

25th February, 1809

Mr. Davy, a course on Chemistry.
Mr. Davy, a course on Electro-chemical Science.
Mr. Pond, on Astronomy.
Mr. Wood, on Perspective.
Mr. Samuel Wesley, on Music.
Rev. Mr. Crowe, on History and Poetry.
Mr. Este, on Animated Nature.
Mr. Fletcher, on Natural Philosophy.
Mr. Allen, on Mechanical Philosophy.
Rev. Mr. Dibdin, on English Literature.
Dr. Smith, on Botany.

27th November, 1809

Mr. Davy, on Electro-chemical Science.
Mr. Davy, on general Chemistry, and its applications to Nature and Art.
Mr. Dalton, on Natural Philosophy.
Mr. Allen, on Practical Mechanics, and Mechanical Inventions.
Mr. Pond, on Physical Astronomy, and its Applications.
Mr. Pond, on Popular Astronomy.
Dr. Smith, on the Philosophy of Natural History.²⁷¹

Such an intention is represented by a restatement of the RI’s goals included in the managers minutes just as they announce the lecture season for 1809, containing no lectures on the fine arts: “In the

²⁷⁰ Davy, *Lecture on the Plan*, 16.

²⁷¹ Michael Lambton Este, *Letter Concerning the Royal and Other Scientific Institutions: Respectfully Addressed to Their Managers, Proprietors, and Subscribers* (London: James Ridgway, 1810), 8-9.

Theatre Annual Courses of Lectures are delivered on the most useful branches of Experimental Science, by the Professors to the Institution; and Lecturers are engaged from time to time, in different branches of general Science, and the Philosophical principles of the *useful* Arts.”²⁷²

Although in practice this exclusion of the fine arts would only last for a few seasons, and fine arts lectures would resume in a limited form over the following decade, perhaps because they remained a good source of income, this initial exclusion tells us that the recognition of fine arts subjects within the Institution is officially marginalized after 1810.

* * *

To show how the procedural analogy demanding “principles and application” enters into the fine arts lectures, I will compare what survives of the RI fine arts lectures of John Landseer and Samuel Taylor Coleridge. It is important to recognize, however, that consistent procedure emphatically does not translate to identical principles, and I think the comparison between these two showcases just how different the philosophy underpinning the fine arts lectures could be. In what follows, I would like to characterize Landseer’s lectures as endorsing the Royal Academy-sanctioned definition of the disciplinary domain “fine art” to argue for the inclusion of engraving within that definition. In contrast, I argue that Samuel Taylor Coleridge’s 1808 course of lectures “On the Distinguished English Poets, in Illustration of the General Principles of Poetry” defines “Poetry” as generic in character, in contradistinction the specific fine art of “poetry” with a lower-case “p,” which he elsewhere calls “measured words.”²⁷³ Indeed, Coleridge evidently deploys the term “Poetry” as a replacement for the category “Fine Art” itself.

²⁷² *Managers’ Meetings*, IV, 495: November 27 1809 (my emphasis).

²⁷³ Coleridge, *CW*, I, 12.

Landseer's *Lectures on the Art of Engraving*, which, as I will show, must be characterized as *scientific* lectures on engraving considered as a *fine art* (rather than a mechanical art), provide valuable information about the complex and shifting disciplinary circumstances that an RI lecturer had to navigate. The details surrounding the publication of Landseer's lectures show how perilous the RI waters could be, and expose the traditional institutional fault lines between the fine, useful, and mechanical arts. As an engraver to the Royal Academy, Landseer occupied a liminal position, associational as well as disciplinary, between the mechanical and fine arts. The Royal Academy did not at that time appoint professors of engraving, and did not admit engravers as full members. It becomes apparent upon reading Landseer's RI lectures that he thought the Academy's exclusion of this art was unjust and amounted to a betrayal of their own principles. Against prevailing opinion, Landseer's lectures target the "commercial interest" of the prolific publisher of engravings, John Boydell (notable for creating the Boydell Shakespeare Gallery), as a primary cause of the decline of taste and respect for the art of engraving in Britain, and as an alternative rationale for why engraving had not been included in the category of fine art at the Royal Academy.

In his sixth lecture, Landseer alludes to Boydell to make his case for elevating the art of engraving to the status of a fine art from its traditional position as a mechanical art, and in doing so engages in a categorical controversy that helps illuminate the contours of this particular division of labor. A fine art was typically supposed to partake more of the mind, to involve the faculties of imagination and reason, while a mechanical art was thought primarily to involve the body, to be repetitive and imitative rather than novel and imaginative, and hence machine-like or mechanical. Boydell's nephew Josiah happened to be a Proprietor of the RI, and upon hearing the news of Landseer's comments, applied to the Managers to have Landseer's lectures discontinued.²⁷⁴ As a

²⁷⁴ *Managers' Meetings*, IV, 156: 24 February 1806.

prohibition on “allusions” to living persons was an important impetus for Rumford’s caveat that the lectures be limited to subjects that were “strictly scientific,” the Managers seem somewhat reluctantly to have agreed with Boydell, and “regretfully” removed Landseer from the lecture schedule.²⁷⁵ Thinking himself ill-used, Landseer published his lectures as a vindication of his supposed “allusions” to Boydell, claiming in the introduction and in several notes throughout the lectures, that he nowhere explicitly violated the RI bye-laws because his allusions were to John Boydell, who was no longer living, and was thus wrongfully terminated. It is for this reason that we have a record of at least one set of fine arts lectures relatively intact. Though unfinished, it is possible to use Landseer’s lectures as an indicator of the RI’s requirements for the scientific lectures on the fine arts, precisely because its status as a fine art was controversial, and had to be explicitly defended against prominent persons and associations that thought otherwise.

However, the structural similarities between Landseer’s and Coleridge’s courses suggest that the standard infrastructure for the RI fine arts lectures included at least one lecture on the principles and practice of criticism, a historical treatment of the subject in question, and a detailed account of the principles and application of the fine art in question via what are usually termed “illustrations.” As Landseer’s introductory lecture makes clear, the communication of an accurate critical theory is an important preliminary of the fine arts curriculum. “I must beg leave to premise,” Landseer begins, “that, this is not the place from whence to teach the attainment of practical excellence to students in the art; neither can I be supposed to have undertaken to inform masters of its theory.” The diversity of the RI audiences meant that their interest in the fine arts lectures could not be assumed to be uniformly practical, and even if they were, the goal of the RI lectures was generally not directed toward achieving practical excellence in art. However, it seems that the elucidation of

²⁷⁵ *Managers’ Meetings*, IV, 156: 24 February 1806.

principles and practice of critical theory would be a more attainable goal. This emphasis on critical theory and practice has important implications for understanding the manner in which both lecturers sought to illustrate their principles.

Because Landseer's lectures were terminated early, evidence of his adherence to the RI requirement of elucidating principles and their application comes primarily by way of his historical treatment of engraving, as well as his preface, in which he states what his intentions would have been had he been permitted to finish the course. In each of these his enthusiasm for principles is striking. In the preface, for instance, Landseer acknowledges the reasons that drew the engraver to venture to deliver a course of lectures without what he called "the passport of a classical education."²⁷⁶ "On the present occasion," Landseer writes, "both reason and sentiment united to persuade me that this species of pleasure (i.e. engraving) is as referable to ascertainable principles, as [that]²⁷⁷ arising from the productions of any other Art which is at once an object of the eye and of the mind."²⁷⁸

Landseer viewed his historical task in coordination with the benefits he presumed would accompany the elucidation of principle. The scope of Landseer's historical vision was apparently innovative. "Of the Art of Engraving," he remarks, "I believe there is no regular history extant in any language; and, what may seem still more extraordinary, no precepts of criticism that are founded on any thing like principle."²⁷⁹ While "Painting, Poetry, Music—almost every other art," could "boast its historians and critics," with respect to engraving, "facts have passed unrecorded; principle has been allowed to flit from our observation; and taste has been driven to wander, and is till

²⁷⁶ Landseer, *Lectures*, v.

²⁷⁷ printed as "h at."

²⁷⁸ Landseer, *Lectures*, ii-iii.

²⁷⁹ Landseer, *Lectures*, vii.

wandering, through the palpable obscure, with scarcely a gleam of elementary light to assist its progress.”²⁸⁰ Landseer viewed this as a slight to his art, which he sought to remedy, first by providing engraving with a history, and by that history showing how it actually shared fundamental principles with the other fine arts, and so must be categorized accordingly.

In the history Landseer provides, it is clear that he views his elucidation of principle as in line with the general trajectory of enlightenment that informed the RI’s design to unite the arts and sciences. He identifies the medieval period as a crucial point of transition in this historical trajectory:

In the time of Martin Shon, and Albert Durer, German art was much in the same state with European ethics: Theory was separated from practice; and both Art and Philosophy remained perplexed with false analogies, metaphysical jargon, and occult nonsense, till Bacon and the resurrection of the Antique, referred them to the results of experience, as a criterion of principle.²⁸¹

Landseer’s attempt to link the separation of theory and practice with the gothic or medieval period, and to situate their unification as a defining feature of Europe’s transition into the renaissance, represented here by the work of Bacon and the revival of “Antique” thought, shows Landseer to be thinking fairly precisely about what it would mean to participate in the Institutional unification of the arts and sciences embodied by the RI. Landseer appears to be blaming the separation between theory and practice that characterized the gothic period for the perpetuation of various unspecified “false analogies, metaphysical jargon, and occult nonsense.” In uniting the arts and sciences (as “Art and Philosophy”) and referring these perplexities to the “results of experience,” Bacon and the Antique revival helped to bring that age of epistemological ‘darkness’ into the ‘light.’ Insofar as Bacon was broadly understood to be the guiding intellectual spirit of the RI, Landseer seems to be invoking the Baconian ideal on behalf of eradicating that “false analogy” that would place engraving

²⁸⁰ Landseer, *Lectures*, vii.

²⁸¹ Landseer, *Lectures*, 207-8.

among the mechanical arts. Hence, his goal in these lectures would be to right this wrong, to establish engraving in its rightful position as a fine art, by referring his arguments, as Bacon had done before him, to “the results of experience, as a criterion of principle.”²⁸²

Landseer’s excitement about the new possibility of deriving fundamental empirical principles for the art of engraving is hence first, that he seems to think of it as part of a larger Baconian project of enlightenment, where errors in categorization might finally be rectified. But as I described earlier in the chapter, the Institutional focus on deriving fundamental principles has everything to do with supporting an idea of national, imperial, and intellectual progress:

The ascertainment, then, of what ought to be esteemed Principle, is, in every Art, of the very highest importance. If we embark in that of Engraving, either as professors or collectors, without it,—we may carry sail indeed; but we traverse an ocean of uncertainty, without light, without rudder, without compass, or polar star; and are only right by occasional good fortune. With principle for our guide, we proceed regularly in our conquests over error and barbarism, with the superior discipline and steady bravery of a Roman legion; possessing, and securing, and cultivating, the ground we have gained.²⁸³

Speaking, as he is, of engraving as a fine art, it is safe to say that the phrase “every Art” includes both its fine and useful branches. This aligns Landseer’s statement with Thomas Young’s proposal to derive general theories or sciences of the arts, and suggests a coherent view of how the arts, whether useful or fine, were to be treated of in the scientific lectures. Deriving the principles of engraving as a particular instance of deriving principles of art plays its role in the “conquest over error and barbarism,” considered here as equivalent forms of ignorance. As Landseer earlier used the word “philosophy” to denote “the science of connecting principles,” this passage suggests that the “ascertainment” of these scientific principles in “every Art,” is at the heart of how the RI

²⁸² i.e. as a rule for judging principles.

²⁸³ Landseer, *Lectures*, 340-1.

unabashedly understood itself as underpinning an imperial logic of science on behalf of the British nation.

As with his eagerness to communicate the principles of engraving, Landseer also shows a keen interest in and rationale for applying those principles on behalf of improving the state of his beleaguered art. On the stage of the lecture theatre, RI lecturers often relied on the manipulation of visible objects to assist in “demonstrating” or “illustrating” to the audience the precise manner in which their principles could be applied to practice. In this they usually drew on the models and experimental apparatus housed in the rooms of the Institution that had been devoted to those purposes. Rumford had actually designed the model rooms and rooms for experimental apparatus with the lectures in mind, because the exchange between the two spaces constituted a key thread in the communicative ideal that his *Proposals* envisioned for the Institution. These rooms were built just below the lecture theatre to promote an easy exchange of models and apparatus between the two spaces, and the RI even employed an assistant whose specific task was to transfer these objects from one room to the other. As such, these demonstrations formed one of the original novelties of its arts-and sciences design.

Although there were not likely to be relevant models in the model rooms of the Institution, the plan for the fine arts lectures was otherwise evidently the same. Where Davy’s lectures might consist of an experimental demonstration of a chemical principle, or an application of it to the art, say, of tanning hides, lecturers on the fine arts made ample use of drawings, engravings, and other models, for the purpose of illustrating the application of aesthetic principles to products of artistic practice. “It afforded me the most lively pleasure,” Landseer acknowledges in his preface to the *Lectures*,

when I perceived that the Royal Institution was extending its views toward the fine Arts. It immediately occurred that the opportunity of lecturing there would be a more eligible mode

than that of printing, of addressing the public:²⁸⁴ not only because the opinions and principles which I might have the honour to state would be supported by the engraved examples which I should at the same time exhibit, and my sentiments by these means be more clearly and powerfully conveyed; but also because, thus supported, and where the attention of my audience would be so much more attracted towards thoughts and things than toward words, I believed I might venture to read what it would have required, without such auxiliary aid, more confidence to print.²⁸⁵

By “engraved examples,” Landseer is referring to this uniquely arts-and-sciences practice of using models, originally to be drawn from the model rooms, on behalf of illustrating or demonstrating the application of principles to practical products and inventions. Landseer’s rationale fits precisely the view articulated in both the *Proposals* and the *Prospectus* that “descriptions...can give but very imperfect ideas of things; and the impressions they leave are faint and transitory.”²⁸⁶ What was needed, Rumford thought, was “something visible and tangible...to fix the attention and determine the choice.”²⁸⁷ This logic coincides with Landseer’s preference for “lecturing” over “printing,” and underpins the standard pedagogical practice of experimental demonstration at the RI. Landseer’s engraved “exhibit” would hence have referred to an actual product of engraving that he could use to “more clearly and powerfully conve[y]” to his audiences the application of “thoughts” to “things.”

* * *

Coleridge had been loosely affiliated with the Royal Institution through his friendship with Humphry Davy since 1802, when he likely attended Davy’s well-known “Discourse Introductory to a Course of Lectures on Chemistry.” So too, Davy assisted in editing proofs of the *Lyrical Ballads*, and several scholars have suggested that the interaction between Coleridge and Davy is in part

²⁸⁴ i.e. “lecturing there would be a more eligible mode [of addressing the public] than that of printing.”

²⁸⁵ Landseer, *Lectures*, iii-iv.

²⁸⁶ Rumford, “Prospectus,” *CW*, V, 778.

²⁸⁷ Rumford, “Prospectus,” *CW*, V, 778.

responsible for the addition made to the 1802 “Preface” to the *Lyrical Ballads*, in which Wordsworth articulated the distinction between the “Poet” and the “Man of Science.”²⁸⁸

As early as 1805, Davy had convinced the RI to invite Coleridge to lecture there “On the Principles common to the Fine Arts,” an invitation Coleridge accepted at the end of his tenure as acting public secretary in Malta.²⁸⁹ After his return, however, Coleridge’s health and marriage were both in a downward spiral, and after some of the examples he wanted for the illustration of his principles got caught up in customs, the Wordsworths eventually convinced him to cancel that initial lecture series, which was set to commence in January of 1806.²⁹⁰ Although we have very little direct evidence about what this first course of lectures would have looked like, the title alone speaks to the issues of utmost concern to the RI as it developed its fine arts curriculum. What are the fundamental principles common to all of the fine arts? Whereas the other fine arts lectures had concerned the principles associated with individual fine arts, this course proposed as its subject precisely those principles common to all.

While the RI was certainly disappointed at the cancellation, they nonetheless engaged Coleridge again to deliver a course of lectures starting in January 1808, with the title “On the Distinguished English Poets, in Illustration of the General Principles of Poetry.”²⁹¹ At first, the difference between this title and the lectures on the principles common to the fine arts would seem to be that it is giving up on the idea of identifying principles common to the entire domain of the

²⁸⁸ See Roger Sharrock, “The Chemist and the Poet: Sir Humphry Davy and the Preface to *Lyrical Ballads*, *Notes and Records of the Royal Society of London*, 17, no. 1 (May, 1962), 57-76.

²⁸⁹ John Beer, “Coleridge, Samuel Taylor (1772-1834), poet, critic, and philosopher,” *Oxford Dictionary of National Biography*, 23 Sep. 2004; Accessed 8 Nov. 2019, <https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198613128-e-5888>.

²⁹⁰ Coleridge, *CW*, V, I, 7.

²⁹¹ Coleridge, “Lectures 1808-1819,” *CW*, I, 13.

fine arts in favor of elucidating the principles of the particular species of fine art called poetry. It is evident, however, from Coleridge's lecture notes, as well as from audience testimony, that he *is* still actually pursuing such a general course, and retains ambitions to elucidate the scientific principles common to a comparably general aesthetic domain. If this is the case, the change in the title deserves some explanation.

Coleridge's classical reading led him often to Anglicize Latin and Greek terms. His deployment of the word "Poetry" appears throughout the lectures to be a direct importation of the Greek usage exemplified in Aristotle's *Poetics*. There, Aristotle uses the Greek *Poesis* as a generic term to identify all of those arts for which mimesis or imitation is the foundational principle. For Aristotle, this would include the modern genres of written verse, written narrative, music, drama, painting, statuary, and dance. Although Coleridge often disagrees with and adds much to Aristotle's thinking, he deploys the term "Poetry" in a manner consistent throughout with Aristotle's generic usage.²⁹² Hence we find Coleridge defining the term in lecture four in the following way:

In my last address, I had defined Poetry (and I have been requested to repeat the definition) to be—The art—or whatever better name our language may afford—of representing external nature and human Thoughts & Affections, both relatively to human Affections; to the production of as great immediate pleasure in each part, as is compatible with the largest possible Sum of Pleasure in the whole.—Now this Definition applies equally to Painting & Music, as to Poetry—and in truth the term "Poetry" is alike applicable to all three.²⁹³

²⁹² See the following example from Aristotle's *Poetics*, cited from *A New Aristotle Reader*, ed. J.L. Ackrill (Princeton: Princeton University Press, 1987), 540: "The subject I wish to discuss is poetry itself, its species with their respective capabilities, the correct way of constructing plots so that the work turns out well, the number and nature of the constituent elements [of each species], and anything else in the same field of inquiry."

"To follow the natural order and take first things first, epic and tragic poetry, comedy and dithyrambic, and most music for the flute or lyre are all, generally considered, varieties of mimesis, differing from each other in three respects, the media, the objects, and the mode of mimesis. ['Media' needs explaining]: in some cases where people, whether by technical rules or practiced facility, produce various mimeseis by portraying things, the media are colours and shapes, while in others the medium is the voice; similarly in the arts in question, taken collectively, the media of mimesis are rhythm, speech, and harmony, either separately or in combination."

²⁹³ Coleridge, *CW*, V, I, 75-76.

As Coleridge developed this definition in later courses on the “Principles of Poetry,” delivered in London and Bristol periodically over the following decade, it would come to include dance, to some extent statuary, and in an unexpected way, the novel. Hence, despite the typically narrow view of poetry that was common in 1808, and remains in use today, Coleridge is using the term as a generic category to describe all of what at that time would have been designated, the fine arts. This definition includes, as Coleridge calls it, “measured words,” but he would include it as an example of the broader category of mimetic arts delimited by his peculiar use of the term Poetry.

Recognizing this generic usage is extremely important, because what it suggests is that Coleridge’s title, and the content of the lecture itself, is responding to and constrained in significant ways by the demands and interests of the Royal Institution. It is the RI that is interested in developing scientific principles common to the fine arts, and Coleridge’s unusual use of “Poetry” represents his negotiation of those demands. The editors of Coleridge’s *Collected Works*, for instance, attribute his attempt to define Poetry as a response to John Dennis’s definition in *The Grounds of Criticism in Poetry*.²⁹⁴ While the validity of such a comparison is not necessarily diminished by recognizing the Institutional demands, such a recognition does provide an important and straightforward context for understanding what might at first appear to be Coleridge imposing a notion of “measured words” onto the whole of the fine arts.

Like Landseer’s published lectures, Coleridge’s lecture notes include an introductory lecture on the principles and practice of criticism, the principles of Poetry and their application, as well as the use of history in ascertaining those principles. He remarks, for instance, in the second paragraph to the first lecture, that

The Subject announced [i.e. for that lecture], is of Taste, in regard to Poetry, & whether it have any fixed Principle. Now the same arguments that shall decide the Question whether

²⁹⁴ Coleridge, *CW*, V, I, 75.

'Taste have any fixed Principle, may probably lead to the determination of what those Principles are. But first, what is *Taste*...' ²⁹⁵

The "Subject" for that day's lecture would have been "announced" on behalf of the RI Managers in the morning papers, and his reference to it helpfully shows Coleridge interacting with the Institutional structure in connection with the question "whether Taste have any fixed Principle."

Although he would eventually come to outline those principles, his first point of procedure is to define his terms. And as we see at the end of the passage above, the first term he wishes to define is "Taste." Isolating the "primary" sense of the word "Taste," by which we distinguish flavors in food, from the "metaphorical Sense as applied to the fine arts," Coleridge provides the following definitions. I will quote these two definitions in full because they build on each other in the notes and end in his first attempt to define the fine arts, or what he will in the following lectures, define more clearly as "Poetry":

1. Taste implies an intellectual perception of any object blended with a distinct consciousness of pain or pleasure conceived as resulting from that Object—or vice versa a sense of Enjoyment or Dislike instantly combined with & appearing to proceed from some intellectual perception of the Object. I say, intellectual: for otherwise we should confound the metaphorical with the primary sense of the word—a blunder, which if I mistake not, lies at the bottom of a whole system on the Principles of 'Taste—tho' common language might have suggested, that we taste a Ragout, but we do not taste the Paradise lost, but *have a Taste* for it.
2. Taste then may be defined—a distinct Perception of any arrangement conceived as external to us co-existing with some degree of Dislike or Complacency conceived as resulting from that arrangement—and this immediately, without any prospect of consequences—tho' this is indeed implied in the word co-existent. And in this Definition is involved the definition of the Fine Arts, as being such whose especial purpose is to gratify to [sic] the Taste—that is, not merely to adjoin but to combine and unite a sense of immediate pleasure in ourselves with the perception of external arrangement.²⁹⁶

²⁹⁵ Coleridge, *CW*, V, I, 27.

²⁹⁶ Coleridge, *CW*, V, I, 30.

In the section of notes just following these definitions, Coleridge suggests that “as Beauty has been generally admitted as the direct & peculiar Object of the Taste, it becomes in some measure necessary to settle, or endeavor to settle, the true meaning of that word.”²⁹⁷ After discussing his disagreements with Richard Payne Knight on the question, Coleridge, “[f]ollowing Plato and all the Platonists,” renders the following definition:

We should define Beauty to be a pleasurable sense of the Many (by Many I do not mean comparative multitude, but only as a generic word opposed to absolute unity—) reduced to unity by the correspondence of all the component parts to each other & the reference of all to one central Point.²⁹⁸

As the “peculiar Object of the Taste,” Beauty may be united to the above definition of the fine arts, “as being such whose especial purpose is to gratify...the Taste.” Hence the fine arts, in Coleridge’s conception, should be productive of that “pleasurable sense of the Many...reduced to unity by the correspondence of all the component parts to each other.” That is, the fine arts, with their goal of stimulating that “pleasurable sense,” also become the peculiar object of the Taste, insofar as a determination of Taste is made regarding a given production of fine art.

As preparation for “the great Question...whether Taste, in any one of the fine Arts, have any fixed Principle or Ideal,” these definitions understand beauty as a pleasurable determination of the Taste, and equivalent to success in the fine arts. As such, beauty, understood as a pleasurable intellectual perception of an arrangement or object, becomes the “especial purpose” of the fine arts. For Coleridge, it is this sort of aesthetic success that he isolates in his generic definition of “Poetry,” which I cited above. Returning to that definition, where Poetry may be understood as “the art...of representing external nature and human Thoughts & Affections, both relatively to human Affections; to the production of as great immediate pleasure in each part, as is compatible with the

²⁹⁷ Coleridge, *CW*, V, I, 31.

²⁹⁸ Coleridge, *CW*, V, I, 35.

largest possible Sum of Pleasure in the whole,” his definition of beauty is already embedded in it. Hence, an important but subtle distinction between Poetry and Fine Art, for Coleridge, appears to be that Fine Art refers to a generalized practice, the goal of whose productions is beauty, whereas Poetry is the superlative execution of such a goal.

Why make such a distinction? And why begin the course with the question of taste, as opposed to first outlining a theory of practice. I think the primary reason Coleridge begins with taste, and distinguishes between “Fine Art” and “Poetry,” is that he is keenly aware of the peculiar composition of his audience. As I have mentioned, the RI audience is a general rather than a practicing audience, so he, like Landseer, is primarily interested in communicating principles related to a “critical knowledge” of fine art. But the crucial difference between Landseer and Coleridge on this point, is that Coleridge is attempting to frame that critical knowledge as essentially consistent with the method conducive to his view of true Poetic practice. Coleridge is treating aesthetic judgment (i.e. the determination of the Taste) as the foundational principle of Poetry. He would like to align, instead of oppose, the aesthetic judgment of the poet and that of the audience, by suggesting that his principles in criticism and Poetry constitute a methodological agreement of imaginative Poet and imaginative audience, instead of opposing a rational critical judgment to an imaginative artistic genius.

Teaching this to an audience accustomed to Reynoldsian principles of the grand style would have been difficult. Although, as I’ve said, Landseer’s published lectures end just prior to his providing the fundamental principles of engraving, his endorsement of Reynolds and the principles of the grand style is evident in his treatment of the general and the particular. His and the Royal Academy painter John Opie’s RI lectures (which have been lost) would likely have provided principles generally aligned with the grand style, which typically emphasized the general over the particular. “The Statuary, the Poet, the Painter, the Engraver, the Musician,” Landseer affirms, “all

who aspire to touch with pure delight the imaginations of others—all Generalise, and without generalising, it may be questioned whether any have attained to high and lasting reputation.”²⁹⁹

Coleridge on the other hand emphasizes the individual and particular aesthetic judgment over that of the general, as when he asks in the notes to his first lecture, “whether in every judgment determination of the Taste concerning any work of the fine arts the Individual does not, with or even without against the approbation of this general Judgment, involuntarily claim that all other minds ought to think & feel the same?”³⁰⁰

The task Coleridge sets for himself is hence nothing less than bringing the audience into the mind of the Poet, to teach them the “Principles of Poetry” via the method by which Poets select their materials and become satisfied with their productions. What Coleridge is after is surprisingly to communicate the “critical knowledge” inherent in Poetic practice itself. When he actually begins to detail the principles of Poetry, he is simultaneously addressing its critical and practical aspects, as simply the receptive and productive sides of what to him is evidently the same question. What are the foundational principles of Taste?

We see this bear out when Coleridge begins in earnest to detail the principles of Poetry. As would be the case in all of Coleridge’s lectures on the subject of Poetry, he invokes Shakespearean examples as an “illustration of principles.”³⁰¹ Beginning with those principles common to the individuals who possess the “power of producing or reproducing”³⁰² what Coleridge calls “poetic feeling,” that “pleasurable emotion, that peculiar state or degree of Excitement, which arises in the

²⁹⁹ Landseer, *Lectures*, 150.

³⁰⁰ Coleridge, *CW*, V, I, 37.

³⁰¹ Coleridge, *CW*, V, I, 82.

³⁰² Coleridge, *CW*, V, I, 67.

poet himself, in the act of composition,”³⁰³ Coleridge proposes the following set of principles, each of which inheres to varying degrees in the true Poet:

1. Sense of Beauty—this thro’ the whole poem, even to almost effeminacy of sweetness—
...
2. With things remote from his own feelings—and in which the romanticity gives a vividness to the naturalness of the sentiments & feelings—
3. Love of natural Objects—...
4. Fancy, or the aggregative Power...the bringing together Images dissimilar in the main by some one point or more of Likeness...
5. That power of & energy of what a living poet has grandly & appropriately. To flash upon that inward Eye Which is the Bliss of Solitude—& to make every thing present by a Series of Images—This an absolute Essential of Poetry, & of itself would form a poet, tho’ not of the highest Class—It is however a most hopeful Symptom...
6. Imagination/ power of modifying one image or feeling by the precedent or following ones—. —So often after afterwards [sic] to be illustrated that at present I shall speak only of—one of its effects—namely, that ultimate end of human Thought, and human Feeling, Unity and thereby the reduction of the Spirit to its Principle & Fountain, who alone is truly one.
7. (The describing natural objects by cloathing them appropriately with human passions)
8. Energy, depth, and activity of Thought without which a man may be a pleasing and affecting Poet; but never a great one...”³⁰⁴

To these Coleridge adds two more general principles:

This leads us to what the Drama should be—and first not an image it is not a *Copy* of Nature; but an Imitation. This is the universal Principle of the Fine Arts—in every well-layed out Grounds what we delight in we feel from that balance and antithesis of feeling and thoughts—how natural we say!—but the very wonder that furnished the how implies that

³⁰³ Coleridge, *CW*, V, I, 217.

³⁰⁴ Coleridge, *CW*, V, I, 67-8. That this is a list of principles is also reinforced by Lecture 4, *CW*, V, I, 80-1, where “Shakespeare possessed the chief if not all the requisites of a Poet—namely, deep Feeling & exquisite sense of Beauty, both as exhibited to the eye in combinations of form, & to the ear in sweet and appropriate melody...That these feelings were under the command of *his own Will*—that in his very first productions he projected his mind out of his own particular being, & felt and made others feel, on subjects no way connected with himself, except by force of Contemplation—& that sublime faculty, by which a great mind becomes that which it meditates on. —To this we are to add the affectionate Love of Nature & Natural Objects, without which no man could have observed so steadily, or painted so truly & passionately the <very> minutest beauties of the external world—

“Next, we have shewn that he possessed Fancy, considered as the faculty of bringing together &c &c. —...Still mounting, we find undoubted proof in his mind of Imagination or the power by which one image or feeling is made to modify many others, & by a sort of *fusion to force many into one*—...or it acts by impressing the stamp of humanity, of human feeling, over inanimate Objects...and lastly, which belongs only to a great poet, the power of so carrying on the Eye of the Reader as to make him almost lose the consciousness of words—to make him see every thing—& this without exciting any painful or laborious attention, without any anatomy of description, (a fault not uncommon in descriptive poetry) but with the sweetness & easy movement of nature—

“Lastly, he [Shakespeare]—previously to his Drama—gave proof of a most profound, energetic & philosophical mind, without which he might have been a very delightful Poet, but not the great dramatic Poet...”

we perceived art at the same moment—we catch the Hint from nature itself...It would be easy to apply it to Painting, and even—tho' with more greater abstraction & a of thought, & by more subtle tho' just analogies even to Music—But this belongs to others—Suffice it, that one great Principle is common to all, a principle which probably is the condition of all consciousness, without which we should feel & imagine only by discontinuous Moments, & be plants or animals instead of men—I mean, that balance ever-varying Balance—or Balancing—of Images, Notions, or Feelings (for I avoid the vague word, Idea) conceived as in opposition to each other—in short, the perception of Likeness & Difference Identity & Contrareity—the least degree of which constitutes Likeness—the greatest, absolute Difference—but the infinite gradations between these two from all the Play & all the Interest of our Intellectual & Moral Being, till it lead us to a Feeling & an Object more awful, than it seems to me compatible with even the present Subject to p utter aloud, tho' most desirous to suggest it—for there alone allre all things at once once different and the same—there alone, as the principle of all things, does distinction exist unaided by division/ Will, and Reason, Succession of Time & unmooving Eternity, infinite Change and uneffable Rest.”³⁰⁵

Together with his definitions of Poetry and taste, these principles articulate in shortened form virtually all of the aesthetic concerns he would go on to develop over his career. Notice here especially that the Fancy and Imagination are each considered necessary to Poetic production, rather than the almost opposed treatment of them in the *Biographia Literaria*. A traditional definition of genius is still evident in principle 5, but comments from his later lecture notes, such as his point that what can be called a Poem is “a distinction resulting from the poetic Genius itself, which sustains and modifies the emotions, thoughts & vivid representations of the Poem by the constant and apparently spontaneous Activity of the Poet’s own powers, more especially of the Imagination, the Fancy, and of that delightful Energy without sense of effort...” show that his list of principles is in fact the result of analyzing the attributes that come to form Poetic genius itself, as he understands it.³⁰⁶ And finally it is crucial to recognize that it is not Coleridge, but instead the procedural requirements of the Royal Institution lecture curriculum, that determine the structure of Coleridge’s articulation according to principle.

³⁰⁵ Coleridge, *CW*, V, I, 83-84.

³⁰⁶ Coleridge, *CW*, V, I, 245.

What Coleridge does with the Institutional requirement of “application” is especially interesting, though, as usual for him, more complicated. Evidence that he knew and understood this practice is available in a letter he wrote to Davy in 1807 while staying with their friend Thomas Poole. Thanking Davy for helping to arrange a second lectureship at the RI, Coleridge’s letter also details several proposed changes to his initial plan for the 1806 lectures “On the Principles Common to the Fine Arts.” “After having discussed the subject with Poole,” Coleridge begins,

he entirely agrees with me, that the former plan suggested by me is invidious in itself, unless I disguised my real opinions, as far as I should deliver my sentiments respecting the *Arts*, [and] would require references and illustrations not suitable to a public Lecture Room; & finally that I ought not to reckon upon spirits enough to seek about [for] books of Italian Prints, &c—And that after all, the general & most philosophical Principles I might naturally introduce into Lectures on a more confined Plan—namely, the Principles of Poetry conveyed and illustrated in a series of Lectures.³⁰⁷

Having already discussed Coleridge’s “sentiments respecting the *Arts*” above, I want to focus here on the problem of acquiring sufficient “illustrations.” In addition to the reasons commonly cited for Coleridge’s cancellation of the 1806 lectures, a failing marriage, a bout of boils, and other health issues, there was also an immediate logistical reason, namely, that his shipment of illustrations had been held up at customs.³⁰⁸ This means that he would have had to lecture without being able to fulfill one of the “requir[ed]” aspects of the RI lectures. Unlike Landseer, Coleridge’s course proposed to elucidate the principles, not of a single art, but of the “Principles common to all the Fine Arts.”³⁰⁹ Adequately illustrating each of the fine arts would have required an unmanageable number of exhibits, and it appears that this is what Coleridge is referring to when he says to Davy that he “ought not to reckon upon spirits enough,” which I believe indicates that he thought it

³⁰⁷ Coleridge, *CW*, V, I, 11-12.

³⁰⁸ Morton Paley, *Samuel Taylor Coleridge and the Fine Arts* (Oxford: Oxford University Press, 2008), 68.

³⁰⁹ Coleridge, *CW*, V, 1, 5.

would be too exhausting to his already fragile constitution to “seek about” for all of the illustrations that would have been required for such a comprehensive course.

His friend Poole, the prominent Bristol tanner and philanthropist with whom Davy had trained prior to delivering his courses on the art of tanning, understood the RI’s arts-and-sciences design, and was likely an important factor in helping Coleridge consolidate his thinking into a more “confined plan.” But this more confined plan must not be mistaken for a more confined subject. “After all,” Coleridge says, this new plan would in fact be more conducive to elucidating “the general & most philosophical Principles I might naturally introduce.” So Coleridge’s point appears to be that his new plan is much more concise and in greater accordance with his “real opinions” on the subject.

This has everything to do with what happens to Coleridge’s illustrations in the 1808 course. As I described earlier, one of Coleridge’s evident goals in these lectures is to shift his “Principles of Poetry” away from the product of “art” in order to elucidate the principles residing within the “nature” of humans that contribute to Poetic activity. This allows him to discuss his principles as a whole without having to divide his discussions according to individual practices. This means that Coleridge uses of the word “Poetry” as a categorical replacement for “Fine Art,” so within the context of these lectures, Coleridge does in fact understand his principles to be a *more* adequate fulfillment of his initial plan to lecture on the “Principles common to all the Fine Arts.”

However, this change makes the question of locating “application” in Coleridge’s lectures slightly more difficult. The scarcity of documentation concerning the 1808 lectures adds to the difficulty. But a perceptive observation by Sarah Zimmerman can provide a point of departure. In her article, “Coleridge the Lecturer, A Disappearing Act,” Zimmerman remarks on a crucial though little noticed aspect of Coleridge’s lecturing style, that “in order to avoid rendering auditors

passive...he *modeled* what he wanted readers to do.”³¹⁰ What this would mean is that Coleridge fulfilled the RI’s administrative requirement of illustrating his principles by using *himself* as the model, rather than, or at least in coordination with, the artistic product.

If Zimmerman’s observation is accurate, and I believe it is, then the key question becomes, what is Coleridge modeling? Zimmerman points to Coleridge’s own explanation of the “purposes of a lecture,”³¹¹ where the lecturer’s goal is “to keep the audience awake and interested during the delivery, and to leave a *sting* behind,” and that “sting” would ideally draw forth a “disposition to study the subject anew, under the light of a new principle.”³¹² This aspect of his lecturing style is certainly in evidence. However, I would like to introduce another way, and they are by no means mutually exclusive, of viewing Coleridge’s peculiar take on modeling in the performance of his lectures.

A few clues from the critical commentary pertaining to his later lecturing career, which Coleridge claimed differed from the RI lectures “only, by occasionally varying the illustrations of the same thoughts,” can help guide the way.³¹³ For example, in the prospectus to his 1818 course “On the Principles of Judgment, Culture, and European Literature,” Coleridge makes an astonishing claim. Each of his lectures for this course will be

indeed very *different*, but not (in the strict sense of the term) *diverse*: they are *various*, rather than *miscellaneous*. There is this bond of connexion common to them all,—that the mental pleasure which they are calculated to excite is not dependent on accidents of fashion, place, or age, or the events or the customs of the day; but commensurate with the good sense, taste, and feeling, to the cultivation of which they themselves so largely contribute, as being all in *kind*, though not all in the same *degree*, productions of GENIUS.³¹⁴

³¹⁰ Sarah Zimmerman, “Coleridge the Lecturer, A Disappearing Act,” in *Spheres of Action: Speech and Performance in Romantic Culture*, eds. Alexander Dick and Angela Esterhammer (Toronto: University of Toronto Press, 2009), 64 (my emphasis).

³¹¹ Zimmerman, “Coleridge the Lecturer,” 64.

³¹² Zimmerman, “Coleridge the Lecturer,” 64; Coleridge, *CL* 4: 924.

³¹³ Samuel Taylor Coleridge, *Biographia Literaria*, ed. Nigel Leask (London: J.M. Dent Orion Publishing Group, 1997), 21.

³¹⁴ Coleridge, *CW*, V, II, 40.

How are we to understand Coleridge's claim? And how can it help us to understand his mode of illustration in the 1808 lectures? The first point to make is that the external critical commentary on his Poetry lectures tends to move in the exact opposite direction, so the view Coleridge has expressed here should be contextualized as a defensive position. Henry Crabb Robinson, who attended many of Coleridge's lectures, remarked that Coleridge's lectures in general appeared to be "immethodical rhapsodies" rather than "a scientific or instructive course of readings on any one subject."³¹⁵ This view of Coleridge as an immethodical stylist has persisted in much twentieth-century criticism, such as in Nigel Leask's introductory remarks on the "immethodical" structure of the *Biographia Literaria* in the introduction to his edition of that work.³¹⁶ But "the poetic Lecturer,"³¹⁷ as the newspapers began to call him, was noted for the peculiar interest of his digressions even then. "Coleridge's digressions," Crabb Robinson writes, "are not the worst part of his lectures, or rather he is always digressing."³¹⁸ And Coleridge himself had remarked to Crabb Robinson as early as the 1811-12 lectures that his style "was not in etymological severity a Lecture—for tho' the reasoning, the arrangement, the &c bore the clearest marks of long premeditation, yet the language, illustrations &c were as evidently the children of the Moment."³¹⁹

To adequately deal with Coleridge's lecturing style, it is important to remember that the mode of lecturing in which Coleridge was participating at the RI was in fact already highly novel. Understanding this novelty, Thomas Young even made a point of explaining his lecturing style as

³¹⁵ Coleridge, *CW*, V, I, xlvii.

³¹⁶ Coleridge, *Biographia*, xliii.

³¹⁷ Coleridge, *CW*, V, I, 320.

³¹⁸ Coleridge, *CW*, V, I, xlv.

³¹⁹ Coleridge, *CW*, V, I, 161.

“synthetic” rather than “analytical,” and his synthetic mode matches quite well with what Crabb Robinson seems to have understood as a “scientific or instructive course.”³²⁰ While Crabb Robinson saw Coleridge’s explanation as merely a sign of “culpable indolence,” the report of the first of the 1811-12 LPS lectures in the *Sun* echoes Coleridge’s own view:

Mr. COLERIDGE, yesterday evening, gave his introductory Lecture on Milton and Shakespear, in illustration of the principles of poetry, and their application as grounds of criticism to the works of later and of living Poets. Gratified as we always must be at seeing a man of genius employed on subjects worthy of him, and appropriate to his known studies, we could not but feel pleasure at observing so respectable an audience, and for a first Lecture, so numerous. We do not indeed know, whether the word “Lecture” is not a misnomer; as the greater, and certainly the most interesting and best-reasoned part of the address was delivered from the impulse of the moment, as far, at least, as the language and many of the happiest illustrations are concerned. For the thoughts, and the learned arrangement, were as evidently the result of long premeditation and habitual study.³²¹

Noting the striking resemblance these remarks bear to Coleridge’s own comment to Crabb Robinson, along with the fact that Coleridge had written to him to have a notice of his lecture placed in *The Times*, I suspect Coleridge may have had something to do with the composition of this review. But if this is indeed Coleridge imagining his own audience’s reaction to his peculiar lecturing style, this fact would only lend additional support to the point I am trying to make. The point is that Coleridge’s lectures *are* methodical, it is just that his method is an original take on the RI’s already highly novel lecturing infrastructure. Emulating the “scientific” lecture style that Crabb Robinson had become used to at the Royal Institution is emphatically not what Coleridge is trying to do, and he plainly recognizes this.

The *Sun*’s review continues just below, to note appreciatively that

The occasional digressions concerning modern Education, and the true views of Poetry, as implying in man an instinct after perfection unattainable in this life, but which yet, like all other instincts of nature, must somewhere, and at some period, meet their appropriate object, were exceedingly beautiful, and evidently dictated by the feeling of the moment. Not

³²⁰ Coleridge, *CW*, V, I, xlvii.

³²¹ Coleridge, *CW*, V, I, 161; 195-6.

only from this Lecture, but from our former observations of the Lecturer at the Royal Institution, we are impelled to recommend Mr. C. to speak as much, and to read as little as possible. He appeared to refer to his notes rather from natural timidity, which rapidly decreased after the first moments. What his audience may have thought, we cannot say; but assuredly we have seldom seen so many pass out of a public room with countenances more alive or more expressive.³²²

Zimmerman's point about the educational "sting" Coleridge sought to elicit from his audience certainly finds support here. Yet his "digressions" also concern chiefly the "true views of Poetry," so in addition to Zimmerman's claim I would like to add that what Coleridge is modeling for his audience, and hopes he can elicit from them, is precisely that form of aesthetic pleasure that he experiences when he encounters what he believes to be "true Poetry."

The passage's mention of the Royal Institution lectures is also key to understanding the specific arts-and-sciences inheritance in Coleridge's later "non-lecturing" style. Describing the RI lectures, Coleridge explains in an entertainingly self-congratulatory style that

for the first lecture he prepared himself and when it was finished he received many high flown but frigid compliments, which had evidently been before studied. For the next Lecture he prepared himself less, and was much admired; for the 3^d Lecture, and for the remainder, he did not prepare himself at all, and was most enthusiastically applauded and approved, and the Theatre completely filled. The reason was in his mind obvious, for what he said came warm from the heart...and Coleridge subjoined, that although the observations might not be so remarkably good or so well illustrated, *yet being illustrated at the moment by objects before the eyes of the auditors*, they felt and acknowledged them.³²³

This short explanation of the progression of his lectures, if not exactly an accurate depiction, shows his attempts at extempore criticism to be almost exactly in line with the RI's initial rationale for using models in the lectures as a mode of illustration. Rumford's *Prospectus*, remember, emphasized the point that in order to instill the most vivid impressions and perfect ideas of things, "something *visible* and *tangible* is necessary to fix the attention and determine the choice." Coleridge's near

³²² Coleridge, *CW*, V, I, 195-196.

³²³ Coleridge, *CW*, V, I, xlvi-xlvii.

quotation of the RI's original goals for the models, presented in this passage as the justification for his mode of illustration, even above the quality of the illustrations themselves, affirms the primacy of his extempore style in his attempts to fulfill his formal obligations as an RI lecturer. The review in the *Sun*

is evidently more appreciative of the pleasure he supposedly communicated to his audience than of its particular subject matter. It even notes that the lecture was "too miscellaneous to allow us to give even a slight statement of its contents," so if Coleridge did not write it, the review confirms that the external criticism tends to view his lecture topics as miscellaneous and immethodical. If he did write it, it just might make him a "GENIUS."

I use that word pointedly because it is that term that appears to be at the center of the more explicitly methodical view of his lecturing style that he expresses in the prospectus to the 1818 lectures, with which I began. If it is possible to trace the style of lecturing, which Coleridge articulates here as "various" rather than "miscellaneous," all the way back to his 1808 lectures at the Royal Institution, it is just possible to view the critical commentary on those early lectures as indicating, despite their own claims to the contrary, exactly the kind of "connexion common to them all" that Coleridge expresses here as "being all in kind, though not all in the same degree, productions of GENIUS." Evidence that Coleridge is attempting to model genius as a pedagogical tool for communicating critical practice emerges most clearly, as might be expected, in the notes taken by his audience. Recalling Coleridge's lecture on *Love's Labour's Lost*, J. Tomalin reminds himself that "Above all <it> shd be recollected that he had taken the great names of Milton & Shakespeare rather for the purpose of illustrating great principles than for any minute examination of their works."³²⁴ Tomalin even recalls Coleridge's stage presence at certain moments, recounting

³²⁴ Coleridge, *CW*, V, I, 279.

various acts of modeling as they were taking place, as in his use of exclamatory marks in practical criticisms of that play,

What was the Love's Labour lost? Was it the production of a person accustomed to stroll as a Vagabond about the streets, or to hold horses at a Play-house door, and who had contented himself with making observations on human nature? No such thing! There is scarcely a trace of any observation of nature in Shakespeare's earliest works. The dialogue consisted, either of remarks upon what is grotesque in language, or mistaken in literature—all bore the appearance of being written by a man of reading and learning, & the force of genius early saw what was excellent, or what was ridiculous.³²⁵

In the exclamatory act Coleridge even seems to be producing a commentary on his own critical method by invoking Shakespeare's "force of genius" and the ability to see "what was excellent, or what was ridiculous." Tomalin isolates a pure form of Coleridge's critical energy when he recalls that Coleridge, breaking suddenly away from a discussion of Charity, "cried...with enthusiasm,"

'Give me...the works which delighted my youth—give me the History of St George & the Seven Champions of Chistendom (sic), which at every leisure moment I used to hide myself in a corner to read. Give me the Arabian Nights Entertainments which I used to watch till the sun shining on the bookcase approached it, and glowing full upon it gave me courage to take it from the shelf.'³²⁶

It is this "enthusiasm," in other words, that Coleridge seems to be attempting to illustrate and methodize in his critical procedure. Viewing these productions as Coleridge's attempts to *model* genius to his audience lends a particularly interesting pedagogical angle from which to approach his own critical practice. If, as Zimmerman has suggested, Coleridge's lectures "*modeled* what he wanted" his audience to do, then what we are left with is a strict "application" of one of Coleridge's principles of Poetry, namely "GENIUS," to his aesthetically inflected critical practice in the lecture performances from at least 1808-1818. Understood in this way, Coleridge views Poetic genius less as a mode of private and isolated contemplation, available to only a select few, and more as an attempt,

³²⁵ Coleridge, *CW*, V, I, 275.

³²⁶ Coleridge, *CW*, V, I, 278.

molded by the Institutional logic that sought a cordial embrace between art and science, to communicate a Poetic disposition to his audience. In the next chapter, I hope to elucidate in more detail how these connections develop into a fully-fledged articulation of aesthetic method in his later lectures and prose works on Poetry and the fine arts.

327 “Système Figuré des Connoissances Humaines,” *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, etc., eds. Denis Diderot and Jean le Rond d'Alembert. University of Chicago: ARTFL Encyclopédie Project (Autumn 2017 Edition), Robert Morrissey and Glenn Roe (eds), <https://encyclopedia.uchicago.edu/content/syst%C3%A8me-figur%C3%A9-des-connaissances-humaines>.



CHAPTER THREE

Romantic Institutions: Teaching the Arts and Sciences

The previous chapters have tried to situate the Royal Institution as one significant result of an expansive Institutional reform movement that sought to bring the arts and sciences into closer proximity. Chapter I detailed the shifting structure of the RI's arts-and-sciences configuration from 1799-1826. Chapter II examined the coordinated development of the RI's library and scientific lectures, in an effort to show how its systematic Institutional design emerges in lecturing practice as the elucidation of "principles and application" relative to either "nature" or "art." A primary concern in both of these chapters was to elaborate the central infrastructural logic of the Royal Institution. The focus on a single Institution is intended in part for comparison, in order to understand the extent to which the infrastructural logic of the RI is representative of the broader arts-and-sciences Institutional movement.

The following two chapters will examine the ramifications of this new arts-and-sciences Institutional infrastructure as it informs the careers and publications of four writers who have typically been associated with the Romantic era in England. All of the writers I consider, Samuel Taylor Coleridge, William Hazlitt, Percy Shelley, and Mary Shelley, have direct and explicit connections with the arts-and-sciences Institutional movement. These chapters will show in detail how each of them deploys the infrastructural logic of the arts-and-sciences Institutions as a means to develop deliberate alternatives to the Institutional configuration represented by the RI. In tracing these connections, my aim is to contest the notion that the Romantic "poets had no real involvement with infrastructure."³²⁸ I argue they did, and that their connection with infrastructure

³²⁸ Gayatri Chakravorty Spivak, *An Aesthetic Education in the Era of Globalization* (Cambridge: Harvard University Press, 2012), 112.

was to that which had been developed within these arts-and-sciences Institutions. I claim further that this Institutional infrastructure, particularly its attention to elements, principles, and their application to the arts, generates the structure of the discourses of Poetry, criticism, and the Imagination as they emerge in the works of the writers I consider. I treat the alternatives these writers present as potential practical substitutes in what they still considered a live debate. I conclude that these Romantic defenses of Poetry attempt to profoundly expand the understanding of an intellectual domain that could support the methodical inclusion of the fine arts within the arts-and-sciences Institutional discourse. In this respect, I consider the alternatives themselves as constitutive of a Romantic contribution to the arts-and-sciences Institutional discourse.

Section I: The Institutional Formation of Romantic Discourse, Affirmation and Critique

Institutional Coleridge:

In providing an arts-and-sciences Institutional context for Coleridge's career as a writer on Poetry and the fine arts, I will argue for the fundamental importance of the RI lectures in understanding the precise contours of the Institutional inheritance in Coleridge's later writings on these subjects. To tie these works to the Institutional history I have been developing, I will continue to focus on the Institutional questions of "principle and application" in relation to Coleridge's generic handling of "Poetry" as a methodical term applicable to all of the fine arts, and opposed, importantly, to his definition of "Science." My claim is that Coleridge's opposition represents the kernel of an increasingly coherent Institutional vision that he does not articulate fully until after 1817, in his "Treatise on Method" written as the introduction to the *Encyclopædia Metropolitana*, and his revisions of the "Treatise" that appear as the "Essays on Method" in the 1818 *Friend*. This vision

constructs a harmonious disciplinary arrangement by way of methodological opposition between Science and Poetry. What I want to do in this section is track the development of this methodological argument from its first articulation in the RI lectures to these later essays. Insofar as Coleridge's 1808 definitions of Poetry are compatible with those articulated in his post-RI lectures and later prose works on the subject, they represent a sustained attention to, and elaboration of, questions about how the category of fine art should fit into the broader arts-and-sciences Institutional structure available at venues like the RI. In a very direct sense, we owe Coleridge's peculiar generic usage of the word "Poetry" to his interaction with the Royal Institution, as it is that venue that first set out to derive the principles common to the fine arts. Coleridge's definition is a crucial outcome of that effort. I will hence treat the lectures as direct evidence of Coleridge's Institutional inheritance in order to both demonstrate the connections between them and the essays on method, and situate these essays as a response to his previous experience with the arts-and-sciences Institutions. In doing so, I seek to reveal an Institutional inheritance in Coleridgean thought that is perhaps more profound than has been recognized.

Having delivered only two courses within the arts-and-sciences Institutional circuit, his 1808 course at the Royal and an 1812-13 course on *Belles Lettres* at the Surrey Institution, it is very easy to miss the impact that Coleridge's interaction with these Institutions had on his later thought and writing. A survey of his correspondence from 1804-1810 shows that Thomas Bernard had helped to coordinate a plan for Coleridge to deliver regular courses on the principles of Poetry "every winter both at the Royal and London Institutions, & mainly assisting in a work to be published at the latter."³²⁹ He even said that his engagement at the London Institution was "of more Importance"

³²⁹ Samuel Taylor Coleridge, *Lectures 1808-1819 On Literature*, ed. R.A. Foakes, vol. V of *The Collected Works of Samuel Taylor Coleridge* (Princeton: Princeton University Press, 1987), part I, 6.

than that of the RI.³³⁰ Specifics on the “work to be published” there remain mysterious. Could it have been a large Institutional catalogue comparable to that published by Thomas Young? Although it is an interesting speculation, we may never know. Something also appears to have happened to delay the lecture program at the London Institution. By the time its lecture curriculum finally got underway in 1818, Coleridge was nearing the end of his lecturing career, so his early connection with the London Institution often goes unnoticed. But taking that early connection into account, Coleridge’s plans imagine lectureships at three of the four representatives of the arts-and-sciences Institutional movement in London. As such, following the tracks of the lectures that he did give at these Institutions can enable a more precise understanding of the target of Coleridge’s infrastructural positions.

So too, by 1809 the RI had already begun its administrative push for reform. In addition to having dismantled its proprietary structure, the changes to the Royal’s constitution altered its disciplinary structure in a way that quite obviously sought to stem the increasing influence of “fashion” in its “scientific” curriculum of lectures. For a short period coinciding with the 1810 reforms, subjects as were found incapable of experimental “demonstration” were discontinued entirely, which evidently included its fine arts courses.³³¹ In the years following the reforms, Thomas Bernard came back into a management position, and the RI began reintroducing fine arts lectures. By this time, however, the reforms had initiated an augmentation of its “more Elementary and more Scientific Lectures.”³³² Fine arts lectures were maintained on a more limited scale, but the Institutional focus had now shifted toward the scientific study of nature and the useful arts. It is at

³³⁰ Coleridge, *CW*, V, I, 6.

³³¹ Este, *Scientific Institutions*, 7-8; Davy, *Lecture on the Plan*, 22; (confirm in managers minutes).

³³² Humphry Davy, *A Lecture on the Plan which it is Proposed to Adopt for Improving the Royal Institution and Rendering it Permanent* (London: William Savage, 1810), 16.

this point that we see the RI begin to take on the more utilitarian shape that would make it a model for the modern institution of technology. These reforms hence play a role in obscuring the focus of Romantic Institutional arguments.

Because of the elimination of the fine arts courses leading up to the reforms, Coleridge could not have continued lecturing at the RI during this time, even if he had the support of figures like Thomas Bernard and Humphry Davy. Under these circumstances, Bernard yet assisted Coleridge in getting his post-RI lecture career off the ground. He arranged the first lectures Coleridge gave outside the RI. These were his 1811-12 lectures at the London Philosophical Society in Fetter Lane. They are principally known for being the first relatively intact presentation of Coleridge's Shakespeare and Milton criticism, yet they also show the first evidence, beginning with lecture 9, of Coleridge's borrowings from Schlegel, and because of this have unfortunately been part of the controversy surrounding Coleridge over charges of plagiarism.³³³ However, since the developments I am attempting to trace have their roots in the RI course of 1808, several years prior to Coleridge's reading of Schlegel, the additional material borrowed from Schlegel is of little interest in attempting to understand Coleridge's Institutional inheritance. R.A. Foakes, the editor of the volumes on Coleridge's literary lectures contained in the *Collected Works* of Coleridge, notes in his general introduction the unavoidable "repetitions" inherent in the genre of lecturing, and remarks that they are therefore necessarily less original than some of Coleridge's other works.³³⁴ Yet it is precisely this consistency that I find interesting, because what it suggests is that Coleridge in large part retains the initial structure (i.e. in its reference to Coleridge's generic definition of Poetry, the elucidation of

³³³ Coleridge, *CW*, V, I, lv-lxxx; Coleridge, *CW*, V, I, 172-3 and 353-4. Note also that a common bye-law within these Institutions would explicitly prohibit "personal allusions," i.e. allusions to living figures, so it is possible that the LPS would not have allowed Coleridge to cite Schlegel explicitly. Coleridge had already been admonished for having defended Andrew Bell in the controversy over the Bell and Lancastrian systems of education in a supernumerary lecture on education, which he gave in the middle of his 1808 course at the RI.

³³⁴ Coleridge, *CW*, V, I, xl.

principles, and their application) of the lectures as they were first developed at the RI. Coleridge's consistency means that its arts-and-sciences structure is largely conserved throughout his lecturing career. This point is significant because, although they are more ephemeral than his published works, Coleridge's lectures nonetheless represent a crucial common thread in his intellectual activity from 1808-1819, the period during which his most important prose works on Poetry and literary criticism appear. This consistency, along with the relative consistency with which Coleridge delivered the lectures, hence represents the most direct and sustained Institutional element in Coleridge's thought.

As I pointed out in the previous chapter, the titles of the courses provide the first indication of an Institutional inheritance. The full title of the initial lecture that Davy and Bernard invited Coleridge to deliver in 1806, but which he was ultimately unable to give, would have been "On the Principles Common to the Fine Arts." When Coleridge accepted a second invitation from the RI to deliver a course of lectures beginning in January of 1808, the title, as announced in the *Morning Chronicle*, the *Courier*, and the *Monthly Magazine*, had changed to "On the Distinguished Poets in illustration of the general Principles of Poetry."³³⁵ Importantly however, the generic definition of "Poetry" that Coleridge provides in these lectures, by which "Poetry" refers to a genre of composition applicable to "all of the fine arts," actually stands as Coleridge's attempt to preserve the RI's initial interest in deriving the principles common to the disciplinary domain known as the fine arts.³³⁶

³³⁵ Coleridge, *CW*, V, I, 12.

³³⁶ Another reason Coleridge might have contracted the scope a bit would be compatible with the evidence of Michael Lambton Este (*Scientific Institutions*) that says it was one of the RI's concerns to prevent the lecturers from stepping on each other's toes. As there were other lecturers on the individual fine arts, such as Opie, Landseer, etc. he might not have wanted to encroach. Still, he wanted to make his point, and did it by expanding on the isolated category of poetry, expanding it into a form that encompassed the fine arts, rather than trying to explain the common principles of the fine arts as a whole initially.

The title changes only slightly for the 1811-12 lectures at the London Philosophical Society. This time we have an extant prospectus, which lists the title in full, as “A Course of Lectures on Shakespear and Milton, in illustration of the Principles of Poetry, and their Application as Grounds of Criticism to the most popular Works of later English Poets, those of the Living included.”³³⁷ R.A. Foakes notes of the 1811-12 lectures that this “Prospectus neatly changed the emphasis of the 1808 course by giving Shakespeare and Milton pride of place rather than the principles of Poetry, but Coleridge evidently had in mind the earlier course, and, as is the way of lecturers, used again in 1811-12 some of the materials prepared for that series.”³³⁸ In addition to these consistencies, the title also refers to the “application” of those principles as “Grounds of Criticism,” hence bringing the subject of the lectures into almost exact alignment with the RI’s concerted attention to the “principles and application of the philosophy of nature and art.”³³⁹ Coleridge’s next lecture courses took place at Willis’ Rooms in 1812, and in 1812-13 at the Surrey Institution.³⁴⁰ Although his employment at the Surrey shows a continuation of the arts-and-sciences Institutional relationship Coleridge had begun at the RI, the Surrey lecture title is the first to have a different name. That course is entitled “A course of Lectures on the Belles Lettres.”³⁴¹ At first it would appear that Coleridge had departed widely from his original path, but as with his RI course, Coleridge again began with a lecture on taste, which Henry Crabb Robinson wrote in his journal was merely “a repetition of former

³³⁷ Coleridge, *CW*, V, I, 179.

³³⁸ Coleridge, *CW*, V, I, xli.

³³⁹ Young, *Lectures*, 8.

³⁴⁰ The *Sun* reports that the lectures at Willis’ Rooms (Coleridge, *CW*, V, 431) were “on the subject of Poetry, and particularly of the dramatic kind,” showing how the “illustrations,” such as the specified “dramatic kind,” refer back to the fundamental generic substrate of “Poetry.”

³⁴¹ Coleridge, *CW*, V, I, 480.

lectures.”³⁴² The syllabus for Coleridge’s Surrey Institution lectures also shows that his second and third lectures would consider

The falsehood of the almost universal opinion, that, in the progress of civilized life, the invention of Conveniences and Utilities precedes the Arts of Ornament, proved both by facts, and a priori (i.e. from the Nature of the Human Being). The Fine Arts in the Natural Order of their Origination—Dress,³⁴³ Orchesis, (including all the Arts of Bodily Motion, as Mimic Dances, Gymnastic Sports, &c.) Architecture, Eloquence, Music, Poetry, Statuary, Painting, Gardening.³⁴⁴

Together with the title of lecture four, “On Poetry in genere,” this lecture series too begins to look like the earlier lectures on the principles of Poetry, and Coleridge’s courses start to appear more like periodic elaborations on the theme initiated at the RI, rather than isolated and independent efforts. This description of lectures two and three is quite interesting because it openly mentions that Coleridge will contradict the RI’s stated view that historical progress in the arts moves from “necessaries,” to “comforts,” and finally to “elegancies of life.”³⁴⁵ The fact that Coleridge is making this argument within one of the Institutions founded to promote this progress, with a specific focus on the improvement of “necessaries” and “comforts,” to the exclusion of “elegancies,” means that this reversal is more than mere Romantic opposition to utilitarian progress. Coleridge is actively

³⁴² Coleridge, *CW*, V, I, 487.

³⁴³ For Coleridge’s view of Dress as a Fine Art, See Samuel Taylor Coleridge, *The Letters of Samuel Taylor Coleridge*, Vol. III, ed. Griggs (Oxford: Oxford University Press, 1956), #735, 155-157: “Unsuspicious of the possibility of misunderstanding. I had inserted in this prospectus Dress and Dancing among the fine Arts, the principles common to which I was to develop. Now surely anything common to Dress or Dancing with Architecture, Gardening, and Poetry could contain nothing to alarm any man who is not alarmed by Gardening, Poetry, etc., and secondly, principles common to Poetry, Music, etc., etc., could hardly be founded in the ridiculous hopping up and down in a modern ball-room, or the washes, paints, and patches of a fine lady’s toilet. It is well known how much I admired Thomas Clarkson’s Chapter on Dancing. The truth is, that I referred to the drapery and ornamental decoration of Painting, Statuary, and the Greek Spectacles; and to the scientific dancing of the ancient Greeks, the business of a life confined to a small class, and placed under the direction of particular magistrates. My object was to prove the truth of the principles by shewing that even dress and dancing, when the ingenuity and caprice of man had elaborated them into Fine Arts, were bottomed in the same principles.”

³⁴⁴ Coleridge, *CW*, V, I, 480.

³⁴⁵ Benjamin Thompson Count von Rumford, “Prospectus of the Royal Institution of Great Britain,” *The Complete Works of Count Rumford*, Vol. IV (Boston: American Academy of Arts and Sciences, 1875), 771.

trying to shape the Institution's view of history in a way that would allow its audiences and managers to see that the "ornamental" or fine arts, "the elegancies of life," are actually coextensive in origin and scope with "comforts," or possibly even "necessaries," because they have to do with "the Nature of the Human Being," rather than a specifically directed art or practice. If it was possible to shift the Institutional position on the progress of the arts, then the argument for including the fine arts under the disciplinary category of Poetry could achieve a permanent status within the arts-and-sciences Institutions.

Much of the scholarship on Coleridge's so-called "literary" lectures focuses the "illustrations" of his principles, which gives the impression that the lectures are changing all the time. But if we take the illustrations to be ancillary rather than fundamental to Coleridge's lectures, it is the *principles* of Poetry, considered in its generic sense as applicable to all of the fine arts, that emerges as the relatively consistent foundation upon which a wide variety of illustrations could be made. In the later lectures Coleridge increasingly emphasizes what he had initially billed as the "illustrations" of his principles, so the critical focus has actually been on the figures associated with these illustrations, such as Shakespeare, Milton, Dante, and many others. These figures occupy a larger and larger portion of Coleridge's discussion as his lecturing career proceeds, and these later lectures are comparatively well preserved, so the illustrations have taken a dominant role in typical evaluations of them.³⁴⁶

Despite this trend, Coleridge's consistency with respect to the generic definition of Poetry is retained even in these later lectures. Beginning with the 1808 lectures as a reference, we find Coleridge working to distinguish his generic view of Poetry from the more specific form of written metrical composition:

³⁴⁶ Coleridge, *CW*, V, I, lxiv-lxxx.

In my last address, I had defined Poetry (and I have been requested to repeat the definition) to be—The art—or whatever better name our language may afford—of representing external nature and human Thoughts & Affections, both relatively to human Affections; to the production of as great immediate pleasure in each part, as is compatible with the largest possible Sum of Pleasure in the whole.—Now this Definition applies equally to Painting & to Music, as to Poetry—and in truth the term “Poetry” is alike applicable to all three.”³⁴⁷

Although this definition would appear to commit a categorical error by including “Poetry” as a species of composition that also falls under the broader category called “Poetry,” Coleridge immediately clarifies the point by distinguishing his generic definition of Poetry (i.e. Poetry with a capital “P”) from its traditional use, or what he calls “measured words.”³⁴⁸ This early attempt to differentiate “Poetry” from “measured words” would serve as the foundation upon which his later efforts to distinguish general and specific definitions of the term would build.

His next attempts would appear in the 1811-12 course at the London Philosophical Society, as for example the following definition from lecture four:

Final Definition of a Poem & of Poetry—

A Poem is that species of composition which being with some others opposed to <Works> of Science, as having for its immediate object the communication of Pleasure, not of Truth, is distinguished from all others by proposing to itself such Delight from the Whole as is compatible with a distinct Gratification from each component part—and hence enables us to place its perfection in its power of communicating the greatest degree of pleasurable Excitement from each Part that is consistent with the largest possible sum of Pleasure & Satisfaction from the Whole. This most general yet distinctive Character of a Poem originated in the poetic Genius itself—and tho’ it comprises whatever can with any propriety be called a Poem, unless that word be a mere lazy Synonym of a composition in metre, it yet becomes a just & not merely discriminative but full and adequate definition of Poetry in its highest & <most> peculiar sense, only as far as the distinction still results from the poetic Genius.”³⁴⁹

³⁴⁷ Coleridge, *CW*, V, I, 75-6.

³⁴⁸ Coleridge, *CW*, V, I, 75-6.

³⁴⁹ Coleridge, *CW*, V, I, 24. See earlier definition (Coleridge, *CW*, V, I, 207) Coleridge provides in the second lecture of his 1811-12 course at the London Philosophical Society, as recorded by John Payne Collier:

He would give of Poetry the following Definition—

It is an art (or whatever better term our language may afford) of representing <in words> external nature and human thoughts and affections both relatively to human affections by the production of as much positive pleasure immediate pleasure as is compatible with the largest possible sum of pleasure in the whole—

Coleridge offers several definitions like this earlier in the 1811-12 course, and John Payne Collier's notes on the lecture record Coleridge remarking that "The definition he had supplied would apply equally to Painting and to Music as to Poetry but the to the [last] must be added *words & metre* and the definition was distinctly and solely applicable to Poetry which produced that delight which was the parent of many virtues."³⁵⁰ Like the definition from the 1808 lectures, Coleridge appears to be struggling with the language in an attempt to differentiate his vision for a generic disciplinary and Institutional category called "Poetry" from a specific practice of composing in "measured words" that also goes by that name. Yet, understanding this categorico-linguistic difficulty actually provides an Institutional logic for Coleridge's tendency, especially in later prose works, to use the capitalized form when discussing the subject. This fact reveals that Coleridge's Poetry with a capital "P" is actually an Institutional category that Coleridge is attempting to develop on behalf of preserving a science of aesthetic practice within the arts-and-sciences Institutional configuration.

The notable addition to the 1811-12 definition is the qualification that "A Poem," considered in its generic sense, is to be understood as a species of composition "opposed to <Works> of science." Coleridge's point in drawing this opposition is emphatically not to oppose what he is doing to science. Indeed, the statement that opposes these two, according to the very definition that opposition posits, is itself a scientific statement, so Coleridge is actually practicing

Or to vary the words in order to make the abstract idea more intelligible—

The art of communicating whatever we wish to communicate so as both to express & to produce excitement, but for the purpose of immediate pleasure & so far [as] each part is fitted to afford as much pleasure as is compatible with the largest sum in the whole.—

After providing this definition, Coleridge evidently specified explicit reasons for each component of the definition. After this explanation, and to help clear up John Payne Collier's insertion of "<in words>," Coleridge appears to have added, "The definition he had supplied would apply equally to Painting and to Music as to Poetry but the to the [last] must be added *words & metre* and the definition was distinctly and solely applicable to Poetry which produced that delight which was the parent of many virtues."

³⁵⁰ Coleridge, *CW*, V, I, 207; see also Tomalin notes from Coleridge, *CW*, V, I, 225.

science, not opposing it. Rather, the opposition provides a first indication of Coleridge's emerging "science of method," which he would not fully articulate until his various treatises and essays on method published after 1817. Other lecturers on the fine arts at the RI, John Landseer for instance, tended to have trained at the Royal Academy, and often adopted Joshua Reynolds' theory of the grand style as a basic aesthetic premise in their lectures. The Royal Academy philosophy worked perfectly within the arts-and-sciences Institutional arrangement because it, like the RI *Prospectus*, assumes that progress in the arts occurs in a temporally constrained way, beginning with necessities, moving to accommodations or comforts, and finally to the arts of ornament. It also assumes that the value of the grand style could be successfully communicated by reference to models, Landseer's "engraved exhibit," and that attaining an appreciation for these stylistic principles was the best way for science to improve the fine arts.

In order to properly distinguish his treatment of Poetry from that expressed by the theory of the grand style, Coleridge had to submit both Poetry and Science to the same methodological analysis. Once placed on the same intellectual plane, Coleridge could address the two domains in terms of the goals or purposes of their respective practitioners. For the practitioner of scientific method, the purpose or goal is "truth." For the Poet, on the other hand, the goal is to induce as much aesthetic "pleasure" or pleasurable intellectual activity in each part as is compatible with a pleasure in the whole. Coleridge, in other words, opposes "Poetry" to "Science" not to suggest that Poetry was antithetical to knowledge. Poetry, according to Coleridge, is capable of communicating some of the greatest moral truths.³⁵¹ Instead, he is distinguishing between the goals of Scientific method and the goals of Poetic method in order to articulate what he believes to be a more adequate knowledge of the method involved in its composition. If his lectures were to fully communicate a

³⁵¹ See Samuel Taylor Coleridge, *Biographia Literaria*, ed. Nigel Leask (London: J.M. Dent Orion Publishing Group, 1997), 182.

“Science of Poetry,” and derive a science of criticism from it, it would first be necessary for the audience to understand that the science he was endeavoring to describe concerned a set of practices whose primary goals are in fact opposed to those of science.

Coleridge’s methodological consideration of the generic definition of Poetry persists into his later lectures, as in the following example from his 1818 course “On the Principles of Judgement, Culture, and European Literature,” also given at the London Philosophical Society:

Taking therefore mute as opposed not to sound but to articulate Speech, the oldest definition of Painting is in fact the true and the best definition of the Fine Arts in general—*muta Poesis*—*mute* Poesy—and of course, *Poesy*—/—(and as all Languages perfect themselves by a gradual process of desynonymizing words originally equivalent, as Propriety, Property—I, Me—Mister, Master—&c/ I have cherished the wish, to use the word, Poesy, as the generic or common term, distinguishing that species of Poesy, which is not *muta Poesis*, by its usual name, *Poetry*/) while of all the other species, which collectively form the Fine Arts, there would remain this as the common definition—that they all, like Poetry, are to express intellectual purposes, Thoughts, Conceptions, Sentiments that have their origin in the human Mind, but not, as Poetry, by means of articulate Speech, but as Nature, or the divine Art, does, by form, color magnitude, Sound, and proportion, silently or musically.—³⁵²

Coleridge had already recommended the practice he called “desynonymization” as an enjoyable and productive form of intellectual exercise in his Surrey Institution lectures.³⁵³ Here we see Coleridge bringing that practice to bear on the development of his own Institutional thought. He appears to think that this practice could help to achieve progress in the arrangement of the fine arts within the new arts-and-sciences Institutional configuration.

This passage interestingly comes from the same lecture series in which Coleridge announces that each lecture, though containing much variety of material, would nonetheless be connected by “being all in *kind*, though not all in the same *degree*, productions of GENIUS.”³⁵⁴ The coincidence of these

³⁵² Coleridge, *CW*, V, II, 218-219.

³⁵³ Coleridge, *CW*, V, I, 480.

³⁵⁴ Coleridge, *CW*, V, II, 40.

two passages tells us that Coleridge's more methodical account of the connecting principles of Poetry, which his various practical criticisms during the lectures help to illustrate or model, is travelling in lock-step with a further desynonymizing of his generic definition of Poetry, or as he begins to call it here, "Poesy." This general category of Poesy, or *Poesis*, would according to Coleridge's vision, imply an intellectual method grounded on a feeling of pleasure, and having as a goal the communication of that pleasure. As an Institutional category such a method could conceivably be used to describe practice in all of the fine arts, and even open up the category for other arts not yet considered as forms of Poesy, just as we today apply the phrase "scientific method" to an indefinite number of scientific genres.

Viewing Coleridge's lecturing career as the backbone or at least the common thread of his intellectual activities from 1808-1819 provides a foundation for understanding the Institutional inheritance in his other work during this period. It is notable, for instance, that Coleridge actually developed his idea for *The Friend* (1809) in conjunction with the RI, shortly after completing his 1808 course. There was even an initial plan to have William Savage, the printer to the RI, oversee the printing of its periodic installments.³⁵⁵ This connection usually goes unacknowledged because Coleridge withdrew from the agreement after falling out with Savage over printing costs. But the very fact that the RI was involved in the early planning for a work of such significance as *The Friend* opens the possibility that the degree to which these arts-and-sciences Institutions exerted an effect on the structure Coleridge's prose publications has been underestimated.

In his "Prospectus" to *The Friend*, for instance, Coleridge acknowledges the "Men of highest Rank and established Character in the Republic of Letters," who gave him "not only strong

³⁵⁵ Samuel Taylor Coleridge, *Letters of Samuel Taylor Coleridge*, Vol. III, ed. Earl Leslie Griggs (Oxford: Oxford University Press, 1956), #724, 134-136; #729, 141; #728, 140; #730, 143. See also Samuel Taylor Coleridge, *The Friend*, ed. Barbara E. Rooke, vol. IV of *The Collected Works of Samuel Taylor Coleridge* (Princeton: Princeton University Press, 1987), part I, xxxvii-xxxix.

Encouragements as to my own Fitness for the Undertaking, but likewise Promise of Support from their own Stores.” While the degree to which these supporters were composed of the proprietors, managers, and subscribers of the RI is of course difficult to ascertain, just below this comment, Coleridge invokes the RI directly in his list of the primary “Subjects” *The Friend* proposes to consider:

The necessary Dependence of Taste on moral Impulses and Habits: and the Nature of Taste (relatively to Judgement in general and to Genius) defined, illustrated, and applied. Under this Head I comprize the Substance of the Lectures given, and intended to have been given, at the Royal Institution, on the distinguished English Poets, in illustration of the general Principles of Poetry; together with Suggestions concerning the Affinity of the Fine Arts to each other, and the Principles common to them all: Architecture; Gardening; Dress; Music; Painting; Poetry.³⁵⁶

Despite the contingent events that made the RI’s fine arts lecture curriculum possible, the fine arts lectures still had to abide by its arts-and-sciences discursive infrastructure. This passage from *The Friend* repeats with precision the structural logic of the RI lectures that sought to elucidate scientific principles and apply those principles to the state of the arts. Included in this quotation is not only the clear statement that Coleridge’s lectures on the “Principles of Poetry” will form the basis for his discussion of the fine arts in *The Friend*, but also a clear indication that these two categories, Poetry and the “Principles common to” fine art, are part of the same arts-and-sciences Institutional project. These principles, as in the RI lectures, will be “illustrated” and “applied.” A clear and provocative instance of this infrastructural effect in the body of the text occurs in *The Friend*’s frequent return to the motivations and plan for the work as a whole, such as the following statement from one of its supernumerary installments:

To refer men’s opinions to their absolute Principles, and thence their Feelings to the appropriate Objects, and in their due degrees; and finally, to apply the Principles thus ascertained, first to subjects of Taste or the fine Arts; then to the schemes of private and

³⁵⁶ Samuel Taylor Coleridge, *The Friend*, (London: Gale and Curtis, 1812), 15-16.

national Education; and last of all, to the particular Duties, Joys, and Afflictions of private Life—these were to be the Objects and the Contents of his Work.³⁵⁷

In this passage Coleridge appears to be expanding the structural logic of the RI lectures to encompass the entire plan for *The Friend*. The application of these principles extends the applications evident in his lectures to include topics of “Education” and “private Life,” in addition to “subjects of Taste or the fine Arts.” This fact suggests the possibility that the RI lectures do not simply provide the structure of Coleridge’s discussion of taste and the fine arts in *The Friend*. Instead, it appears to be the case that Coleridge structures the entirety of *The Friend* according to the structural logic of the RI’s scientific lectures.

Together these two passages highlight the audience-directed frame of the original lectures. It is interesting to note, for instance, that Coleridge mentions “Taste (relatively to Judgement in general and to Genius),” as the “Head” that contains the discussion of both “Poetry” and “Fine Art.” In fact, this structure precisely mirrors that of his RI course of 1808, which begins with a lecture on “Taste, in regard to Poetry, & whether it have any fixed Principle.”³⁵⁸ When Coleridge acknowledges this frame of judgment as a key feature of *The Friend*, it registers the first evidence of the retention in a prose publication of Coleridge’s concern for the perspective of the RI audience. Since his task was to communicate a science of taste in relation to Poetry to a general audience of non-artists, establishing the principles of judgment on behalf of a critical theory would have been as important as deriving the principles of Poetry. Indeed articulating the relation between the two forms the basis of his effort to model that critical practice on the stage of the RI theatre. In this sense, both the

³⁵⁷ Coleridge, *Friend*, “Supernumerary Essay,” January 11, 1810, 328. *The Friend* was originally issued in 28 parts, from June 1, 1809 to March 15, 1810. See also Coleridge, *Friend*, No. 1, p. 12: “It is my object to refer men to PRINCIPLES in all things; in Literature, in the Fine Arts, in Morals, in Legislation, in Religion. Whatever therefore of a political nature may be reduced to general Principles, necessarily indeed dependant [sic] on the circumstance of a nation internal and external, yet not especially connected with this year or the preceding—this I do not exclude from my Scheme.”

³⁵⁸ Coleridge, *CW*, V, I, 27.

lectures and *The Friend* privilege the communication of a critical practice founded on the principles of Poetry that Coleridge would develop in its own right only a few years later.

This extension and development of an aesthetically-grounded critical practice begins with Coleridge's "Essays on the Principles of Genial Criticism." He published these essays in *Felix Farley's Bristol Journal* in five installments from August to September, 1814, during the short peace with France.³⁵⁹ Coleridge wrote the series of essays partly to promote an exhibition that included paintings by his friend, the American painter Washington Allston.³⁶⁰ The two had first met in Rome in 1805. Coleridge's "long conversations" with Allston during their many visits to picture galleries had resulted in the first written documents detailing Coleridge's thoughts on fine art and criticism.³⁶¹ These conversations also likely figured prominently in the initial discussion between Coleridge and Davy about the prospects of his delivering a course on such subjects at the RI.³⁶² Coleridge accepted Davy's invitation, and this agreement became the basis for the billed lectures for 1806 on the principles common to the fine arts, which Coleridge eventually had to cancel.

Yet the proximity of the "Essays" to Allston, and their particular interest in providing illustrations in relation to painting rather than "measured words," strike me as especially pertinent to the earliest form Coleridge's RI lectures could have taken.³⁶³ The relationship between the "Essays" and the 1806 proposed lectures must remain speculative to some degree, but their general relationship to Coleridge's special take on the RI lecture structure may be corroborated. The subtitle of the "Essays," for instance, states that "Genial Criticism" indicates a form of judgment in relation

³⁵⁹ Coleridge, *CW*, XI, I, 353-354.

³⁶⁰ Coleridge, *CW*, XI, I, 353-4.

³⁶¹ Coleridge, *CW*, XI, I, 354.

³⁶² See Coleridge, *CW*, V, I, 76n.

³⁶³ i.e. to the 1806 lectures on the principles common to the fine arts.

to the fine arts that has been “deduced from those [i.e. forms of judgment] which animate and guide the true ARTIST in the production of his Works.” As such, I want to stage the method of genial criticism as parallel to Coleridge’s methodological argument about Poetry. It is, in other words, a form of criticism that is aligned with and emerges from his principles of Poetry, and in practice shares the goals he ascribes to Poetry (i.e. pleasure), rather than those he ascribes to Science (i.e. truth).

Immediately recognizable is the consistency of the titles of these essays with those of the RI lectures. Their subject will concern, like the lectures on Poetry and the fine arts, the “principles” of the method of genial criticism. The next significant feature of the title is that word “genial.” H.J. Jackson and J.R. de J. Jackson, the editors of Coleridge’s *Shorter Works and Fragments*, mention that the “epithet ‘genial’ in the title has proved to be a stumbling-block to modern readers.”³⁶⁴ They concur with the critical consensus that Coleridge “did not mean by it ‘cheerful, jovial, or kindly,’” but instead referred to his attempt to “enable the spectator to judge in the same spirit in which the Artist produced, or ought to have produced,” their work of art.³⁶⁵ This initial clue may allow us to specify Coleridge’s use of “genial” still further, as the adjectival deployment of “genius.” The first evidence of this usage that I have been able to find comes from the Surrey Institution lectures of 1812-13, in which Coleridge claims that “Nature, the prime Genial Artist, inexhaustible in diverse powers is equally inexhaustible in forms.”³⁶⁶ In that same paragraph Coleridge transfers this same genial power to Nature’s “chosen Poet, of our own Shakespear/himself a Nature humanized a genial Understanding directing self-consciously a power & a <implicit> wisdom deeper than

³⁶⁴ Coleridge, *CW*, XI, I, 356.

³⁶⁵ Coleridge, *CW*, XI, I, 356.

³⁶⁶ Coleridge, *CW*, V, I, 495.

Consciousness.”³⁶⁷ He also follows this usage throughout the *Biographia Literaria*, the most important example, connecting its adjectival and nominal forms, occurring in chapter XI, when he says

Now though talents may exist without genius, yet as genius cannot exist, certainly not manifest itself, without talents, I would advise every scholar, who feels the genial power working within him, so far to make a division between the two, as that he should devote his talents to the acquirement of competence in some known trade or profession, and his genius to objects of his tranquil and unbiased choice; while the consciousness of being actuated in both alike by the sincere desire to perform his duty, will alike ennoble both.³⁶⁸

Without getting too involved in Coleridge’s division between genius and talent, this passage at least makes the connection between “genius” and “genial” quite clear. Hence, the way I understand “genial” as it pertains to “genial criticism” focuses on the identity of the “spirit” or genius which “animat[es] and guid[es] the true ARTIST, in the production of his Works,” and that with which the critic judges works of art.³⁶⁹ In this respect, the method of genial criticism coincides with the method of Poetry, not necessarily by the truth value of the particular criticisms made, but by the “spirit” that functions as the foundation or ground for making them. This understanding of “genial” permits a rereading of the full title of the 1811-12 lectures, “A Course of Lectures on Shakespear and Milton, in illustration of the Principles of Poetry, and their Application as Grounds of Criticism to the most popular Works of later English Poets, those of the Living included.”³⁷⁰ If the manner of “application” that Coleridge identifies is methodological, as I have been suggesting, then this “genial” criticism is likely a more common feature of the lectures than has been recognized.

The essays themselves support such a connection. Coleridge begins with a common refrain from the lectures, that

³⁶⁷ Coleridge, *CW*, V, I, 495.

³⁶⁸ Coleridge, *Biographia*, 135.

³⁶⁹ Coleridge, *CW*, XI, I, 356.

³⁷⁰ Coleridge, *CW*, V, I, 179.

all the fine arts are different species of Poetry. They admit therefore of a natural division into poetry of language (poetry in the emphatic sense, because less subject to the accidents and limitations of time and space);³⁷¹ poetry of the ear, or music; and poetry of the eye, which is again sub-divided into plastic poetry, or statuary, and graphic poetry, or painting. The common essence of all consists in the excitement of emotion for the immediate purpose of pleasure thro' the medium of beauty; herein contra-distinguishing poetry from science, the immediate object and primary purpose of which is truth and possible utility. (The sciences indeed may and will give a high and pure pleasure; and the Fine Arts may lead to important truth, and be in various ways useful in the ordinary meaning of the word; but these are not the direct and characteristic ends, and we define things by their peculiar, not their common properties.)³⁷²

This definition contains the clearest and most coherent inclusion of all the aspects of Coleridge's earlier definitions of Poetry that I have tried to bring together. Poetry in its generic sense is distinguished from its various species. There is an emphasis on the "common essence" or principle of these separate species. Coleridge defines this generic form of Poetry in contradistinction to "Science" via their respective purposes of "pleasure thro' the medium of beauty" and "truth and possible utility." The passage even includes the caveat that these contrary purposes are not disciplinarily exclusive, and may exist to varying degrees across the two genres of activity. They are just not, in Coleridge's view, definitive of those activities.

Like this definition of Poetry, the "Essays" contain many other features that appear to have been developed from the RI and later lectures. Coleridge identifies the state of current criticism, for instance, in terms particularly relevant to the arts-and-sciences emphasis on the dual aspects of theory and practice implied by the infrastructural attention to principle and application:

The works that have hitherto appeared, have been either technical, and useful only to the Artist himself (if indeed useful at all) or employed in explaining by the laws of association the effects produced on the spectator by such and such impressions. In the latter, as in Allison, &c. much has been said well and truly; but the principle itself is too vague for

³⁷¹ This parenthesis is also common to the lectures, and has direct reference to his conversations with Allston in Rome. It refers primarily to the vulnerability of the materials of fine art themselves. Frescoes are inherently more vulnerable to the decay of time than, say, a manuscript on vellum, a song more evanescent than a sculpture, etc. See Coleridge, *CW*, V, I, 76.

³⁷² Coleridge, *CW*, XI, I, 358.

practical guidance.—Association in philosophy is like the term stimulus in medicine; explaining every thing it [360] explains nothing; and above all, leaves itself unexplained. It is an excellent charm to enable a man to talk *about* and *about* any thing he likes, and to make himself and his hearers as wise as before. Besides, the specific object of the present attempt is to enable the spectator to judge in the same spirit in which the Artist produced, or ought to have produced.³⁷³

Like Thomas Young's earlier critiques of the institutional separation of science and art, Coleridge's critique of current works on criticism is that they are alternatively too exclusively technical, and therefore insufficiently philosophical, or too exclusively speculative, and therefore useless to the practicing artist or critic. At the end of the passage, Coleridge explicitly contrasts his principles of genial criticism to those former modes, because he sees that form of criticism as introducing principles that he believes are speculatively sound, but also practicable. While Coleridge's views certainly differ from Young's with regard to their specific understandings of the arts and sciences, they are crucially consistent on this one point, with common reference to the opinion of Bacon, that the institutional movement of the time should work on behalf of uniting the two.

The principles Coleridge develops hinge on the question of aesthetic pleasure, with reference to the "medium of the beautiful" through which the "immediate purpose of pleasure" that defines the goal of Poetry is communicated. These principles are striking, not necessarily for their content, which by now is so well known as to not require much comment, but for the resemblance which they bear to the remarks Coleridge makes at the end of his notes to the first of the 1808 RI lectures, in which he remarks: "There are three words, on the distinct meaning of which, and on the question whether they ought to have a distinct meaning, depends the solution of the main difficulty concerning Taste—The Good, the Beautiful, the Agreeable."³⁷⁴ This "main difficulty concerning Taste" is none other than that "Subject announced" at the beginning of the introductory lecture, "of

³⁷³ Coleridge, *CW*, XI, I, 359-360.

³⁷⁴ Coleridge, *CW*, V, I, 36.

Taste, in regard to Poetry, & whether it have any fixed Principle...which may probably lead to the determination of what those Principles are.”³⁷⁵ The 1808 notes end with those three words, “the Good, the Beautiful, the Agreeable,” with no explicit statement as to their relation to Coleridge’s “Principle.” In the “Essays,” however, we plainly see that those principles lie exactly in the distinctions available among these terms. For clarity, I have quoted them in full:

Principle the 1st. That which has become, or which has been made agreeable to us from causes not contained in its own nature, or in its original conformity to the human organs and faculties; that which is not pleasing for its own sake, but by connection or association with some other thing separate or separable from it; is neither [376] beautiful, nor capable of being a component part of Beauty: though it may greatly increase the sum of our pleasure, when it does not interfere with the beauty of the object, nay, even when it detracts from it. A moss-rose, with a sprig of myrtle and jasmine, is not more beautiful from having been plucked from the garden, or presented to us by the hand, of the woman we love, but is abundantly more delightful. The total pleasure received from one of Mr. Bird’s finest pictures may, without any impeachment of our taste, be the greater from his having introduced into it the portrait of one of our friends, or from our pride in him as our townsman, or from our knowledge of this personal qualities; but the amiable artist would rightly consider it a coarse compliment were it affirmed, that the beauty of the piece, or its merit as a work of genius, was the more perfect on this account.

Principle the 2nd. That which is naturally agreeable and consonant to human nature, so that the exceptions may be attributed to disease or defect; that, the pleasure from which is contained in the immediate impression; cannot indeed with strict propriety be called beautiful, exclusive of its relations, but one among the component parts of beauty, in whatever instance it is susceptible of existing as a part of a whole.

Principle the 3rd. The safest definition then of Beauty, as well as the oldest, is that of Pythagoras: THE REDUCTION OF MANY TO ONE—or, as finely expressed by the sublime Disciple of Ammonius,..., of which the following offered as both paraphrase and corollary. *The sense of Beauty subsists in simultaneous intuition of the relations of parts, each to each, and of all to a whole: exciting an immediate and absolute complacency, without intervenience therefore of any interest sensual or intellectual.*³⁷⁶

Hence, what we have in Coleridge’s statement of the principles of genial criticism is likely the closest approximation to the principles he describes at the end of the first of the 1808 RI lectures. This

³⁷⁵ Coleridge, *CW*, V, I, 27.

³⁷⁶ Coleridge, *CW*, XI, I, 377.

suggests that from the very beginning of his Poetry lectures, the idea of criticism that he recommends would have been consistent with the principles of genial criticism as he has states them here. In this respect the “Essays” represent a development of the aesthetic critical method that he first articulated in the RI lectures, and further, state in comparatively clear terms how that critical method could be grounded on his principle of Poetry, and employed as an application of those principles.

This consistency provokes important questions about how we have understood Coleridge’s criticisms in the lectures themselves, as well as the practical criticisms in later works like the “Essays” and the *Biographia Literaria*. If we treat the illustrations, such as those on Shakespeare or Milton, as fundamental, any critical disagreement with Coleridge on his practical criticisms would seem to negate the validity of his critical principles. What I want to suggest, however, is that the illustrations, consistent with his own remarks on them, are secondary to his principles.

Disagreements with his practical criticisms do not negate his principles, not because his principles are necessarily completely accurate, but because his practical criticism, like his view of Poetry, has pleasure as its primary goal, rather than truth.

His practical criticisms are genial then, precisely to that extent, and they are more adequately treated as illustrative of the principles, rather than fundamental tests of their validity. In this sense, though it sounds rather strange, it may be valuable to think of these practical criticisms, not as scientific statements about a work of art, but as themselves partaking of the work of art, regarded in terms of the aesthetic pleasure they communicate, rather than the truth they convey. A question that equally captures the point, is, ‘wouldn’t it be beautiful if *that* criticism were true?’ Like the newspaper articles citing Coleridge’s strange and apparently wandering performances of that pleasurable method in the 1811-12 lectures, these performances may be understood as part of the illustration of his principles.

These illustrations appear to be preserved as exclamatory punctuation in the various practical criticisms found in the “Essays.” Such appears to be the case in the single practical criticism of Allston that Coleridge provides in Essay III. In an attempt to illustrate his definition of the word “Beautiful,” which he renders philosophically as “Multēity in Unity,” and more colloquially as “shapely,” Coleridge offers a genial critique of Allston’s “The Dead Man Restored to Life by Touching the Bones of the Prophet Elisha” to show how beauty emerges with reference to either natural objects or works of art as an appreciation (conscious or unconscious) of something akin to geometric shape:

What then will be the result, when the Beautiful arising from regular form is so modified by the perception of life and spontaneous action, as that the latter only shall be the object of our conscious perception, while the former merely acts, and yet does effectively act, on our feelings? With pride and pleasure I reply by referring my reader to the groupe in Mr. Allston’s grand Picture of the Dead Man reviving from the touch of the bones of the Prophet Elisha, beginning with the Slave at the head of the reviving body, then proceeding to the daughter clasping her swooning mother; to the mother, the wife of the reviving man; then to the soldier behind who supports her; to the two figures eagerly conversing; and lastly, to the exquisitely graceful girl who is bending downward, and whose hand nearly touches the thumb of the slave! You will find, what you had not suspected, that you have here before you a circular groupe. But by what variety of life, motion, and passion, is all the stiffness, that would result from an obvious regular figure swallowed up, and the figure of the groupe as much concealed by the action and passion, as the skeleton which gives the form of the human body, is hidden by the flesh and its endless outlines!³⁷⁷

The two exclamatory marks in the above passage are what remains from Coleridge’s illustrations of practical genial criticisms of Shakespeare, Milton, and others, which he first performed on stage in the theatre of the Royal Institution, and almost certainly throughout much of his lecturing career.

This appreciation of shape as an indicator of aesthetic pleasure is grounded ultimately on his principles of Poetry, as well as its constituent mental faculty, the Imagination. The mutual grounding of criticism and Poetry thus serves as an important foundation for communication between the two,

³⁷⁷ Coleridge, *CW*, XI, I, 373.

where the Poet's pleasure (e.g. Allston's, or Shakespeare's) is subliminally related to a shapeliness that can be communicated to the appreciative critic, which would have important implications for several members of Coleridge's audience, as I will discuss further in chapter IV. In the "Essays," then, like the lectures, Coleridge participates in arts-and-sciences Institutional logic by situating his own critical appreciation of Allston as a means to *model* his method "before the eyes of the auditors."³⁷⁸

Viewing the products of Coleridge's critical method in their capacity as illustrations of principles also invites a rethinking of the typical approach to his practical criticisms in the *Biographia Literaria*. Today the *Biographia*, published in 1817, is principally known for its "deduction" or differentiation of the "Imagination" and the "Fancy" from two separate faculties of the human mind. Coleridge calls the Imagination the "seminal principle," which insinuates his discussion of that faculty at once with the prerogatives of the Royal Institution and to the Baconian disciplinary division that connected the Imagination with the disciplinary domain of Poetry.³⁷⁹ In addition, when figured as part of the legacy of Coleridge's RI lectures, and more specifically as an attempt to provide an elaboration and defense of his critical method, his distinction between the Imagination and the Fancy appears primarily as an extended example and justification of the practice of desynonymization that he often advocated in his courses on Poetry.³⁸⁰ So too, the Imagination, though the most important of the Poetic faculties, if traced back to the lectures, appears as merely the most prominent of several principles he mentions.

³⁷⁸ Coleridge, *CW*, V, I, xlvii.

³⁷⁹ Coleridge, *Biographia*, xxxi.

³⁸⁰ See the Syllabus and record of the Surrey Institution lectures in Coleridge, *CW*, I, 480, 487-488.

Like the lectures, both the contemporaneous and more recent critical commentary on the *Biographia* tend to note its apparently “immethodical” structure.³⁸¹ Nigel Leask, in his introduction to the Everyman edition of 1997, also notes the obscurity of the “Biographia’s ‘split’ between theory and practice,” which, “despite several influential modern attempts to reveal an underlying organic ‘unity’ in the work – remains a problem which has challenged as well as bedevilled English criticism ever since.” However, in the context of the arts-and-sciences structure embedded in the RI lectures, which explicitly demanded an attention to both theory and practice, it appears that this Institutional infrastructure could serve quite plainly as the rationale for the shape of the *Biographia*. The clearest evidence of this appears in the opening to Chapter XV, when Coleridge summarizes his task in the practical half of his project as “the application of these principles to purposes of practical criticism.”³⁸²

In attempting to show how this Institutional analogy could help to explain the structure of the *Biographia*, one of the points that must be emphasized is that its structure reveals quite clearly that Coleridge’s concern with theory and practice, principle and application, has to do with audience. Coleridge recognizes that the audience most familiar with his thinking, and with whom he has the most experience, is the new and diverse class of readers he experienced most directly via his lectures.³⁸³ My view locates the impetus to the *Biographia* not in a dispute with Wordsworth, as many critics have contended, but with this new arts-and-sciences reading audience, and tries to imagine its unusual structure as primarily motivated by that audience.³⁸⁴ I want to argue that it is this dialogue

³⁸¹ See Coleridge, *Biographia*, xliii, l-li.

³⁸² Coleridge, *Biographia*, 186.

³⁸³ Coleridge, *Biographia*, 21. For a detailed discussion of Coleridge’s relation to middle-class reading audiences, see Jon Klancher, *The Making of English Reading Audiences, 1790-1832* (Madison: University of Wisconsin Press, 1987), esp. 4, 13-14, 73.

³⁸⁴ See Nigel Leask’s intro to Coleridge, *Biographia*, xxx, xxxvi-iii.

with the new reading audience that forms the connection between his RI lectures on the “Principles of Poetry” and the *Biographia*. As part of this argument, I will show that Coleridge’s deduction of the separate faculties of the Imagination and the Fancy has a direct, even explicit, relationship to both the arts-and-sciences structure and the general non-practicing audience that Coleridge encountered during his lectures at the RI and similar venues.

Coleridge’s notes to the *Biographia* make several references to the RI lectures that describe how his experience there informs the subjects he addresses in each chapter. In a note to chapter II, for example, he expands on his defense of Shakespeare against the claim of Pope that “our great bard ‘grew immortal in his own despite,’” by referring to his discussion of the same subject in his 1808 course:

Mr Pope was under the common error of his age, an error, far from being sufficiently exploded even at the present day. It consists (as I explained at large, and proved in detail in my public lectures) in mistaking for the essentials of the Greek stage certain rules, which the wise poets imposed upon themselves, in order to render all the remaining parts of the drama consistent with those, that had been forced upon them by circumstances independent of their will; out of which circumstances the drama itself arose. The circumstances in the time of Shakespeare, which it was equally out of his power to alter, were different, and such as, in my opinion, allowed a far wider sphere, and a deeper and more human interest. Critics are too apt to forget, that *rules* are but means to an end; consequently where the ends are different, the rules must be likewise so. We must have ascertained what the end *is*, before we can determine what the rules *ought* to be. Judging under this impression, I did not hesitate to declare my full conviction, that the consummate judgement of Shakespeare, not only in the general construction, but in all the detail, of his dramas impressed me with greater wonder, than even the might of his genius, or the depth of his philosophy. The substance of these lectures I hope soon to publish; and it is but a debt of justice to myself and my friends to notice, that the first course of lectures, which differed from the following courses only, by occasionally varying the illustrations of the same thoughts, was addressed to very numerous, and I need not add, respectable audiences at the royal institution, before Mr Schlegel gave his lectures on the same subjects at Vienna.”³⁸⁵

Since Coleridge never did publish the RI lectures, all we have to go on are the lecture notes and reports made by journalists and other audience members. But from those alone, it is clear that

³⁸⁵ Coleridge, *Biographia*, 21, n. 1.

Coleridge did address the topics he describes. The most important of these for my purposes is Coleridge's attempt to distinguish what he calls the "essentials" of dramatic poetry from mere "rules" imposed on Greek drama by "circumstances independent" of the will of the dramatist. Coleridge's point in drawing such a distinction is to suggest that the mistake of taking these circumstantial rules for what is essential to drama (e.g. the unities) had emerged as the "common error" of the neoclassical age. Based on this "common error" (perhaps opposed to "common principle"), Pope made the unity of time and place a criterion for attributing to Shakespeare a lack of judgment. Coleridge is hence reviving a notion of Shakespearean judgment that has reference to the same essentials, while also shifting other less essential elements, such as the unity of time and place, in order to align the "means" of dramatic construction with the "ends" of dramatic poetry.³⁸⁶

Coleridge's distinction has everything to do with the subject of the chapter in which this note occurs. The subtitle of chapter II is "Supposed irritability of men of Genius – Brought to the test of Facts – Causes and Occasions of the charge – Its Injustice."³⁸⁷ Its opening paragraph, however, details the concern that underpins its nominal subject, to address a certain tendency in the criticism of his time. "I have often thought," Coleridge begins, "that it would be neither uninformative nor unamusing to analyze, and bring forward into distinct consciousness, that complex feeling, with which readers in general take part against the author, in favor of the critic."³⁸⁸ Remembering that the 1808 lectures begin by addressing whether "Taste, in regard to Poetry...have any fixed Principle," and that those principles are consistent with the principles of genial criticism described above, the concern in chapter II of the *Biographia* connects with those principles by

³⁸⁶ Coleridge, *CW* V I 481 "proves that a profound judgement in the construction of his Plays is equally his Characteristic,--as Genius and deep Insight into Human Nature;--or, rather, that they are the same power variously applied."

³⁸⁷ Coleridge, *Biographia*, 19.

³⁸⁸ Coleridge, *Biographia*, 19.

attending to the tendency of his audience, understood as a metric of the “*reading* public in general,” in the opposite direction, toward relying on the professional critic’s focus on the faults of an author, rather than giving critical priority to the “excellencies” of the artist’s work.

Noting first that he had been guilty of engaging in this sort of criticism himself, Coleridge subsequently

labored at a solid foundation, on which permanently to ground my opinions, in the component faculties of the human mind itself, and their comparative dignity and importance. According to the faculty or source, from which the pleasure given by any poem or passage was derived, I estimated the merit of such poem or passage. As the result of all my reading and meditation, I abstracted two critical aphorisms, deeming them to comprize the conditions and criteria of poetic style; first, that not the poem which we have *read*, but that to which we *return*, with the greatest pleasure, possesses the genuine power, and claims the name of *essential* poetry. Second, that whatever lines can be translated into other words of the same language, without diminution of their significance, either in sense, or association, or in any worthy feeling, are so far vicious in their diction.³⁸⁹

Coleridge’s desire to ground his opinions in the “component” (i.e. elementary) faculties (i.e. “sources,” intellectual principles) of the human mind is part of the Institutionally inflected Baconian (and for Coleridge also Kantian) discourse that sought to derive a ground for the intellectual disciplines of Philosophy, History, and Poetry, in the dominant mental faculties presumed to be in operation while pursuing those disciplines, Reason, Memory, and Imagination, respectively.

That phrase, “*essential* poetry,”³⁹⁰ has reference back to the earlier definition of “Poetry” that Coleridge first develops in the 1808 and 1811 lectures, which he renders almost verbatim in chapter XIV of the *Biographia* as follows:

The final definition then, so deduced, may be thus worded. A poem is that species of composition, which is opposed to works of science, by proposing for its immediate object pleasure, not truth; and from all other species—(having this object in common with it)—it is

³⁸⁹ Coleridge, *Biographia*, 13-14.

³⁹⁰ See similarity of usage in Samuel Taylor Coleridge, “Treatise on Method,” *Encyclopaedia Metropolitana*, Vol. I, eds. Edward Smedley, Hugh James Rose, Henry John Rose (London: Fellowes, Rivington, etc., 1845), 6.

discriminated by proposing to itself such delight from the whole, as is compatible with a distinct gratification from each component part.³⁹¹

This “faculty or source, from which the pleasure given by any poem or passage was derived,” hence stands as the “ground,” or principle of aesthetic pleasure. It is quite clear that this “pleasure” exists both as the “Object” (i.e. purpose) of, and the criterion for determining whether a given work belongs to “*essential* Poetry.” Coleridge’s use of “essential” thus pertains not to the judgment of artworks by the universal application of an articulated theory of general or essential beauty as exemplified in individual works of art (e.g. the application of Reynolds’ preference of the general over the particular as a criterion for judging individual paintings), but to the requirement that the work excite pleasure from the individual intellectual faculty responsible for producing it. His belief that that criterion of aesthetic pleasure can in fact be grounded on the intellectual faculty from which it is derived will lead him ultimately to his attempt to desynonymize the faculty of the Imagination from that of Fancy.³⁹²

Continuing his inquiry into contemporary trends in criticism, Coleridge begins Chapter III by expressing his “surprise” that “anonymous critics in reviews, magazines, and news-journals” had forced him “to abide the brunt of abuse” not only for the faults “[he] had,” but also “for faults...which [he] certainly had not.” Citing his relatively uncontroversial public career as the ground of his surprise, he notes that

My different essays on subjects of national interest, published at different times, first in the Morning Post and then in the Courier, with my courses of lectures on the principles of criticism as applied to Shakespeare and Milton, constitute my whole publicity; the only occasions on which I could offend any member of the republic of letters. With one solitary exception in which my words were first misstated and then wantonly applied to an individual, I could never learn, that I had excited the displeasure of any among my literary

³⁹¹ Coleridge, *Biographia*, 183.

³⁹² It is important to remember that in Coleridge’s lectures, Imagination and Fancy are both principles of Poetry, so there is some indication that this desynonymizing work functions on behalf of discursive clarity at least as much as it does on othering and devaluing the Fancy.

contemporaries. Having announced my intention to give a course of lectures on the characteristic merits and defects of English poetry in its different aeras; first, from Chaucer to Milton; second, from Dryden inclusive to Thomson; and third, from Cowper to the present day; I changed my plan, and confined my disquisition to the two former aeras, that I might furnish no possible pretext for the unthinking to misconstrue, or the malignant to misapply my words, and having stamp't their own meaning on them, to pass them as current coin in the marts of garrulity or detraction.³⁹³

This interesting note suggests that Coleridge restricted the scope of his lectures due to worries about his audience misconstruing his meaning with regard specifically to living figures. Yet it is from this very point that Coleridge begins his discussion of Southey, at that time a living figure. This seeming paradox is actually crucial. First, it designates his experience as a lecturer with the arts-and-sciences audiences of the RI and SI as a primary indicator of contemporaneous trends in criticism.

Understanding that audience then, as a key example of the “reading public in general,” whose anonymous criticisms are at once an important part of his “publicity” and the misapprehension of his arguments, the following discussion of Southey seems to serve as an example or illustration of the form of criticism based on the fundamental principles that he had been developing over the past decade. Hence, it is not so much that Southey in particular needs to be defended or critiqued, and Coleridge’s particular conclusions about Southey are relatively unimportant. What seems to matter most for Coleridge, is to illustrate how his principles of critique are grounded on the faculty responsible for aesthetic pleasure, which is the criterion of “essential Poetry.”

Hence, understanding the Southey and Wordsworth critiques as specifically *genial* critiques, founded on Coleridge’s principles of Poetry, challenges the tendency in the scholarship on the *Biographia* to emphasize the content of the critiques (i.e. that Coleridge, apparently “immethodically” starts defending these two against criticisms, then, just as incoherently, goes on to the deduction of the imagination.) Taking into account the arts-and-sciences audience clarifies an argument for the

³⁹³ Coleridge, *Biographia*, 35-36.

formal importance of Coleridge's two defenses, as examples of an ideal or "essential" sort of criticism that he wants to model with a view to the eventual critical reception of the *Biographia*. Hence, after his critical appreciation of the "beauties" rather than the "defects" of Southey and Wordsworth, the next chapter introduces the subject of audience explicitly with respect to the arts and sciences, fine art, and poetry, in order to describe how a societal instinct toward "desynonymization" (keeping the RI audience in mind) acts as an impetus to his deduction of the Imagination and Fancy from two separate faculties of the human mind.

The crucial paragraph occurs in chapter IV just prior to his justification for the apparent abstruseness of the deduction to come:

This excellence, which in all Mr Wordsworth's writing is more or less predominant, and which constitutes the character of his mind, I no sooner felt, than I sought to understand. Repeated meditations led me first to suspect, (and a more intimate analysis of the human faculties, their appropriate (sic) marks, functions, and effects matured my conjecture into full conviction) that fancy and imagination were two distinct and widely different faculties, instead of being, according to the general belief, either two names with one meaning, or at furthest, the lower and higher degree of one and the same power. It is not, I own, easy to conceive a more apposite translation of the Greek *Phantasia*, than the Latin *Imaginatio*; but it is equally true that in all societies there exists an instinct of growth, a certain collective, unconscious good sense working progressively to desynonymize those words originally of the same meaning, [56] which the conflux of dialects had supplied to the more homogeneous languages, as the Greek and German: and which the same cause, joined with accidents of translation from original works of different countries, occasion in mixed languages like our own. The first and most important point to be proved is, that two conceptions perfectly distinct are confused under one and the same word, and (this done) to appropriate that word exclusively to one meaning, and the synonym (should there be one) to the other. But if (as will be often the case in the *arts and sciences*) no synonym exists, we must either invent or borrow a word. In the present instance the appropriation had already begun, and been legitimated in the derivative adjective; Milton had a highly *imaginative*, Cowley a very *fanciful* mind. If therefore I should succeed in establishing the actual existences of two faculties generally different, the nomenclature would be at once determined. To the faculty by which I had characterized Milton, we should confine the term *imagination*; while the other would be contra-distinguished as *fancy*. Now were it once fully ascertained, that this division is no less grounded in nature, than that of delirium from mania, or Otway's

Lutes, lobsters, seas of milk, and ships of amber,

From Shakespeare's

What! have his daughters brought him to this pas?

or from the preceding apostrophe to the elements; *the theory of the fine arts, and of poetry in particular*, could not, I thought, but derive some additional and important light. It would in its immediate effects furnish a torch of guidance to the philosophical critic; and ultimately to the poet himself. In energetic minds, truth soon changes by domestication into power; and from directing in the discrimination and appraisal of the product, becomes influent in the production. To admire on principle, is the only way to imitate without loss of originality.³⁹⁴

What this passage tells us is that Coleridge's project of desynonymization presumes that the civilizational "advance" that produced a demand for institutional reformation, also produced a new readership (or the demand is caused by the new readership), what I tentatively want to identify as an arts-and-sciences readership. That new readership has in turn produced an implicit demand for desynonymization, in Coleridge's view, based on what he sees to be the persistent conflation of the terms Imagination and Fancy with respect to the two critical possibilities he wants to contrast. Coleridge's perception provokes his deductions of the Imagination and the Fancy from distinct faculties of the human mind as a way to clarify the mental faculty he deems necessary for establishing the principles of "genial criticism." This "genial" form of criticism is the form that Coleridge wants to advocate as the most conducive to the intellectual engagement of his arts-and-sciences readership with Poetry.

Coleridge's concern with audience in the *Biographia* is only one more piece of evidence of a consistent concern with audience that is traceable back to his RI lectures, and that Institution's requirement that lecturers illustrate their scientific principles. This consistency presents modern criticism of Coleridge with a difficulty. If the Romantics are indeed invested in conceiving of themselves as isolated geniuses, separate from the generality of humanity, Coleridge, in attempting to teach the exercise of genius by way of illustration, would seem to be at odds with himself. Besides, isn't the entire point about Romantic genius supposed to be that it is incommunicable? That one is

³⁹⁴ Coleridge, *Biographia*, 55-56 (my emphasis).

simply born with genius, and cannot learn it? What I hope this study of Coleridge's lectures reveals is that, though he does think genius is inborn, he also implies the existence of that genius in the public he is addressing, and evidently thinks it possible to communicate genius in a way that the public could recognize, namely, by way of illustration. That these illustrations are represented in the practical criticism of the *Biographia* hence represents a further extension of Coleridge's Institutionally derived systematic treatment of a genial criticism grounded on his principles of Poetry.

Design by Dissent: William Hazlitt's Critique of the Arts-and-Sciences Institutional Movement

By 1818, when the Surrey Institution employed William Hazlitt to give a course of lectures "On the English Poets,"³⁹⁵ he surely would have known that the Surrey's "leading object," an object it shared with the Royal, was "to point out the causes which tend to impede the progress of knowledge, and to invite the public to join in effectually removing them."³⁹⁶ So too, the managers of the Surrey would almost certainly have had some idea of what Hazlitt's response to its leading object was likely to be. In the decade prior to accepting a lectureship at the Surrey, Hazlitt had published several articles dealing explicitly with the relationship between the state of the fine arts and the Institutions that claimed to support their improvement. These include his 1814 "Fragments on Art. Why the Arts are not Progressive?," published in two installments in the *Morning Chronicle*, and a related essay published later that year in the *Champion*, in three installments, entitled "An Inquiry: Whether the Fine Arts are Promoted by Academies and Public Institutions," as well as an extraordinary rant entitled "On the Catalogue Raisonné of the British Institution," first published in the *Examiner* in 1816. Hazlitt's suggestion in these essays, that when it came to the fine arts, the

³⁹⁵ William Hazlitt, *Lectures on the English Poets* (London: Taylor and Hessey, 1818).

³⁹⁶ Rudolph Ackermann, *The Microcosm of London; or, London in miniature*, Vol. III (London: R. Ackermann, 1808), 155.

greatest “impediments” to their progress were most often the very institutions that claimed to support them, would not initially seem very promising for his job prospects at the Surrey Institution. Yet the Surrey did engage Hazlitt to give two courses of lectures, first on the English poets, and second on the English comic writers. In these courses, as might have been expected, Hazlitt develops positions on poetry (and also painting) that reflect views similar to those he presents in the earlier essays. What we are left with is an apparent paradox: Hazlitt’s adherence to the “leading objects” of the Surrey Institution functions as the discursive frame for his most ardently anti-institutional arguments concerning the “progress of knowledge” in relation to poetry and the fine arts.

The complexity of Hazlitt’s Institutional affiliations has led several scholars to suggest that Hazlitt’s views on poetry and the fine arts are at odds with his democratic politics, and that in some cases his positions appear “literally aristocratic.”³⁹⁷ The point of view I argue for in this section will show that the evidence for understanding Hazlitt’s ideas on the fine arts as at odds with his politics emerges much more clearly as instead a consistent defense of his principles, regardless of which institution happened to be promoting them. I will use the arts-and-sciences Institutional background I have been developing in previous chapters to help clarify Hazlitt’s position concerning the effect of what he calls “positive institution” on the progress of knowledge in relation to the fine arts.³⁹⁸

In addition to providing a context for Hazlitt’s various institutional critiques, this section seeks to understand the degree to which Hazlitt also expresses a positive institutional vision for the fine arts. Focusing specifically on Hazlitt’s deployment of the Institutionally inflected phrases “true principle” and “true progress” in both the Surrey Institution lectures on poetry and the earlier essays

³⁹⁷ Klancher, *Transfiguring*, 208. See also p. 406n. of William Hazlitt, *Selected Writings*, (Oxford: Oxford University Press, 1991).

³⁹⁸ For Hazlitt’s use of the phrase, see William Hazlitt, *Essays on the Fine Arts* (London: Reeves and Turner, 1873), 5.

on the fine arts, I argue that Hazlitt's institutional critiques function as a negative of his positive Institutional positions. That positive view, as I suggest, is founded on the notion that the first principle of great art is an emphasis on composing from an immediate interaction with nature, which I will understand throughout this section as painting or composing from life, rather than emulating models, or worse, being introduced to painting by the theory of the grand style current at the Royal Academy. I conclude by reading Hazlitt's positive Institutional vision in the context of the second clause of the Surrey Institution's "leading objects," to "invite the public to join in effectually removing" impediments to the progress of knowledge. The most immediate members of this public would have been Hazlitt's audience at the Surrey. As was the case with Coleridge, I suggest that the new arts-and-sciences audience is in fact the key to understanding the political element of Hazlitt's positions on poetry and painting. Far from an aristocratic argument about the fine arts, Hazlitt's teachings on poetry, like his politics, are steadfastly revolutionary.

Unlike Coleridge's positions on fine art, however, which emerge in an Institutional setting and come to inform his later writing career, Hazlitt's critiques of fine art begin outside of the arts-and-sciences Institutional circuit, and culminate in his Surrey Institution lectures. Understanding Hazlitt's critique can thus help explain how the discourse of the arts and sciences develops with each new *Institutional* accretion, and how, within that Institution, Hazlitt develops an alternative Institutional vision that I have characterized as "design by dissent."

Hazlitt first registers his institutional critiques of fine art in his *Morning Chronicle* essay of 1814, entitled "Fragments on Art. Why the Arts are not Progressive?" Addressing several of the key premises upon which recent instituting had been conducted, the essay begins as follows:

It is often made a subject of complaint and surprise, that the arts in this country, and in modern times, have not kept pace with the general progress of society and civilisation in other respects, and it has been proposed to remedy the deficiency by more carefully availing ourselves of the advantages which time and circumstances have placed within our reach, but

which we have hitherto neglected, the study of the antique, the formation of academies, and the distribution of prizes.³⁹⁹

The more immediate reference is of course to the Royal Academy, and to some degree premium granting institutions like the Society for the Encouragement of the Arts. But if we remember that the model rooms in both the RI and the SI were derived from the Society for the Encouragement of the Arts, and that the fine arts had become subjects in their scientific lecture curricula, the relevance of Hazlitt's critique for the arts-and-sciences Institutional movement becomes clear. The "advantages" of which Hazlitt speaks are not specified, but the revolutionary moment, and the institutional instability it brought about, certainly created the conditions for the construction of new institutions. Since the Royal Academy had been established much earlier, Hazlitt's reference to these "advantages" of "time and circumstance" instead appears to figure newer Institutional movements like that which brought the arts and sciences into closer Institutional proximity, as the proximate impetus to his critique.

It is notable that nowhere in this essay does Hazlitt question the will to improve the arts. Rather, as the above passage clearly states, the issue is the means proposed to effect that improvement. And for Hazlitt, a grave error exists in the principles upon which these "Academies" would propose to remedy the "complaint" of the imagined interlocutors:

First, the complaint itself, that the arts do not attain that progressive degree of perfection which might reasonably be expected from them, proceeds on a false notion, for the analogy appealed to in support of the regular advances of art to higher degrees of excellence, totally fails; it applies to science, not to art. Secondly, the expedients proposed to remedy the evil by adventitious means are only calculated to confirm it. The arts hold immediate communication with nature, and are only derived from that source. When that original impulse no longer exists, when the inspiration of genius is fled, all the attempts to recal it are no better than the tricks of galvanism to restore the dead to life. The arts may be said to resemble Antaeus in his struggle with Hercules, who was strangled when he was raised above

³⁹⁹ William Hazlitt, *Selected Writings*, (Oxford: Oxford University Press, 1991), 257.

the ground, and only revived and recovered his strength when he touched his mother earth.⁴⁰⁰

If there were any doubt as to whether Hazlitt also had in mind more recent arts-and-sciences Institutional structures like the RI and SI, this passage should satisfy those concerns. Not only does it refer to experiments in galvanism, conducted most famously in England by Humphry Davy at the RI, but Hazlitt also directly identifies the “false notion” at issue, namely the “analogy appealed to in support of the regular advances of art to higher degrees of excellence.” That analogy, as Hazlitt contends, applies to “science, not to art.” That this concern comes at a time when the analogizing in question was ongoing in the effort to unite the arts and sciences, when the process of instituting was actually taking place, suggests that the “adventitious means” proposed to remedy the lack of regular progress in the arts, has a more contemporary target. While not diminishing the notion that older arts institutions are also the target of Hazlitt’s critique, the new Institutional movement too, despite its intention to improve fine art, appears to him to be headed in the wrong direction.

Applying his argument to the more specific phrase, “fine art,” Hazlitt details the precise contours of the analogical mistake as one of assuming that what allows a useful or mechanical art to improve at regular intervals is applicable also to the improvement of the fine arts:

Nothing is more contrary to the fact than the supposition that in what we understand by the *fine arts*, as painting and poetry, relative perfection is only the result of repeated efforts, and that what has been once well done constantly leads to something better. What is mechanical, reducible to rule, or capable of demonstration, is progressive, and admits of gradual improvement: what is not mechanical or definite, but depends on genius, taste, and feeling, very soon becomes stationary or retrograde, and loses more than it gains by transfusion. The contrary opinion is, indeed, a common error, which has grown up, like many others, from transferring an analogy of one kind to something quite distinct, without thinking of the difference in the nature of the things, or attending to the difference of the results.⁴⁰¹

⁴⁰⁰ Hazlitt, *Writings*, 357.

⁴⁰¹ Hazlitt, *Writings*, 257-258.

Up to this point in the essay, Hazlitt had referred only to “art” in general, suggesting that his argument in the opening concerns the movement to unite the arts and sciences as a whole. That is to say, the mistaken analogy potentially covers all skilled practices not “reducible to rule.” Hence, Hazlitt appears to be suggesting that anything which is so reducible, may be justly termed a science, whether it be, to invoke Young’s phrasing, a science of “nature” or one of “art,” and would participate in the broadly technological method supported by the RI and the SI. As I mentioned earlier, this method encouraged the conversion, or what Jon Klancher has termed “transfiguration,” of skilled practices into formal systems or sciences, in order to promote the diffusion of knowledge to the greatest possible degree. During Hazlitt’s time, subjects like chemistry had shown themselves to be reducible to rule in this way. To invent an idealized example, we begin with a practicing chemist, or apothecary, experimenting with combinations of various materials and liquids. When an experiment in combination produces a novel or desired result, that combination is noted, and if found to consistently produce the same result, preserved as a reproducible practice, tending toward mechanical reproduction. If that individual then writes a treatise on the “science” of the “art” or skilled practice of chemical combination, that treatise would state that particular combination as an universally applicable fact, a formal science of the art, or a technology in its etymological sense: “To produce X, combine A with B.” Using this knowledge as a foundation, the chemist can experiment anew, in an indefinitely progressive fashion. What is left after this process of transfiguration, is equivalent to what is left to Hazlitt’s “art.”

Hence, when Hazlitt remarks that men of science, and those members of the public who endorse their position, have made an analogical mistake in supposing that such a method would result in the improvement of skilled practice, that mistake, in his opinion, has had particularly grievous effects as it pertains to the fine arts. If Hazlitt’s idea of the fine arts depends on “genius, taste, and feeling,” and finds its “source” or principle in “immediate communication with nature,”

any attempt to focus the elementary attention of the artist on the products of artifice, such as models or theories, is guilty of the common analogical error he is describing. The opposition Hazlitt endorses here can hence usefully be applied to the practical issues that had arisen during the process of designing new institutions. For Hazlitt, it is essential that the framers of institutions, men of science, and concerned members of the public, understand that relative perfection in the fine arts can only be brought about in a manner opposed to that by which they seek to improve the sciences “of nature and art.”

The “common error” Hazlitt identifies has two primary aspects. The first is an inadequate handling of the question of “true progress” as it relates to the improvement of the fine arts. The second is a serious misunderstanding of the “true principles” productive of greatness in the fine arts. With regard to progress, Hazlitt renders his argument sufficiently clear in the following passage:

We look back upon the theological creed of our ancestors, and their discoveries in natural philosophy, with a smile of pity; science, and the arts connected with it, have all had their infancy, their youth, and manhood, and seem to have in them no principle of limitation or decay; and, inquiring no farther about the matter, we infer, in the height of our self-congratulation, and in the intoxication of our pride, that the same progress has been, and will continue to be, made in all other things which are the work of man. The fact, however stares us so plainly in the face, that one would think the smallest reflection must suggest the truth, and overturn our sanguine theories. The greatest poets, the ablest orators, the best painters, and the finest sculptors that the world ever saw, appeared soon after the birth of these arts, and lived in a state of society which was, in other respects, comparatively barbarous. Those arts, which depend on individual genius and incommunicable power, have always leaped at once from infancy to manhood, from the first rude dawn of invention to their meridian height and dazzling lustre, and have in general declined ever after. This is the peculiar distinction and privilege of each, of science and of art; of the one, never to attain its utmost summit of perfection, and of the other, to arrive at it almost at once.⁴⁰²

Hazlitt’s reflection that progress in the fine arts functions in a manner opposite to that of science and the mechanical arts, would certainly apply to the Royal Academy, but to the degree that the arts-and-sciences Institutions had also incorporated such notions concerning the fine arts, this critique

⁴⁰² Hazlitt, *Writings*, 258.

applies more directly to them. Thinking back to the RI lectures of John Landseer, his point is plainly opposed to Hazlitt's. "With principle for our guide," Landseer maintained, "we proceed regularly in our conquests over error and barbarism, with the superior discipline and steady bravery of a Roman legion; possessing, and securing, and cultivating, the ground we have gained."⁴⁰³ Landseer, speaking, like Hazlitt, of the fine arts in general, also suggests how Hazlitt's opposing arguments about regular progress in the fine arts might also align with his anti-imperialist positions. Certainly though, Hazlitt's point is internally consistent, that progress in the fine arts occurs not regularly, by the imposition of a hollow rule to train the perception, but by the immediate interaction between genius and nature. This point about genius, which I will discuss in more detail below, does not so much indicate that Hazlitt is lionizing genius as a good in itself, but more that the imposition of institutional principles, especially ones he considers inadequate, is not the cause of creative power. Hazlitt is arguing rather that the genius involved in the production of great art, simply is not the "creature of positive institution."⁴⁰⁴ Rather, genius in art lies outside traditional instituting practices.

This rapid rise and gradual decline that Hazlitt argues defines the typical contours of progress in the fine arts would seem to suggest that institutions can play no role in actually "encouraging" the fine arts, as they profess to do. But Hazlitt nowhere says that mechanical skill is not important to execution. In fact, he says just the opposite, that

the mechanic parts of painting for instance, such as the mode of preparing colours, the laws of perspective, &c., which may be taught by rule and method, so that the principle being once known, every one may avail himself of it, these subordinate and instrumental parts of the art admit of uniform excellence, though from accidental causes it has happened otherwise.⁴⁰⁵

⁴⁰³ John Landseer, *Lectures on the Art of Engraving, Delivered at the Royal Institution of Great Britain*, (London: Longman, Hurst, Rees, and Orme, 1807), 340-1.

⁴⁰⁴ William Hazlitt, *Essays on the Fine Arts* (London: Reeves and Turner, 1873), 5.

⁴⁰⁵ Hazlitt, *Writings*, 259-260.

Instead, what Hazlitt is interested in separating is the institutional method of treating of the fine arts in a manner that depends too much on these mechanical or scientific attributes, those attributes “reducible to rule.” To really have an institution that encouraged the fine arts, according to Hazlitt, that institution would have to be capable, not merely of encouraging mechanically reproducible practices, but of encouraging originality, imagination, genius, taste and feeling. And for Hazlitt, the true method of encouraging those aspects of the artist is that which nature supplies. “Nature is the soul of art,” Hazlitt insists. It is thus nature that Hazlitt sees as the great encourager of the fine arts, if the aspiring artist would only understand how to interact with it. In an institutional setting this interaction is best supported by composing from life, where the artist is able to gauge the variety of intellectual energy and feeling that arises during intercourse with the objects and beings of the world. That immediacy is crucial to Hazlitt’s argument for an adequate notion of encouragement with respect to the fine arts.

As Hazlitt continues to develop his positions on fine arts institutions in “An Inquiry, Whether the Fine Arts are Promoted by Academies and Public Institutions,” his critique of progress turns to the question of true principle. The essay is framed as a response to “The Directors of the British Institution,” concerning an exhibition of “the works of Hogarth, Wilson, &c.,” in the catalogue for which the BI Directors had claimed the following:

“The present exhibition, while it gratifies the taste and feeling of the lover of art, may tend to excite animating reflections in the mind of the artist: *if at a time when the art received little comparative support such works were produced, a reasonable hope may be entertained that we shall see productions of still higher attainment under more encouraging circumstances*”⁴⁰⁶

Hazlitt remarks that the above passage

proceeds on the common mistaken notion that the progress of the arts depends entirely on the cultivation and encouragement bestowed on them; as if taste and genius were perfectly

⁴⁰⁶ Hazlitt, *Fine Arts*, 4.

mechanical, arbitrary things—as if they could be bought and sold, and regularly contracted for at a given price. It confounds the fine arts with the mechanic arts—art with science.⁴⁰⁷

Many scholars have suggested that Hazlitt's views on the fine arts appear to have aristocratic leanings, and as such are opposed to his democratic politics. Much of that argument is founded on his evident support, voiced in the 1816 essay entitled "On the Catalogue Raisonné of the British Institution," of the aristocratically organized British Institution against an artist directed Royal Academy. But the notion that Hazlitt is supporting the BI because they are an aristocratic organization is belied by Hazlitt's critique of that Institution in the examples just above. Hence, I want to state my argument once again that Hazlitt's apparent allegiance to a socially aristocratic fine arts Institution is only indirectly important to the argument he is trying to make, and that the direct argument is a comparatively unwavering concern with the ascertainment of true principle and true progress in the fine arts.

The most pressing question for Hazlitt in "An Inquiry" is, as he says, to point out the error on which the BI grounds its notion that it encourages progress in the fine arts. In the case of the British Institution, the error has to do primarily with the idea that access to good models (i.e. paintings) will support "higher attainment" in modern painting and sculpture. Importantly, the British Institution was founded in 1805 in connection with several managers of the RI, to patronize the fine arts by providing aspiring artists with access to several of the kingdom's great private collections.⁴⁰⁸ Remembering that the RI was initially founded without a fine arts curriculum of any kind, and that its fine arts lecturing curriculum had only begun about a year prior to the foundation of the British Institution, the British Institution may be viewed as a sort of addition to the Institutional perspective that supported the creation of a model room at the RI. Where the RI's

⁴⁰⁷ Hazlitt, *Fine Arts*, 5.

⁴⁰⁸ Klancher, *Transfiguring*, 52.

model room collected inventions in the useful arts, the BI might be thought to do something roughly equivalent with the fine arts.⁴⁰⁹

Viewed with this specifically arts-and-sciences lens, Hazlitt's critique of the British Institution is primarily that he does not think that an interaction with models encourages an adequate communication between the artist and what he thinks to be the "true theory and principles" of the fine arts, namely, an "immediate communication with nature."⁴¹⁰ Yet just at this point, we begin to see Hazlitt reveal his positive principles in his treatment of several Old Masters, beginning with the painter Correggio:

Such was not Correggio; he saw and felt for himself; he was of no school, but had his own world of art to create. That image of truth and beauty which existed in his mind he was forced to construct for himself without rules or models.⁴¹¹ As it could only have arisen in his mind from the contemplation of nature, so he could only hope to embody it to others by the imitation of nature. We can conceive the work growing under his hands—by slow and patient touches approaching nearer to perfection, softened into finer grace, gaining strength from delicacy, and at last reflecting the pure image of nature on the canvas. Such is always the true progress of art; such are the necessary means by which the greatest works of every kind have been produced. They have been the effect of power gathering strength from exercise, and warmth from its own impulse—stimulated to fresh efforts by conscious success, and by the surprise and strangeness of a new world of beauty opening to the delighted imagination. The triumphs of art were victories over the difficulties of art; the prodigies of genius, the result of that strength which had grappled with nature.⁴¹²

Hazlitt's focus on Correggio has a connection to the Royal Academy "Discourses" of Joshua Reynolds that should not go unnoticed here. For Reynolds, Correggio was the epitome of what Reynolds calls alternatively the "original" or "characteristic" style of painting. Although Reynolds thinks rather well of this style, it ranks decidedly below the grand style because it attends too

⁴⁰⁹ Klancher affirms this point in *Transfiguring*, 206.

⁴¹⁰ Hazlitt, *Fine Arts*, 8.

⁴¹¹ The dichotomy of "rules" and "principles" is part of a hierarchy of vocabulary common to the arts-and-sciences Institutional movement, where 'principles' is the good word, rules the 'bad' word, 'models' the in between word.

⁴¹² Hazlitt, *Fine Arts*, 10.

vehemently to the particulars of a subject, and bases that attention too exclusively on the peculiar tastes and feelings of the individual artist. Hence, in praising Correggio as the example of true principles and progress in art, Hazlitt is also making a calculated move to elevate Reynolds' original style while simultaneously devaluing the grand style promoted he promoted at the Royal Academy. This background forms the oppositional structure of the passage. Correggio supposedly did not use "rules or models" to construct "the image of truth and beauty," but relied instead on the results that "could only have arisen in his mind from the contemplation of nature" and which "he could only hope to embody...to others by the imitation of nature." Everywhere Hazlitt attempts to describe a first principle in the fine arts, whether that art be painting or poetry or sculpture, he always returns to the "contemplation" and "imitation of nature." But how are we to understand what Hazlitt means by "nature?" Does it simply mean that going out to the Lake District will make you a good painter? No. As is clear from the lines just below, which describe the practice of Titian and Raphael, "nature" for Hazlitt means painting from life. "Titian," as he says

copied even a plant or a piece of common drapery from the objects themselves; and Raphael is known to have made elaborate studies of the principal heads in his pictures. All the great painters of this period were thoroughly grounded in the first principles of their art; had learned to copy a head, a hand, or an eye, and had acquired patience to finish a single figure, before they undertook to paint extensive compositions. They knew that, though Fame is represented with her head above the clouds, her feet rest upon the earth. Genius can only have its full scope where, though much may have been done, more remains to be done; where models exist chiefly to show the deficiencies of art, and where the perfect idea is left to be filled up in the painter's imagination. Where the stimulus of novelty and of necessary exertion is wanting, generations repose on what has been done for them by their predecessors, as individuals, after a certain period, rest satisfied with the knowledge they have already acquired.⁴¹³

In other words, the subject of painterly attention, whether "a plant" or "a piece of common drapery," does not matter so much as that it is part of the direct, lived experience of the artist. With this passage Hazlitt's position on what a "positive institution" that could successfully encourage the

⁴¹³ Hazlitt, *Fine Arts*, 11.

fine arts would actually look like becomes apparent. Its primary thrust is not to presume genius to be “a creature of positive institution,” but rather one that permits genius to live and flourish by supplying it with the means to stay connected, like Hazlitt’s Antaeus, to “the earth.”

In Hazlitt’s treatment of “rules and models” as they pertain to institutional design, then, they are not absolutely detrimental to artists, but their effectiveness has limits, and their importance to “true” progress in the fine arts is always secondary to the artist’s interaction with lived experience. As I have shown, Hazlitt can be quite critical of painting from models, but of the two, as evidenced by his defense of the British Institution’s continental masters exhibition, he prefers the use of “models” over “rules” of style. Hazlitt’s arguments concerning models show them to be valuable when they are used “chiefly to show the deficiencies of art, and where the perfect idea is left to be filled up in the painter’s imagination.”⁴¹⁴ This claim appears to be connected to the question of the proper “encouragement” of the fine arts, where “genius can only have its full scope where, though much may have been done, more remains to be done.” Artists, that is, must be shown “deficiencies” in what has already been done in order to inspire them with the hope that they could do better.

The second valid use of models, according to Hazlitt, brings us back to his essay “On the Catalogue Raisonné of the British Institution,” where he appears to defend the use of “models” at the British Institution against the “rules” of the Royal Academy, and in doing so to defend an aristocratic, connoisseur style of art criticism over an artist directed organization intended to support working artists. But here again a nuanced handling of the points Hazlitt is debating are crucial to gaining an adequate conception of how he saw his views on the fine arts as in line with his politics. Models are secondary to painting from life on principle, no matter how superlatively great the production. But in comparison with a theory of the grand style, Hazlitt preferred models,

⁴¹⁴ Hazlitt, *Fine Arts*, 11.

particularly those of the Old Masters, since they in effect proved his principles. The Old Masters were the ideal models because they reveal clear evidence of having painted from life.

Considering principle as of primary importance to Hazlitt's argument, the rationale underpinning his graded and nuanced appreciation for first, composing from life, second from models, and third, from theories, becomes clear. Viewed in this way, the political radicalism of his views on fine art may now be considered with precision. And his political view of the fine arts only makes sense if we take his audience into account. It is with his audience in mind, I would suggest, that we often see Hazlitt decrying the notion that artists have the exclusive right to judge of art works, or that exhibitions of the Old Masters which happen to be owned by aristocrats do not always spark more ire than the RA exhibitions whose productions he finds consistently inferior. Such was his experience, noted in the "Catalogue Raisonné" itself, shortly after returning from the first exhibition of Raphael's cartoons:

We knew not how enough to admire them. If from this transport and delight there arose in our breasts a wish, a deep aspiration of mingled hope and fear, to be able one day to do something like them, that hope has long since vanished, but not with it the love of art, nor delight in works of art, nor admiration of the genius which produces them, nor respect for fame which rewards and crowns them! Did we suspect that in this feeling of enthusiasm for the works of Raffaele we were deficient in patriotic sympathy, or that, in spreading it as far as we could, we did an injury to our country or to living art? The very feeling showed that there was no such distinction in art, that her benefits were common, that the power of genius, like the spirit of the world, is everywhere alike present. And would the harpies of criticism try to extinguish this common benefit to their country from a pretended exclusive attachment to their countrymen?⁴¹⁵

This passage both reinforces the political radicalism of Hazlitt's argument, and shows that his attention is devoted to answering Institutional questions of principle, progress, and his peculiar notion of "common benefit," much more so than it is about siding with a particular social class against his own political principles. Hazlitt's championing of a kind of transnational "enthusiasm"

⁴¹⁵ Hazlitt, *Fine Arts*, 57-58.

for good painting is a radical political move, and it is interlocked with his Institutional position. As in the case of the Royal Institution, the Surrey, in addition to their interest in identifying the impediments to knowledge, and inviting the public to assist in their removal, also maintained an interest in promoting by the application of scientific knowledge the “common purposes of life.” This passage thus provides crucial evidence for how Hazlitt understood himself as assisting a common purpose. Hazlitt locates the “common benefits” of great art on the side of the audience, the observer, or to use Hazlitt’s more overtly political terminology, “the people.” Hence, the uncommon greatness of Raffaele, by encouraging its public display, and likewise the display of the Old Masters exhibition at the British Institution, is the very means by which that “common benefit” of bringing the faculties into activity takes place.

Hazlitt’s most pressing concern, which is just evident in the above passage, is not the social associations between these two organizations, but the defense of his views against charges of being anti-patriotic. His rhetoric in the following passage clarifies the contours of this charge:

Tired of exposing such knavery, we walked out the other day, and saw a bright cloud resting on the bosom of the blue expanse, which reminded us of what we had seen in some picture in the Louvre. We were suddenly roused from our reverie by recollecting that, till we had answered this catch-penny publication,⁴¹⁶ we had no right, without being liable to a charge of disaffection to our country, or treachery to the art, to look at nature, or to think of anything like it in art not of British growth and manufacture! To what absurdities may we be reduced by the malice of folly! Our Catalogue-makers, like the puffers of the Gaslight Company, consider it only as a matter of trade, or what they can get by the sale and monopoly of it; they would extinguish all of it that does not come through the miserable chinks and crannies of their patriotic sympathy, or would confine it in the hard, unfeeling sides of some body corporate, as Ariel was shut up in a cloven pine by the foul witch Sycorax. The cabal of art in this country would keep it on the other side of the Channel. They would maintain a perpetual quarantine against it as infectious. They would subject it to new custom-house duties. They would create a right of search after all works of genuine art as contraband. They would establish an Alien office under the Royal Academy, to send all the finest pictures out of the country, to prevent unfair and invidious competition. The genius of modern art does not bathe in the dews of Castalie, but rises, like the dirty goddess in Gay’s “Trivia,” out of the Thames, just opposite Somerset House, and, armed with a Grub Street pen in one hand and a signpost brush in the other, frightens the arts from proceeding any further. They

⁴¹⁶ i.e. the Catalogue Raisonné.

would thus effectually suppress the writers of ancient genius and the progress of modern taste at one and the same time; and if they did not sell their pictures, would find ease to their tortured minds by not seeing others admired.⁴¹⁷

What emerges from Hazlitt's rhetorical conceit in this passage is an internationalist argument about the "common benefit" that resides in the transfer of power inherent in the process of admiring great art, which he posits against a strictly nationalist view of artistic progress and pretended patriotism.

Art has no national allegiance, Hazlitt claims, and the attempt to turn "positive institution" toward the encouragement of the fine arts is bound to fail, or worse, to contribute to the decline of art, if an inadequate understanding of principle persists. Hazlitt's principles tell him instead that greatness in the fine arts is not confined by national boundaries, so what emerges is actually an internationalist and revolutionary argument about the fine arts against what he sees as a baldly nationalist, morally empty, and financially interested Royal Academy.

Section II: Alternative Institutional Visions in Romantic-Era Writing

Hazlitt's Pedagogical Alternative: "On Poetry in General"

With the previous points in mind, it is now possible to provide an adequate picture of Hazlitt's position on the relationship between the fine arts, institutional design, and the movement to bring the arts and sciences into closer Institutional proximity, as it informs his 1818 lectures at the Surrey Institution. The introductory lecture, entitled "On Poetry in General," provides an overview of Hazlitt's principles and outlines the plan for the course. It begins with the following simple but provocative statement:

The best general notion which I can give of poetry is, that it is the natural impression of any object or event, by its vividness exciting an involuntary movement of imagination and

⁴¹⁷ Hazlitt, "Catalogue Raisonné," *Fine Arts*, 57-59.

passion, and producing, by sympathy, a certain modulation of the voice, or sounds, expressing it.⁴¹⁸

The entire course of lectures, of which this is the opening statement, is framed with respect to the SI's "leading object," to "point out the causes which tend to impede the progress of knowledge, and to invite the public to join in effectually removing them."⁴¹⁹ So too, the "public" that the Surrey asked Hazlitt to address was most directly that new and diverse arts-and-sciences audience that filled the seats of his lectures. Recalling finally that Hazlitt includes painting and poetry in all of his statements about the fine arts, namely, that the Institutions and Academies nominally constructed to encourage the arts actually further their decline, this statement may be seen as fitting directly in that context, where Hazlitt's anti-institutional position is nonetheless made in accordance with the leading object of the Surrey Institution. Hence, when Hazlitt states his general view of poetry, it appears as an open call to his audience to see that Institutional arrangements are not the primary means of achieving greatness in painting or poetry. Rather, all the tools rest with the individual, and good art begins not with entrance into an academy, but with the recognition that all the things that have made a successful artist in the past, lie outside its bounds.

This opening remark is thus an importantly audience-directed view of poetry. By distinguishing his true principles of great art from the traditional organizations developed to encourage them, Hazlitt is arguing that these organizations, on the subject of poetry and its improvement, are the very "impediments" to the progress of knowledge they seek to eliminate. Most importantly, Hazlitt is requesting that his audience "join in effectually removing" that impediment by opening their minds to ways of thinking about the fine arts that do not depend on entry into the

⁴¹⁸ Hazlitt, *Lectures*, 1.

⁴¹⁹ Ackermann, *The Microcosm of London*, 155.

Royal Academy. Far from an aristocratic argument about the fine arts, Hazlitt's teachings on poetry, like his politics, are steadfastly revolutionary because they depend only on understanding that "it is the natural impression of any object or event," which "by its vividness" excites an "involuntary movement" of poetic expression. He uses terms like "nature," not to be grand for its own sake, but because he would not wish to arbitrarily isolate proper subjects for poetry, stating to the contrary that "any object or event" is potentially a fit subject for poetic contemplation. Paragraph V of the first lecture gives a sense of the real openness that inform Hazlitt's principles, and confirms his invitation to the audience (of which Keats was importantly a member) to remove the obstacles to true progress by participating in poetry themselves:

Poetry is the language of the imagination and the passions. It relates to whatever gives immediate pleasure or pain to the human mind. It comes home to the bosoms and businesses of men; for nothing but what so comes home to them in the most general and intelligible shape, can be a subject for poetry. Poetry is the universal language which the heart holds with nature and itself. He who has a contempt for poetry, cannot have much respect for himself, or for any thing else. It is not a mere frivolous accomplishment, (as some persons have been led to imagine) the trifling amusement of a few idle readers or leisure hours—it has been the study and delight of mankind in all ages. Many people suppose that poetry is something to be found only in books, contained in lines of ten syllables, with like endings: but wherever there is a sense of beauty, or power, or harmony, as in the motion of a wave of the sea, in the growth of a flower that 'spreads its sweet leaves to the air, and dedicates its beauty to the sun',—*there* is poetry, in its birth. If history is a grave study, poetry may be said to be a graver: its materials lie deeper, and are spread wider. History treats, for the most part, of the cumbrous and unwieldy masses of things, the empty cases in which the affairs of the world are packed, under the heads of intrigue or war, in different states, and from century to century: but there is no thought or feeling that can have entered into the mind of man, which he would be eager to communicate to others, or which they would listen to with delight, that is not a fit subject for poetry. It is not a branch of authorship: it is 'the stuff of which our life is made.' The rest is 'mere oblivion', a dead letter: for all that is worth remembering in life, is the poetry of it. Fear is poetry, hope is poetry, love is poetry, hatred is poetry; contempt, jealousy, remorse, admiration, wonder, pity, despair, or madness, are all poetry. Poetry is that fine particle within us, that expands, rarefies, refines, raises our whole being: without it 'man's life is poor as beast's. Man is a poetical animal: and those of us who do not study the principles of poetry, act upon them all our lives.⁴²⁰

⁴²⁰ Hazlitt, *Lectures*, 2.

With Hazlitt's arts-and-sciences audience in mind, this paragraph stands out as an invitation for his audience to recognize how poetry is in fact embedded in their very being; it is the "fin[est] particle" within us, even if we are not aware of it, and we act on poetic principles whether we try to or not. The sense of embeddedness and naturalness of poetry as Hazlitt defines it then emerges as a caveat to his first principle, "Poetry then is an imitation of nature...but the imagination and the passions are a part of man's nature." If poetry is natural rather than artificial, and in fact so natural that we often participate in it without knowing it, then this caveat tells us that that is because the "imitation of nature" is indeed a natural human activity. Humans participate in poetry's first principle without tuition because imitative, imaginative activity is part of nature, rather than art. Poetry, as Hazlitt quite surprisingly claims, "is not a branch of authorship" precisely for this reason, because it is built in to our very being.

The distinction Hazlitt makes between history and poetry toward the end of the passage is his own revision of the typical Baconian divisions that characterize poetry as "feigned history." A few paragraphs later, Hazlitt picks up the reference explicitly to highlight the virtues of poetry and imagination in contrast to the two other Baconian divisions, history and the memory, and philosophy and reason:

Poetry puts a spirit of life and motion into the universe. It describes the flowing, not the fixed. It does not define the limits of sense, or analyse the distinctions of the understanding, but signifies the excess of the imagination beyond the actual or ordinary impression of any object or feeling. The poetical impression of any object is that uneasy, exquisite sense of beauty or power that cannot be contained within itself; that is impatient of all limit; that (as flame bends to flame) strives to link itself to some other image of kindred beauty or grandeur; to enshrine itself, as it were, in the highest forms of fancy, and to relieve the aching sense of pleasure by expressing it in the boldest manner, and by the most striking examples of the same quality in other instances. Poetry, according to Lord Bacon, for this reason, 'has something divine in it, because it raises the mind and hurries it into sublimity, by conforming the show of things to the desires of the soul, instead of subjecting the soul to external things, as reason and history do.' It is strictly the language of the imagination; and the imagination is that faculty which represents objects, not as they are in themselves, but as

they are moulded by other thoughts and feelings, into an infinite variety of shapes and combinations of power.⁴²¹

In referring to Bacon the key point is Hazlitt's conflation between disciplinary and facultative realms when he describes the action of "poetry," later linking it directly to the faculty of "imagination," by comparing them to "reason and history." If he had not referred to Bacon in this passage, it might be of only minor interest. But since he does so specifically in reference to the traditional connections between the disciplinary domains of philosophy, history, and poetry, and the mental faculties of reason, memory, and imagination, suggests a crucial Institutional rationale for how poetry and the imagination achieved their distinctive place in the lexicon of British Romanticism. If the arts-and-sciences Institutions were the educational establishments that were attempting to realize a Baconian ideal to bring the disciplines of science, art, and to some degree history, into closer institutional proximity, the primary rationale for invoking this particular piece of Bacon's work is plainly because of the unique Institutional context in which Hazlitt was lecturing. Poetry and the imagination function in contrast to history and memory, and philosophy and reason.

As Hazlitt often argues in the essays on the fine arts mentioned above, he here repeats that argument, only this time folding it directly into its Baconian facultative-disciplinary context. Against those "frigid and pedantic critics" who would treat of poetry only by "the standard of common sense and reason," Hazlitt responds with an ardent defense of the imagination:

We can no more take away the faculty of the imagination, than we can see all objects without light or shade. Some things must dazzle us by their preternatural light; others must hold us in suspense, and tempt our curiosity to explore their obscurity. Those who would dispel these various illusions, to give us their drab-coloured creation in their stead, are not very wise. Let the naturalist, if he will, catch the glow-worm, carry it home with him in a box, and find it next morning nothing but a little grey worm; let the poet or the lover of poetry visit it at evening, when beneath the scented hawthorn and the crescent moon it has built itself a palace of emerald light. This is also one part of nature, one appearance which the glow-worm presents, and that not the least interesting; so poetry is one part of the history of the

⁴²¹ Hazlitt, *Lectures*, 6-7.

human mind, though it is neither science nor philosophy. It cannot be concealed, however, that the progress of knowledge and refinement has a tendency to circumscribe the limits of the imagination, and to clip the wings of poetry. The province of the imagination is principally visionary, the unknown and undefined: the understanding restores things to their natural boundaries, and strips them of their fanciful pretensions. Hence the history of religious and poetical enthusiasm is much the same; and both have received a sensible shock from the progress of experimental philosophy.⁴²²

The point Hazlitt is making is clear if we take into account the Institutional setting in which his claims occur. Arts-and-sciences Institutions like the Surrey were founded primarily to speed up the progress of knowledge, and to suggest means of removing impediments to that progress. Hence, what Hazlitt is saying, far from Hans Eichner's claim that the Romantics represent a "desperate rearguard action against the spirit and the implications of modern science," is rather that treating poetry, painting, etc. in a manner that attempts to systematize its procedures would actually lead to the decline of knowledge, not to its augmentation or progress.⁴²³ To erase poetry as a subject of study and practice, would be to also erase a primary element of the human mind. Hence, it is the very attempt to describe poetry and the fine arts in terms of reasoned procedure that Hazlitt suggests has in fact been detrimental to a true knowledge of the fine arts, and its coordinated mental faculty, the imagination. Hazlitt's argument, in other words, is not anti-science. He is suggesting, rather, that the dominant Institutional arrangement, and its attempts to systematize poetry, is largely to blame for the decline of both science and poetry.

If Hazlitt does express in his essays and lectures a positive statement of what he understands to be true principles and progress in poetry and the fine arts, a question immediately arises. How does Hazlitt's argument for painting from life cohere with his politics of liberation? How can a conception that holds great art, or great poetry, to be manifestly "uncommon," contribute to an

⁴²² Hazlitt, *Lectures*, 17.

⁴²³ Hans Eichner, "The Rise of Modern Science and the Genesis of Romanticism," *PMLA*, 97, 1 (January, 1982), 8-30, 8.

opening up of what is “common” on behalf of liberating the people? Hazlitt is also quite clear about this. His primary argument is that it “makes us drink deeper of the cup of human life; tugs at the heartstrings; loosens the pressure about them; and calls the springs of thought and feeling into play with tenfold force.” Again,

Impassioned poetry is an emanation of the moral and intellectual part of our nature, as well as of the sensitive—of the desire to know, the will to act, and the power to feel; and ought to appeal to these different parts of our constitution, in order to be perfect. The domestic or prose tragedy, which is thought to be the most natural, is in this sense the least so, because it appeals almost exclusively to one of these faculties, our sensibility. The tragedies of Moore and Lillo, for this reason, however affecting at the time, oppress and lie like a dead weight upon the mind, a load of misery which it is unable to throw off: the tragedy of Shakespeare, which is true poetry, stirs our inmost affections; abstracts evil from itself by combining it with all the forms of imagination, and with the deepest workings of the heart, and rouses the whole man within us.⁴²⁴

Whether we agree with Hazlitt about Shakespeare is another matter. Shakespeare, as for Coleridge, is here an illustration of a fundamental principle, or as Hazlitt puts it, an “emanation.” The source, in other words, of “true poetry,” is the activity of the “moral,” “intellectual,” and “sensual” parts of our nature. Since even today we likely have no problem saying that Shakespeare did indeed produce this activity for Hazlitt. What Hazlitt calls “true poetry,” hence, is the effect of that combined activity, which in turn “calls the springs of thought and feeling into play with tenfold force” in the audience, or at the very least for him. It is this process of calling all the faculties into activity that Hazlitt views as fitting his political radicalism. If that activity, in other words, may be understood as the goal of poetry from the perspective of the audience, and there are no barriers to accessing it other than those which society has artificially constructed, then we can begin to see that what Hazlitt is arguing for is the liberation of the true means by which this politically radical effect of poetry might be achieved. The activity of the faculties can help to ground new notions of truth and disband its habitual, untested forms. The lesson to the SI audience then, seems to be, not that true poetry is

⁴²⁴ Hazlitt, *Lectures*, 12-13.

only available to a select few in possession of genius, but rather, that you do not need to be admitted to the Royal Academy to make or adequately admire great art. The value of the British Institution gallery is that opened private collections of what Hazlitt would have called “true” painting, up to a broader public. Something similar occurred several years earlier, when Hazlitt visited the recently opened Louvre, and I think it is crucial to see Hazlitt’s views on fine art as always attempting to put the people in relation to works that follow, according to him, true principle. Studying these works permits at best a knowledge of true principle, allowing the viewers to see that the best form of elementary education in fine art is a paintbrush, canvas, an attention to details in the world, the courage to act on the causes of feelings, and a commitment to practice.

Coleridge’s Encyclopaedic Alternative: The Encyclopaedia Metropolitana

In earlier chapters, I showed how eighteenth-century encyclopaedias, and particularly Charles-Joseph Panckoucke’s *Encyclopedie Methodique*, appear to have informed several basic structural features of the Royal Institution and those modeled on its design, such as the Surrey, London and other arts-and-sciences Institutions. In concluding my remarks on Coleridge, I would like to return to that discussion to examine the Institutional implications of his short-lived role as general editor of the *Encyclopaedia Metropolitana*, which began publishing in London in 1817. I want to position his general introduction to this work, entitled “A Preliminary Treatise on Method,” as an explicit response to earlier, “failed” attempts to “*methodize*” encyclopaedic arrangement, which would refer most obviously to Panckoucke’s *Methodique*.⁴²⁵ Insofar as Coleridge was himself aware that the RI had been modeled on the *Methodique*, or at least had attempted its own methodical arrangement on a broadly encyclopaedic plan, the “Preliminary Treatise on Method,” I will argue, serves as an

⁴²⁵ Samuel Taylor Coleridge, “Treatise on Method,” *Encyclopaedia Metropolitana*, Vol. I, eds. Edward Smedley, Hugh James Rose, Henry John Rose (London: Fellowes, Rivington, etc., 1845), 1.

alternative model for future Institutional arrangement. Coleridge's experience as a lecturer at the RI and the Surrey Institutions in their formative years, as well as some important though unfulfilled projects with the London Institution, gave him special insight into the connections between encyclopaedic and Institutional arrangement. Viewing Coleridge's attempt to methodize the arrangement of his encyclopaedia as an implicit response to his Institutional experience, I suggest that the *Treatise* represents the culmination of his methodological critique of such Institutions, and can equally be viewed as a work anticipating future institutional design.

Although Coleridge's plan for the *Metropolitana* is extraordinary in many respects, I want to focus particular attention on his arrangement of the fine arts within the broader encyclopaedic scheme. More specifically, I will concentrate on a decision that should now be familiar, Coleridge's deployment of the word "Poetry" as a generic term that encompasses all of the fine arts. The technological model of studying the fine arts at the RI functioned on behalf of building general theories of the arts in support of improved mechanical reproduction. Alternatively, Coleridge's introduction to the *Metropolitana* treats "Poetry" in its generic sense as a philosophically valid *method of inquiry* that acts on an equal intellectual plane with the method of theoretical investigation itself. This methodological treatment of Poetry, as I have maintained in earlier sections, has its origins in the 1808 lectures at the RI, and exists in a rudimentary form in prose works like *The Friend*, the "Essays on Genial Criticism," and the *Biographia Literaria*. What the introductory "Treatise" represents is hence the culmination of his Institutional thinking on this issue.

The first notable aspect of the "Treatise" is that it formalizes the norms of arts-and-sciences lecturing procedure by converting them into basic structural features. Section I is hence entitled, "On the Philosophical Principles of Method," followed by Section II, an "Illustration of the Preceding Principles," culminating in Section III, "Application of the Principles of Method to the

General Concatenation and Development of Studies.”⁴²⁶ Detailing the plan in the opening paragraphs, Coleridge explicitly connects his encyclopaedic arrangement to the discourse of the arts and sciences,

to exhibit the Principles on which alone a correct Philosophical Method can be founded; to illustrate those principles by their application to distinct studies and to the History of the Human Mind; and lastly to apply them to the general concatenation of the several Arts and Sciences, and to the most perspicuous, elegant, and useful manner of developing each particular study.⁴²⁷

Beyond Coleridge’s personal commitments to these procedures, adopting an arts-and-sciences structure for his encyclopaedia would appear to have at least two benefits. By 1817, such a structure would have become familiar to those, whether administrators, lecturers, or audience members, already associated with the arts-and-sciences Institutions, which raises their potential rhetorical value. In addition, mirroring the structure of his Royal Institution lectures would have announced Coleridge’s alternative encyclopaedic design as a potential competitor with the arrangement of disciplines already in place at the arts-and-sciences Institutions. Deploying these familiar conventions allows us to see that Coleridge is interested in elucidating a *science* of method, and applying it on behalf of improving the *art* of institutional design, identifying its target audience as the institutor seeking to translate encyclopaedic designs into educational practice.

Coleridge’s grievances about encyclopaedic arrangement go back to at least 1803, when we find him complaining to his friend and fellow poet-institutor Robert Southey of the “strange abuse [that] has been made of the word encyclopaedia!...To call a huge unconnected miscellany of the *omne scibile*, in an arrangement determined by the accident of initial letters, an encyclopaedia, is the impudent ignorance of your Presbyterian bookmakers. Good night! God bless you! S.T.C.”⁴²⁸ So

⁴²⁶ Coleridge, “Treatise,” *Metropolitana*, 1, 5, 21.

⁴²⁷ Coleridge, “Treatise,” *Metropolitana*, 1.

⁴²⁸ Coleridge, “Introduction to ‘Treatise on Method,’” *CW*, XI, I 626-627.

too, Coleridge believed that the eighteenth-century attempts to achieve a properly *methodical* arrangement had ultimately failed, and that the best of these attempts had produced little more than a series of individual disciplinary systems that, although largely coherent in themselves, lacked an intelligible framework accounting for their intellectual development.⁴²⁹ Defining his position within the broader urban institutional cultures with which he was competing, Coleridge distinguishes the published title, chosen with respect to “the place whence it originates,—the *ENCYCLOPAEDIA METROPOLITANA*” from his particular scheme, claiming “from its mode of execution to be also called ‘a *METHODICAL Compendium of Human Knowledge*.’” Words like “compendium” might remind us of the vocabulary Thomas Young employs to describe the encyclopaedic foundations underpinning the internal economy of the Royal Institution, a point driven home by language that would tie Coleridge’s arrangement also back to Baconian divisions of learning. “If we would discover a *universal Method*,” Coleridge begins, “by which every step in our progress through the whole circle of Art and Science should be directed, it is absolutely necessary that we should seek it in the very interior and central essence of the Human intellect.”⁴³⁰ For Coleridge, a truly methodical arrangement could be possible only by organizing the various knowledges according to the dominant *methods* of inquiry or intellectual activity according to which a given set of disciplines advanced. Hence, the *Metropolitana* was to be a methodical encyclopaedia in what Coleridge understood to be the original etymological sense of the Greek word “*Methodos*,” which refers to “a way, or path of transit.”⁴³¹ From this understanding of method, Coleridge derives his two fundamental principles for constructing a methodical encyclopaedia. The first principle of

⁴²⁹ Coleridge, “Treatise,” *Metropolitana*, 2.

⁴³⁰ Coleridge, “Treatise,” *Metropolitana*, 2.

⁴³¹ Coleridge, “Treatise,” *Metropolitana*, 2.

methodical thinking, according to Coleridge, is the principle according to which that thinking must exhibit “unity with progression.”⁴³² The act of the mind which produces that unity forms the second fundamental principle of method, which he calls the “initiative idea.”⁴³³ By arranging all of the different knowledges according to the appropriate form of methodical thinking, Coleridge thought that he had developed a universal “Science of Method” capable of producing a truly methodical encyclopaedia, which is to say, an encyclopaedia in which the disciplines could be arranged according to the three fundamental methods of human thought.⁴³⁴

In the first section of the “Treatise,” entitled “On the Philosophical Principles of Method,” Coleridge distinguishes each category of methodical thinking according to the dominant species of relation involved in the “path of transit” (i.e. the method), which the activity of the intellect takes in moving from one idea to another. Those relations that are “necessary” Coleridge calls “relations of law.”⁴³⁵ He gives as an example of this relation *the means* by which the mind moves from the idea of a triangle, to the idea that the sum of the three angles of a triangle is equal to the sum of two right angles.⁴³⁶ Imagining this movement of thought, it is then possible to imagine an indefinite train of reasoning comprised only of these necessary relations, or relations of law. Coleridge believes this to be the most perfect form of methodical thinking, because in relations of law the certainty of conclusions is guaranteed.⁴³⁷ He applies the forms of methodical thinking that accord with relations of law to the categories of knowledge called the pure and mixed sciences (see the stemmatic analysis

⁴³² Coleridge, “Treatise,” *Metropolitana*, 2.

⁴³³ Coleridge, “Treatise,” *Metropolitana*, 2.

⁴³⁴ Coleridge, “Treatise,” *Metropolitana*, 2.

⁴³⁵ Coleridge, “Treatise,” *Metropolitana*, 3.

⁴³⁶ Coleridge, “Treatise,” *Metropolitana*, 4.

⁴³⁷ i.e. ideas whose unity and progression has its entire being in the mind, and is not said to actually exist in the world.

below [Figure 2]), which was published as a graphic representation of Coleridge's plan at the end of the general introduction). Hence, according to Coleridge's scheme, mathematics falls under the category of pure science because it derives its being purely from the mind, and does not rely on physical ideas that exist in the world (i.e. I do not claim that a perfect circle exists anywhere in the world outside of my mind). Those sciences that do rely on such physical ideas, but nonetheless operate according to relations of law, comprise the category of the mixed sciences, which include the traditional subjects of natural philosophy, i.e. mechanics, pneumatics, hydrostatics, astronomy, and optics. For these sciences, the relations of law, which exist wholly in and for the mind, are fitted to the physical world, ideally without imposition. Hence it is in these sciences that we find what Coleridge calls the "great laws of nature," such as those of Kepler, which fitted the idea of an ellipse to the phenomena of planetary motion.⁴³⁸

The second form of methodical inquiry Coleridge calls the relation of "theory." Relations of theory, as he describes, are those relations "in which the existing forms and qualities of objects, discovered by observation, suggest a given arrangement of them to the mind, not merely for the purposes of more easy remembrance and communication; but for those of understanding, and sometimes of controlling."⁴³⁹ The initiative and dominant idea in this mode of inquiry is the idea or necessary connection between cause and effect.⁴⁴⁰ Coleridge lists the sciences of chemistry, physiology, and medicine as forms of inquiry that accord with this relation of theory. A train of reasoning that applies this sort of relation might understand the pumping of the heart as the cause of

⁴³⁸ Coleridge, "Treatise," *Metropolitana*, 3.

⁴³⁹ Coleridge, "Treatise," *Metropolitana*, 3.

⁴⁴⁰ Coleridge, "Treatise," *Metropolitana*, 3.

the circulation of the blood, the circulation of the blood as the cause by which oxygen is distributed throughout the body, and so on toward the development of a physiological theory of circulation.

The third and final method Coleridge identifies is the method appropriate to the fine arts, or what he intermittently calls the “middle method,” and the method of Poetry. He claims that method in the fine arts partakes of both relations of law and relations of theory, and therefore must be designated a “middle method.” As an example of the relation of law in the fine arts Coleridge describes the mathematical relations (or proportions) productive of musical harmony and other forms of aesthetic pleasure, which take place entirely in the mind. In contrast, the construction of a physical musical instrument will affect the degree to which that instrument produces artifacts of vibration that actually exist in the world. Hence, though Coleridge argues for the superiority of the relations of law with respect to a Poetry method, the successful musical artist must also be extremely sensitive to changes in the material structure of the instrument, the acoustics of a room, and so on, such that thinking methodically according to relations of theory will also be of great importance to the fine artist.

But as you can see in the stemmatic analysis [Figure 2], the visual arrangement Coleridge describes does not match the arrangement that is actually published at the end of the introductory treatise. Instead, the analysis describes “poetry” as an *example* of “fine art,” and categorizes “fine art” as an “applied” science, which by definition partakes predominantly of the relations of theory, placing it alongside the craft practices or useful arts, which would make them consistent with a broadly technological method. The published stemmatic analysis, in other words, elides the “middle method” that Coleridge describes in the introduction, in effect erasing the distinct method granted to the fine arts in the *Treatise* itself.

These alterations seem to have been due primarily to tensions between Coleridge and his publishers Fenner and Curtis. For Fenner and Curtis, the main problem was, as usual, Coleridge’s

inability to make deadlines. But Coleridge too felt betrayed when, after an explicit promise not to, they proceeded to “interpolate” his introductory Treatise, leaving it, in his words, “so bedeviled...and topsy-turvied,” that he could no longer claim as his own the work he had at one time considered more valuable than “all his other prose writings taken collectively.”⁴⁴¹ Specifics concerning the alterations are available as early as the 1817 “Prospectus” for the *Metropolitana*, where, in a letter to his friend C.A. Tulk, Coleridge describes the chief alterations to his proposed structure. At first, Coleridge begins, the publishers had adopted his plan “in toto—“

but afterwards spite of my earnest reclamation, oral and by letter, the Prospectus was altered in two essential points—first, the Fine Arts were removed from their place in the system, as the *intermediate* Link between the *pure* Sciences, in which both the matter and the form are wholly from, in, and for the mind—and the applied Sciences &c.-- This with other senseless changes of less importance deformed the rationality and beauty of the arrangement. Second—the 4th and miscellaneous Part, which was according to the Plan to have been published after the preceding 16 volumes...was made co-aparent with the others.—By this change the pledge given in the Prospectus became demonstrably unperformable—⁴⁴²

His complaint regarding the fine arts is consistent with the methodical discrepancy between the “Treatise” and the stemmatic analysis that is supposed to represent it, and provides a first clear hint of what a reconstruction of Coleridge’s initial structure would entail.

I would like to attempt such a reconstruction [see Figure 3] by examining in more detail his peculiar use of the term “Poetry” in section II of the *Treatise*. “Let it not...be said,” Coleridge cautions, “that Poetry—and under the word Poetry we will now take leave to include all the works of the higher imagination, whether operating by measured sound, or by the harmonies of form and colour, or by words, the more immediate and universal representatives of thought—is not strictly methodical; nay, does not owe its whole charm, and all its beauty, and all its power, to the

⁴⁴¹ Coleridge, *CW*, XI, I, 628.

⁴⁴² Coleridge, *CL*, IV 816-17: 26 Jan 1818.

philosophical principles of Method.”⁴⁴³ In this by now familiar generic use of “Poetry,” Coleridge identifies written verse as merely an example exhibiting a principle of method common to all the works of the “higher imagination,” such as “measured sound” (i.e. music), and “harmonies of form and colour” (i.e. painting). What this suggests is that Coleridge is interested not in describing the practice of poetry as an object of systematic knowledge best suited for theorization, leading to something like an empirical science of the fine arts, or what he elsewhere calls the “recipe” view of poetic composition. Rather, he is situating Poetry as a method of inquiry that has an intellectual validity equal to and integral with that method of “theory.” “Poetry,” in other words, represents one genre of method in Coleridge’s general science of methods, of which the “relation of theory” (productive of the experimental and applied sciences) and the “relation of law” (productive of the pure and mixed sciences) are the other examples.

The primary difference Coleridge identifies between the two methods of science and the middle method of Poetry is that in Poetry the initiative idea that impels the inquiry is a “mighty, inward power, a feeling...” by which the artist advances in his or her art, “gradually” converting this feeling into a “bright, and clear, and living ideal!” Hence, what is at stake for Coleridge in defending the method of Poetry is nothing less than the philosophical validation of a method of inquiry that begins with feeling (as opposed, say, to the idea of a circle or a triangle in the pure sciences). Distinguishing the initiative ideas of Science and Poetry in this way can provide an initial structure that any reconstruction of Coleridge’s methodical arrangement should be careful to preserve. In the *Treatise* and several of his other works, Coleridge also distinguishes Science and Poetry in terms of their respective goals, as for instance in his lectures on the “Principles of Poetry,” given at the London Philosophical Society in 1811-12. Although Coleridge is careful in these lectures to affirm

⁴⁴³ Coleridge, “Treatise,” *Metropolitana*, 23.

that truthfulness in a Poet is a virtue, he nonetheless defines Poetry as “a species of composition, opposed to Science as having intellectual pleasure for its Object,” that is, instead of “truth,” which is the explicit object or goal of science. In the form of “measured words,” Poetry attains “its end [i.e. Object] by the Language natural to us in states of excitement,” but it is “distinguished from other species” of composition “not excluded by this criterion, by permitting a pleasure from the Whole consistent with a consciousness of pleasurable excitement from the component parts, & the perfection of which is to communicate from each part the greatest immediate pleasure compatible with the largest Sum of Pleasure [in?] the whole.”⁴⁴⁴ If the explicit goal of Science is truth, and aesthetic pleasure that of Poetry, their methods should also replicate this oppositional or competitive structure.

Taking a final hint from Jeffrey Hipolito’s 2004 article on Coleridgean hermeneutics, in which Hipolito argues for attaching the end or goal of the Poetry method to the beginning or ground of Philosophical methods of inquiry, my reconstruction attempts to preserve the oppositions between Science and Poetry that Coleridge identifies.⁴⁴⁵ If Coleridge sees the goal of Poetry as the production of aesthetic pleasure, wonder, and astonishment, then his remark from the “Essays on Method” in *The Friend* (1818), that “in wonder...does philosophy begin: and in astoundment...does all true philosophy finish,”⁴⁴⁶ indicates that the goal of Poetry for Coleridge circumscribes the beginning and end of all philosophical inquiry. Hence, from the early lectures to the “Treatise,” Coleridge situates the “middle method” of Poetry as productively opposed to Science in the sense that it activates the contemplative methods associated with both the relations of law (pertaining to

⁴⁴⁴ Coleridge, *CW*, V, I, 218.

⁴⁴⁵ Jeffrey Hipolito, “Coleridge, Hermeneutics, and the Ends of Metaphysic,” *European Romantic Review*, 15:4 (2004), 547-565, 561.

⁴⁴⁶ See Essay XI in Samuel Taylor Coleridge, *The Friend*, ed. Barbara E. Rooke, vol. IV of *The Collected Works of Samuel Taylor Coleridge* (Princeton: Princeton University Press, 1969), part I, 519.

pure and mixed sciences), and those of theory (pertaining to experimental and applied sciences). Without Poetry as a middle method, Coleridge's disciplinary structure collapses into a binary relation in which scientific inquiry will always be at risk of stagnation.

This reconstruction [Figure 3], though certainly preliminary, can also illustrate the potential value in comparing norms of institutional methodology with speculations about alternative configurations of academic inquiry that are not generally accepted within knowledge producing institutions. We know, in other words, that a Coleridgean science of method has not taken hold, not because we have neglected Coleridge's works. Instead, it is in the present awareness that we do not recognize Poetry method as a valid method of academic inquiry that might compete with the widely accepted experimental method in the natural sciences. From the arguments I have made concerning the relation between his "Essays on the Principles of Genial Criticism" above, Coleridge's Poetry method would almost certainly include his genial method of critique. Insofar as Coleridge saw the organization of methods in his encyclopaedia in the context of the encyclopaedic precedents that had contributed to the formation of the Royal Institution, I think it could be helpful to think about the ways in which Coleridge's scientific principles of method might have been composed with a mind to their eventual *application* on behalf of improving the art of arts-and-sciences Institutional design.

Figure 2: Stemmatic analysis of disciplinary scheme as published in the *Encyclopaedia Metropolitana* (1818, 1845):⁴⁴⁷

THE principles of Method, developed in the preceding Essay, will, it is hoped, render perfectly intelligible the Plan of our whole work, which is comprehended under Four Divisions as follow :

FIRST DIVISION.

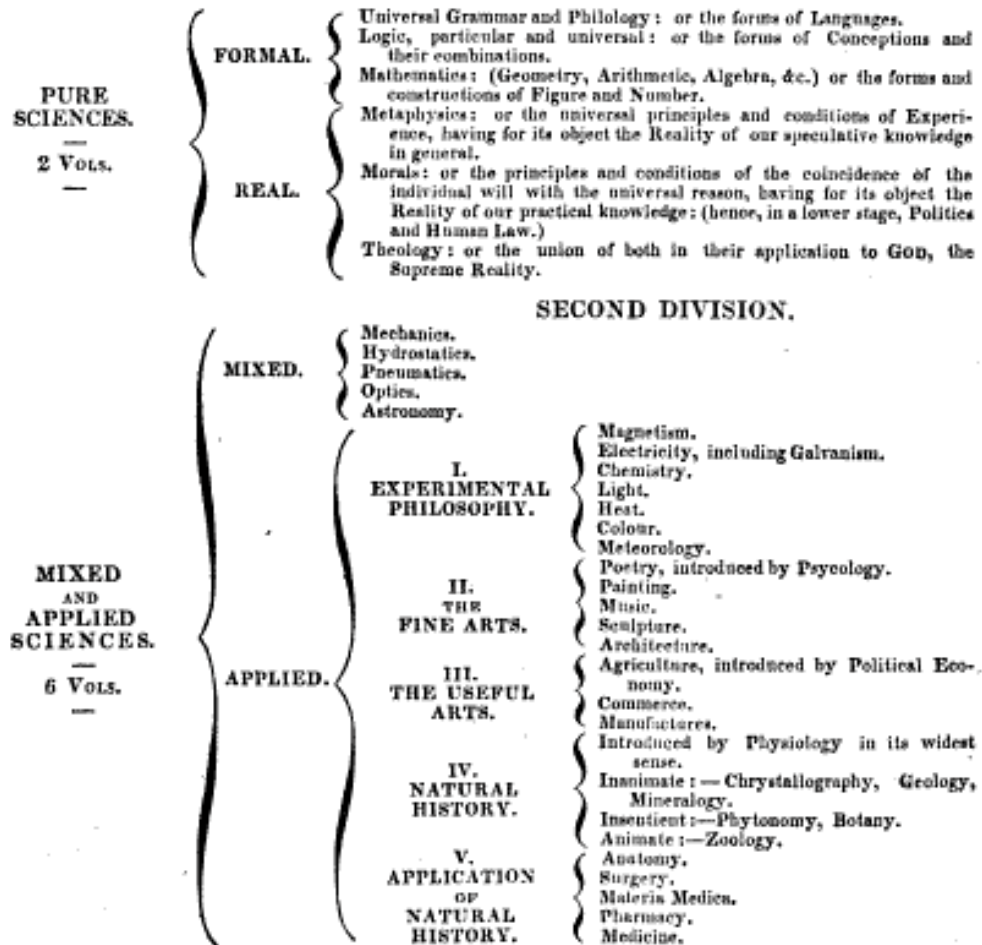
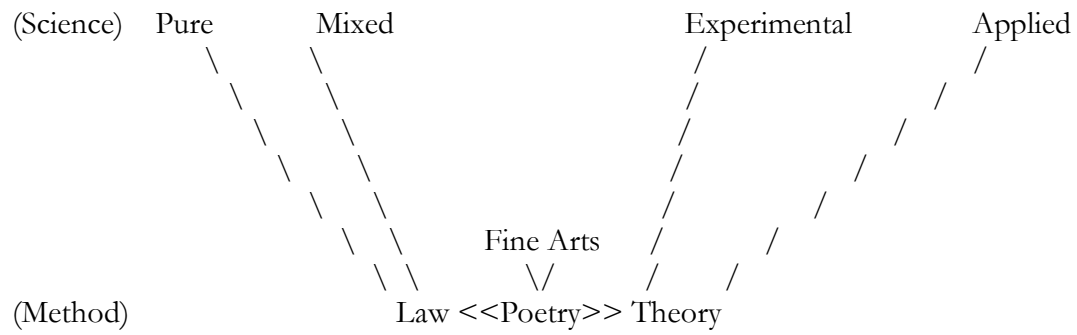


Figure 3: Reconstruction of Coleridge's initial scheme for the *Encyclopaedia Metropolitana*:



CHAPTER FOUR

An Institution of Poetry? Inheritance and Critique in the Second Generation

Institutions can completely new-model our nature; for, if the instinct of self-defense be subdued, nothing else is so powerful.

—Robert Southey, Letter to John Rickman, 1806⁴⁴⁸

Introduction:

In the previous chapter I showed how two prominent Romantic-era lecturers on the fine arts negotiated the terms and conditions imposed by the new Institutional formations that resulted from the movement to unite the arts and sciences. In my final chapter I would like to focus on reactions to that Institutional movement, and the place of the fine arts within it, by prominent members of its audience and readership. As in the previous chapter, I will concentrate on two figures who have been associated with the Romantic period in England, Percy Bysshe and Mary Wollstonecraft Shelley. I will begin by examining the evidence connecting Percy to the arts-and-sciences Institutional movement, in an effort to describe the extent to which his famous *Defence of Poetry* (composed 1821), attempts to emulate the arts-and-sciences structure of the Royal Institution's lectures. I then attempt to account for Mary Shelley's interaction with that same Institutional culture by reading her 1818 novel *Frankenstein* as part of the arts-and-sciences Institutional discourse I have been describing throughout this dissertation. Although *Frankenstein* predates the composition of Percy's *Defence*, I have chosen to end with a discussion of Mary's novel, because it acts, in my view,

⁴⁴⁸ Robert Southey and Charles Cuthbert Southey, *The Life and Correspondence of Robert Southey* (New York: Harper & Brothers, 1855), 212.

as an important commentary on the entire arts-and-sciences Institutional project. It also highlights a key female voice, only accessible from the angle of the arts-and-sciences audiences, in an otherwise male-dominated Romantic discourse of Institutions.

As in the preceding chapters, I want to give special attention to the traditional historiographical treatment of the period during which the fine arts lectures emerged within the RI lecture curriculum. In the words of its first historian, Henry Bence Jones

For the first three years the advancement of scientific knowledge was the chief object of the Institution; in the fourth and fifth years this object gave way to that of fashionable popularity, which was sought for until the original investigations of Davy again made science, in the noble function of new discovery, the life of the Royal Institution.⁴⁴⁹

Instead of treating Bence Jones' characterization as adequate, I instead want to use it to highlight a rationale for the attitude of *Defense* assumed by the Shelleys in their handling of Poetry. Poetry had to be defended, that is, principally at the level of Institutional thought, and I argue that viewing their work in this light helps to clarify how they imagined themselves as contributing to Britain's arts-and-sciences Institutional discourse.

Although there is no direct evidence that Percy attended a Royal Institution lecture, he and his first wife Harriet lived on Albemarle Street (where the RI is located) in 1813, during what his biographers have called his "silent period," so he may very well have attended lectures during this time. He would certainly have been familiar with the Institution's output, since, on July 29, 1812, Percy wrote a letter to Thomas Hookham requesting "Milton's Prose Works, 'Elements of chemical Philosophy,' by Sir H. Davy (to be published August 1), 'Medical Extracts,' Hartley 'On Man,' 'Rights of Women,' by Mary Wollstonecraft."⁴⁵⁰ Percy took copious notes from Davy's chemical

⁴⁴⁹ Bence Jones, *Royal Institution*, 261.

⁴⁵⁰ Percy Bysshe Shelley, *The Letters of Percy Bysshe Shelley*, Vol. I, ed. Roger Ingpen (London: Sir. I. Pitman, 1909), 340, no. 148.

works, and these notes record how he actually applied Davy's principles to practice in improving potato production his Sussex estate.⁴⁵¹ Although surprisingly Percy never met Coleridge, his appreciation of Coleridge's intellect is well documented. Percy even appears to have had an interest in practical instituting himself, as is evident in a letter to William Godwin, also of 1812, in which Percy recommends "the institution of a philanthropic society" in Ireland to assist in ameliorating the "oppressive influence of the Union Act."⁴⁵² His interest in science is also well known, and I think informs his attempt to teach the science of Poetry in his *Defence*.

Similarly, Mary Shelley's likely attendance as an audience member to Humphry Davy's lectures on chemistry, as well as her documented reading of his published works on chemistry, would have familiarized her with the basic structure of the arts-and-sciences Institutional model.⁴⁵³ And while there has been, insofar as her novel is understood as a critique of science, much critical focus on Shelley's connection with Davy, what is less commonly known, but I would argue equally important, is that she also attended Coleridge's 1811-12 lectures "On the Principles of Poetry, and their Application as Grounds of Criticism," delivered at the London Philosophical Society.⁴⁵⁴ Just prior to the commencement of those lectures, Mary's father William Godwin received a letter from Coleridge containing the following note: "I have inclosed your Ticket & hope that the youthful members of your Family may receive amusement."⁴⁵⁵ Coleridge, a long-time friend of the Godwin-Wollstonecraft family despite various political differences, had put Godwin in charge of advertising

⁴⁵¹ Frank A.J.L James, "Agricultural Chymistry is at present in it's infancy": The Board of Agriculture, The Royal Institution and Humphry Davy," *Ambix* 62, no. 4 (2015) 363-385, 383.

⁴⁵² Shelley, *Letters*, I, 262, no. 125: February 24, 1812.

⁴⁵³ See Crouch, L. E., "Davy's A Discourse, Introductory to a Course of Lectures on Chemistry: A Possible Scientific Source of Frankenstein." *Keats-Shelley Journal* 27 (1978), 35-44.

⁴⁵⁴ James Bieri, *Percy Bysshe Shelley, A Biography, Volume I* (Newark: University of Delaware Press, 2004), 316.

⁴⁵⁵ Samuel Taylor Coleridge, *The Collected Letters of Samuel Taylor Coleridge*, vol. III, ed. Earl Leslie Griggs, (Oxford: Clarendon Press, 2000), 839/355, no. 840.

the lecture course in the *Morning Chronicle*, and this ticket, which would have been good for the entire season, seems likely to have been part of his remuneration.⁴⁵⁶

Mary would have been fourteen years old at the time, but for the person who would compose *Frankenstein* only a few years later, she clearly understood much of what Coleridge was doing. Mary's attendance at these lectures makes her part of Coleridge's literal audience in the lecture theatre, where he would communicate some of his earliest arguments concerning the methodological opposition between Poetry and Science. If my argument above holds, Coleridge had also "illustrated" his nascent ideas on a Poetry method by the performance of his principles in the lectures themselves, as the key arts-and-sciences feature of his practical criticisms of Shakespeare and Milton. This means that Shelley would have been a direct witness to what a Poetry method could achieve prior to the publication of the *Encyclopaedia Metropolitana* or the "Essays on Method" in *The Friend* of 1818, where Coleridge first explicitly articulated the possibility of a "middle method" appropriate to the fine arts.

In connecting these two figures to the arts-and-sciences Institutional discourse, I hope to show that both Shelleys attempt to further extend the generic category of Poetry that Coleridge had already outlined in his lectures. I begin by showing how Percy's *Defence of Poetry* adheres to the strict procedural obligations of a Royal Institution lecture, and follows key principles concerning Poetry and Science, Reason and the Imagination, first laid out by Coleridge. With this foundation, I argue for the *Defence* as principally an Institutional argument that attempts to move beyond Coleridge's science of Poetry by including the Institutional act itself within Coleridge's already expanded categorical definition of *poesis*.

⁴⁵⁶ Godwin himself had been attending Coleridge's lectures since the 1808 course, see Coleridge, *CW*, V, I, 92-3.

But if Percy's *Defence* approvingly mimics the form of a Royal Institution lecture, Mary Shelley appears to have seen a more ominous tendency in the obsession with the discovery of principles that the Royal Institution and its lecture curriculum implied. While Humphry Davy has often been viewed as a model for professor Waldman in her 1818 novel *Frankenstein*, I argue that it is Victor's search for what he calls the "*principle of life*," and his fateful application of it to that most profound of arts, the creation of a rational being, that stands as perhaps the most severe Romantic critique of the arts-and-sciences Institutional movement. Rather than a merely negative critique of systematic inquiry, however, I argue that *Frankenstein* registers an alternative vision that would maintain a "monstrous" Poetic practice as an Institutional norm, made visible in Victor's tragic destruction of the female companion that his Creature had so earnestly requested. I conclude by reflecting this Institutional reading of *Frankenstein* back onto the historical fact of Shelley's aesthetic product, to show how she extends the generic category of Poetry to include the novel form, thereby defending both the creative and critical agency of a new and diverse arts-and-sciences audience.

Section I: Institutional Practice in Shelley's Defence of Poetry

That Percy Shelley's famous *Defence of Poetry* was the result of a "sacred rage" inspired by Thomas Love Peacock's 1820 essay entitled *The Four Ages of Poetry*, is very well known. What is less well known, and what I would like to concentrate on in this section, is the degree to which both works are engaged in an explicitly arts-and-sciences form of Institutional discourse. Since the substance of Peacock's essay, which is concerned with "the progress of useful art and science," coincides with the increasingly utilitarian direction of the RI after 1810, we might expect its form of argumentation to be similar to the forms instituted there, which hinged on the formal conjunction of "principle and application." In contrast, we might also expect to find Percy Shelley resisting the forms of discourse imposed by that same Institutional arrangement. However, as will become clear,

the case is exactly the opposite. Instead, Shelley's *Defence* adheres precisely, even rigidly, to the fundamental form of discourse initiated at arts-and-sciences Institutions like the Royal and the Surrey. In this section I will show how that Institutional focus on the "principles and application of the philosophy of nature and art," embedded in the design of the RI's scientific lectures, bears directly on the structure of Shelley's argument in the *Defence*. As I argued in chapters II and III, the RI's development of a fine arts curriculum provides the structure and title of Coleridge's lectures "On the Principles Common to the Fine Arts" (1806, never delivered), as well as his more famous 1808 lectures "On the Principles of Poetry." I have also suggested that Coleridge's peculiar definition of "Poetry," which he uses as a generic term to encompass "all of the fine arts," is a key legacy of the Institutional context in accordance with which his lectures were prepared. In the *Defence*, I view Shelley's division between "universal" and "restricted" definitions of "Poetry" as a modification of Coleridge's distinction between the generic "Poetry" and its specific written form, which Coleridge called "measured words." Shelley's distinction is hence part of the same arts-and-sciences Institutional legacy, though at one remove. I conclude by arguing that this distinction is crucial to understanding Shelley's treatment of the relationship between Poetry and institutions in the *Defence*. Rather than conceiving of Shelley's institutor as having specific reference to his "restricted" view of poetry, I instead suggest that the "universal" definition is fundamental. Shelley extends this generic definition beyond "all of the fine arts" to include the institutional act itself. Such an extension asks the readers of the *Defence* to see, not a composer of measured words as necessarily an institutor, but to see the institutional act of which the *Defence* is an outcome, as also a form of "Poetry" in the "most extended sense."

Toward the end of Peacock's cyclical argument concerning the rise and decline of metrical composition, he defines its contemporaneous Institutional position as follows:

When we consider that the great and permanent interests of human society become more and more the main spring of intellectual pursuit; that in proportion as they become so, the

subordinacy of the ornamental to the useful will be more and more seen and acknowledged; and that therefore the progress of useful art and science, and of moral and political knowledge, will continue more and more to withdraw attention from frivolous and uncondusive, to solid and conducive studies: that therefore the poetical audience will not only continually diminish in the proportion of its number to that of the rest of the reading public, but will also sink lower and lower in the comparison of intellectual acquirement: when we consider that the poet must still please his audience, and must therefore continue to sink to their level, while the rest of the community is rising above it: we may easily conceive that the day is not distant, when the degraded state of every species of poetry will be as generally recognized as that of dramatic poetry has long been: and this not from any decrease either of intellectual power, or intellectual acquisition, but because intellectual power and intellectual acquisition have turned themselves into other and better channels, and have abandoned the cultivation and the fate of poetry to the degenerate fry of modern rhymsters, and their Olympic judges, the magazine critics, who continue to debate and promulgate oracles about poetry, as if it were still what it was in the Homeric age, the all-in-all of intellectual progression, and as if there were no such things in existence as mathematicians, astronomers, chemists, moralists, metaphysicians, historians, politicians, and political economists, who have built into the upper air of intelligence a pyramid, from the summit of which they see the modern Parnassus far beneath them, and, knowing how small a place it occupies in the comprehensiveness of their prospect, smile at the little ambition and the circumscribed perceptions with which the drivellers and mountebanks upon it are contending for the poetical palm and the critical chair.⁴⁵⁷

Considered with a view toward the direction the arts-and-sciences Institutional movement had taken by 1820, when the *Four Ages* was published, Peacock's argument mirrors the RI's decision after 1810 to limit the prominence given to poetry and the fine arts, Bence Jones' "fashionable popularity," in its lecture curriculum. Peacock's characterization of poetry as a "subordinate" discipline hence suggests a defense of the Institution that sought just such a subordination. In this sense, the view Peacock is defending has a specific Institutional coordinate in the Royal Institution's curricular changes after 1810, as well as the ossification of the institutional privileging of science and technology that those reforms implied. Yet, for all of Peacock's apparent support of the arts-and-sciences configuration that was beginning to take shape at places like the RI, he observes none of the adherence to its aims of revealing the "principles and application" of the subject in question.

⁴⁵⁷ Thomas Love Peacock, "The Four Ages of Poetry," in *Peacock's Four Ages of Poetry, Shelley's Defence of Poetry, Browning's Essay on Shelley*, ed. H.F.B. Brett-Smith (New York: Houghton Mifflin Company, 1921), 18-19.

Peacock never uses the language of “application,” and his very few deployments of “principle” tend to function satirically, as part of his attack on the new arts-and-sciences discourse of Poetry. “What Mr. Coleridge calls a new principle,” Peacock argues, is in reality “no principle at all.”⁴⁵⁸

While these terms are entirely absent as positive structuring features of *The Four Ages of Poetry*, they occur with unusual frequency and consequence for Shelley’s argument in the *Defence*. I want to examine several important instances in which Shelley’s handling of these terms invokes a specifically *arts-and-sciences* Institutional discourse, most readily available as a structuring feature of the RI lectures and affiliated publications. Toward the end of the *Defence*, for instance, Shelley describes the intended arrangement of that essay as follows:

The first part of these remarks has related to poetry in its elements and principles; and it has been shown, as well as the narrow limits assigned them would permit, that what is called poetry in a restricted sense has a common source with all other forms of order and of beauty according to which the materials of human life are susceptible of being arranged; and which is Poetry in an universal sense.⁴⁵⁹

This short passage bears at least two crucial marks of an arts-and-sciences Institutional inheritance. The first is a fundamental concern with “elements and principles,” which, as I have shown, were defining features of the word “Institution” as it was typically used and incorporated into lecturing practice in early-nineteenth-century Britain. This evidence alone would allow us to characterize the *Defence* as an Institutional argument in the precise sense that he refers his reasoning to the elements and principles of his subject. In the second mark of Institutional inheritance, Shelley deploys a generic definition of Poetry that looks remarkably similar to that developed by Coleridge in his RI lectures. In Shelley’s definition, Coleridge’s “measured words” becomes “poetry in a restricted sense,” and his “common principles” becomes the “common source” which that “restricted” or

⁴⁵⁸ Peacock, “Four Ages,” 16.

⁴⁵⁹ Percy Bysshe Shelley, *The Major Works*, eds Zachary Leader and Michael O’Neill (Oxford: Oxford University Press, 2003), 700.

written form of poetry shares “with all other forms of order and of beauty according to which the materials of human life are susceptible of being arranged; and which is Poetry in an universal sense.” This “universal” or general sense of Poetry even retains Coleridge’s convention of capitalizing the generic term. It is this general sense, too, that will inform Shelley’s discussion of that “other [form] of order” he calls “institution,” which I will discuss a little further on.

By themselves these two features would indicate a close structural affiliation between the *Defence* and the arts-and-sciences Institutional context I have been describing. But Shelley voices an additional concern in the next paragraph, which connects his argument even more precisely with the RI’s initial goals for the scientific lectures:

The second part will have for its object an application of these principles to the present state of the cultivation of Poetry, and a defence of the attempt to idealize the modern forms of manners and opinion, and compel them into a subordination to the imaginative and creative faculty.⁴⁶⁰

Shelley’s *Defence* is importantly an unfinished work. He completed the first half, which dealt with “poetry in its elements and principles,” leaving us only the above passage as evidence of its fragmentary state. What we have was composed early in 1821, but was not published until 1840, by which time Shelley was of course dead, but also crucially the Institutional movement to unite the arts and sciences had stabilized into its more recognizable technological form, resulting in various new educational institutions, among the most prominent of which was London University (now University College London). The incomplete state of the *Defence*, along with its posthumous publication, has caused the Institutional structure of the essay to go unnoticed, yet in these two passages that connection is as clear as could be expected without his explicit statement of the fact. The “first part,” which is all that was published, as he says, concerns Poetry in relation to its “elements and principles,” while the “second part,” never published, would have had “for its object

⁴⁶⁰ Shelley, *Major Works*, 700.

the application of these principles to the present state of the cultivation of Poetry.” This stated structure mimics almost exactly the structure of the RI lectures, and stands as evidence that Shelley understood the importance of these Institutional demands, and sought to incorporate them as the fundamental structural feature of the *Defence*. He did so, I might add, with much more precision than Peacock. I think the rationale for this is that, by 1820, it appeared that the Institutional dynamic had shifted in the direction favored by Peacock, so Shelley’s deliberately Institutional frame appears to be a late attempt within the new arts-and-sciences movement to justify, for an emerging democratic order, an arts-and-sciences curriculum that included that view of Poetry which had been founded on a “new principle.”

This structural evidence might seem to contrast with the apparently meandering shape of what was actually written. But Shelley accounts for this aspect as well:

I have thought it most favourable to the cause of truth to set down these remarks according to the order in which they were suggested to my mind by a consideration of the subject itself, instead of following that of the treatise which excited me to make them public. Thus, although devoid of the formality of a polemical reply, if the view which they contain be just, they will be found to involve a refutation of the *Four Ages of Poetry*, so far at least as regards the first division of the subject. I can readily conjecture what should have moved the gall of the learned and intelligent author of that paper. I confess myself like him unwilling to be stunned by the Theseids of the horse Codri of the day: Bavius and Maevius undoubtedly are, as they ever were, insufferable persons. But it belongs to a philosophical critic to distinguish rather than confound.⁴⁶¹

In describing the difference between the form of the *Defence* and that of the *Four Ages*, Shelley invokes a vocabulary as indicative of imaginative action as it is indicative of logical action. The style would seem to wander, which would typically have been considered a mark irrational lack of control, but Shelley is saying here that he has elected to follow the path provided by the imaginative action of his mind on the subject. And contrary to expectation, Shelley describes this altered style as “favourable to the cause of truth.” That is, recollecting Coleridge’s opposition, favorable to the

⁴⁶¹ Shelley, *Major Works*, 700.

cause of “Science.” Hence, the stylistic argument shows itself to be that imaginative prose construction, rather than being detrimental, can also work on behalf of the cause of truth and knowledge.

Notably also, Shelley is not simply saying that he disagrees with everything Peacock says. In fact, Shelley concurs with Peacock in being unimpressed by particular unnamed authors, his Bavius and Maevius. His disagreement with Peacock is instead entirely focused on the goals of what Shelley calls the “philosophic critic.” Presuming that the philosophic critic is also committed to the “cause of truth,” Shelley’s argument is that the philosophic critic should work to “distinguish” those few great Poets, rather than “confound” the many bad poets with those few greats. Though such confounding renders Peacock’s argument empirically comprehensive, it is philosophically useless, because in Shelley’s view, the entire point of philosophical criticism would be to show the value of selecting a few particularly powerful poets from among the many, and by selecting, to “distinguish” on behalf of “the cause of truth.”

Supposing this structural evidence allows us to claim an Institutional inheritance for Shelley’s *Defence*, I would now like to follow out his individual references to Institutional vocabulary, to “principles,” “elements,” and even “institutions,” as they occur in the argument itself. In the case of the first two terms, Shelley uses them so often throughout the essay that I will need to focus on only those that are especially consequential for the argument I have been developing. Shelley opens, for instance, with an opposition between reason and imagination, treating them each as fundamental “principles” of “mental action.” As he says,

According to one mode of regarding those two classes of mental action which are called Reason and Imagination, the former may be considered as mind contemplating the relations borne by one thought to another, however produced; and the latter as mind, acting upon those thoughts so as to colour them with its own light, and composing from them as from elements, other thoughts, each containing within itself the principle of its own integrity. The one is the [GREEK POIEIN] or the principle of synthesis; and has for its objects those forms which are common to universal nature and existence itself; the other is the [GREEK LOGISEIN], or principle of analysis and its action regards the relations of things, simply as

relations; considering thoughts, not in their integral unity, but as the algebraical representations which conduct to certain general results. Reason is the enumeration of quantities already known; Imagination the perception of the value of those quantities, both separately and as a whole. Reason respects the differences, and Imagination the similitudes of things. Reason is to Imagination as the instrument to the agent, as the body to the spirit, as the shadow to the substance.⁴⁶²

Rather than beginning with the disciplines themselves (i.e. Poetry and Science), as Coleridge had done, Shelley commences with the mental faculties traditionally supposed to be responsible for those disciplines. As I have described above, Bacon appears to have been the key intellectual guide for the arts-and-sciences Institutional movement. The contingent manner in which the RI developed a curriculum for the fine arts meant that the lectures given there had to be structured in terms of scientific principles. The faculty of “mental action” that had been correlated with the scientific lectures was the faculty of reason. Hence, in describing his subject in terms of principles, Shelley is abiding by the Institutional demands of science and reason. However, this circumstance creates a difficulty for handling scientifically any human practice that involves the activity of other mental faculties, such as Poetry. In Shelley’s case, what is missing from the scientific characterization that Peacock provides is a principled justification of the faculty of imagination. In a draft letter to Charles Ollier, whose periodical *Literary Miscellany* had recently published the *Four Ages*, Shelley contends that Peacock “would extinguish Imagination which is the Sun of life, and grope his way by the cold and uncertain and borrowed light of that moon which he calls Reason.”⁴⁶³ Peacock’s putative move to eliminate the imagination from valuable mental endeavor thus has a direct historical coordinate in the Royal Institution’s gradual limitation of the fine arts curriculum. Shelley’s *Defence*, on the other hand, invokes Baconian “principle” on behalf of the imagination itself, forming a direct link between the Baconian arts-and-sciences discourse and the Romantic discourse of the imagination. The

⁴⁶² Shelley, *Major Works*, 674.

⁴⁶³ Shelley, *Letters*, II, 1000; See also Shelley, *Major Works*, 829n.

interpretation of Bacon thus functions as the crucial hinge in the Institutional debate, repeated in different ways by both individual figures and practicing establishments like the RI. Shelley's argument hence stands as an alternative and opposing vision that could replace or compete with the dominant practical iterations that had appeared at the beginning of the arts-and-sciences Institutional movement.

Recalling Coleridge's development of a coherent Institutional frame by means of an oppositional disciplinary pairing of Poetry and Science, here we see Shelley extending that oppositional argument to the mental faculties themselves, treating imagination and reason, in effect, as the principles of disciplines that emerge from them. Hence, in Shelley's science of mental action, "Poetry" is the result or "expression" of the "synthetic principle" called the Imagination. He is clear on the point of Poetry, to suggest that the analytical principle of reason also plays a role in its production, but that role is steadfastly instrumental to the agential mental action of the imagination. This analytical principle, as he says, "regards the relations of things, simply as relations," while the synthetic principle perceives the "value" of those relations. The synthetic principle then acts on those evaluations, with the result being the production of "Poetry." Hence, it is possible to identify Shelley's "Imagination," or the "principle of synthesis," as the primary principle of Poetry, while the "Reason," or "principle of analysis" is its secondary principle, responsible for things like the gradual accretion of stable verse forms over time.

Shelley's description of the primary principle of Poetry in terms of the mental action thought to produce it sets up his next task, which is to defend the "utility" of that principle of synthesis, and hence Poetry, with regard to the manner in which it fosters civilizational progress. On this point, the unavoidable term is "harmony," or, as Shelley later calls it, "beauty," where both pertain to a superlative pleasure induced by "a certain order or rhythm belonging to each of [the] classes of

mimetic representation.”⁴⁶⁴ The classes of mimetic representation that produce this superlative pleasure, taken together, are the constituents of what Shelley understands to be the general definition of “Poetry.” It is in this respect that his principles follow those of Coleridge. Each class being an individual fine art, such as painting, sculpture, music, dance, or written poetry, combined according to the superlative pleasure created by their distinct modes of ordering, suggests the direct link to the arts-and-sciences Institutional movement in its attempt to unite all of the fine arts under a common principle. So what we find in the *Defence* is an Institutional argument throughout, whether considered from the perspective of principles, of the arts and sciences, or of the Coleridgean Institutional precedent.

Beyond these immediate features of arts-and-sciences Institutional practice are also important references to Bacon’s *Advancement of Learning*, that bear directly on the broader Institutional discourse surrounding the subject of Poetry, as for instance in the following passage, in which Shelley describes the language of the poet as

vitally metaphorical; that is, it marks the before unapprehended relations of things, and perpetuates their apprehension, until the words which represent them become through time signs for portions and classes of thoughts, instead of pictures of integral thoughts; and then, if no new poets should arise to create afresh the associations which have been thus disorganized, language will be dead to all the nobler purposes of human intercourse. These similitudes or relations are finely said by Lord Bacon to be ‘the same footsteps of nature impressed upon the various subjects of the world’—and he considers the faculty which perceives them as the storehouse of axioms common to all knowledge.⁴⁶⁵

To clarify the connection Shelley is making via Bacon, it is “the faculty which perceives” the “similitudes or relations” that produces the “vitally metaphorical” language of the poet. This faculty is identifiable as the imagination, or “synthetic principle” whose action results in Poetry. It is hence, perhaps surprisingly, Bacon who considers the faculty of imagination as the “storehouse of axioms

⁴⁶⁴ Shelley, *Major Works*, 675-676.

⁴⁶⁵ Shelley, *Major Works*, 676.

common to all knowledge.” The passage Shelley is citing comes from Book III, chapter I of Bacon’s *Advancement*, and concerns questions of first philosophy having to do with the development of general axioms that can apply not to a particular science, but can serve an analogical function for considering and comparing several sciences at once.⁴⁶⁶ Thinking back to Hazlitt’s critiques of the inadequate disciplinary analogies concerning the fine arts that had, in his opinion, negatively affected the state of the fine arts in England, Shelley’s quotation of Bacon at this point in the *Defence* tells us that he too is thinking about the role of Poetry in the development and stability of knowledge institutions. Shelley’s argument places Poetry in a deliberately foundational position. His statement that the language of poetry is “vitally metaphorical” suggests that Poetry underpins philosophical inquiry. In other words, if metaphorical activity is removed, so Imagination and Poetry, and with them ultimately philosophy and science, which rely on “the before unapprehended relations of things” that Poetry supplies. These relations are then, according to Shelley, taken for granted by the analytical principle of reason, “simply as relations” that exist in the world, and “through time” function as “signs for portions and classes of thoughts,” which indicate the complex of distinct sciences. As soon as the sciences forget that these relations are ultimately the product of the poets, the relations dissolve, knowledge becomes disorganized, and the power of language recedes and becomes “dead to all the nobler purposes of human intercourse.” This means that written poetry, as an example of the generic category of Poetry, stands at the foundation of all knowledge, and is the vital support of the common purposes of the “analytical principle” of reason. Prior to institutions, poetry, and the synthetic principle responsible for producing it, “marks the before unapprehended relations of things” that knowledge institutions take for granted, via the analytical principle, in making analogical comparisons between the disciplines. Crucially, Shelley’s is a reflexive argument,

⁴⁶⁶ See Francis Bacon, *The Advancement of Learning*, ed. Joseph Devey (New York: P.F. Collier and Son, 1902), 140: Book III, Chapter I.

constructed according to the form of an RI lecture on the common principles of Poetry or the fine arts, in order to retroactively insert a Baconian precedent for Poetry into the arts-and-sciences Institutional discourse in which Bacon was already such a central figure.

Turning to Shelley's connected use of the Institutionally inflected term "elements," Poems become the fundamental elements whose combination results in civil society. Shelley describes, for instance, the "poems of Homer and his contemporaries [as] the delight of infant Greece; they were the elements of that social system which is the column upon which all succeeding civilization has reposed."⁴⁶⁷ Shelley's deployment of the term here is striking because it uses the Institutional concern with elements to position poetry as fundamental to the establishment of the very Institutional discourse employed to describe it. For Shelley, the elemental status of poems, poetry, and the imagination to civil life, never recedes in importance. After the poet has supplied "the unapprehended relations of things," they must "perpetuate [the] apprehension" of those relations. If they fail to sustain the vitality of these relations, and "no new poets should arise to create afresh the associations which have been thus disorganized, language will be dead to all the nobler purposes of human intercourse." What this means for Shelley's Institutional argument is that poetry will never become irrelevant to knowledge Institutions because they are built on it, and their health, which is the health of science, depends on it.

This dependence reaches its most extreme when Shelley characterizes the act of Institution as itself a form of Poetry, here considered in its general or "universal" sense:

But Poets, or those who imagine and express this indestructible order, are not only the authors of language and of music, of the dance and architecture and statuary and painting; they are the institutors of laws and the founders of civil society and the inventors of the arts of life and the teachers, who draw into a certain propinquity with the beautiful and the true that partial apprehension of the agencies of the invisible world which is called religion. Hence all original religions are allegorical or susceptible of allegory, and like Janus have a double face of false and true. Poets, according to the circumstances of the age and nation in

⁴⁶⁷ Shelley, *Major Works*, 680.

which they appeared, were called in the earlier epochs of the world legislators or prophets: a poet essentially comprises and unites both these characters. For he not only beholds intensely the present as it is, and discovers those laws according to which present things ought to be ordered, but he beholds the future in the present, and his thoughts are the germs of the flower and the fruit of latest time.⁴⁶⁸

This passage contains the crux of Shelley's argument about the relationship between Poetry and institutions. In it, Shelley draws an equivalency between that broad domain of the fine arts, and that similarly broad domain of institutions. In doing so, he confirms that he is not simply saying that the composer of "measured words" is in effect a musician, a dancer, an institutor, a teacher, etc. Rather, he is saying that all of these modes of activity, whether traditionally categorized as a fine art, or as a mode of instituting, all have a common reference to the "synthetic principle" that produces them, of which "measured words," or poetry in the restricted, linguistic sense, is a particular example. Moving beyond Coleridge, who had attempted to broaden the definition of Poetry to encompass superlative performance in all of the activities we call the fine arts, Shelley is here suggesting that even institutors and teachers may employ the synthetic principle and thence partake of Poetry in their work. What makes a Poet, in other words, is participation in its true principles, not simply the practice of composing in "measured words."

This view of Poetry, which situates the imaginative or "synthetic principle" as its common source, and comprehends not only all of the fine arts, but also the various modes of instituting, as its different species, actually helps to justify the Institutional structure I have identified in the discursive practice of the *Defence* itself. By arranging his work according to principles, elements, and their application, Shelley's essay strikes a delicate balance by practicing the Poetry of Institutions and instituting that he justifies in the passage above. This reading helps explain the imaginative style Shelley assumes on behalf of the "cause of truth," which he nonetheless opposes to Peacock's

⁴⁶⁸ Shelley, *Major Works*, 677.

formal treatise. It also makes sense of the manner in which Shelley uses the term “Poetry” to describe the scope and development of scientific institutions more specifically, such as in the following passage:

Poetry is indeed something divine. It is at once the centre and circumference of knowledge; it is that which comprehends all science, and that to which all science must be referred. It is at the same time the root and the blossom of all other systems of thought: it is that from which all spring, and that which adorns all; and that which if blighted denies the fruit and the seed, and withholds from the barren world the nourishment and the succession of the sciences of the tree of life. It is the perfect and consummate surface and bloom of things; it is as the odour and the colour of the rose to the texture of the elements which compose it, and the form and splendor of unfaded beauty to the secrets of anatomy and corruption.⁴⁶⁹

Like Hazlitt before him, Shelley’s “indeed” recalls the Baconian concern with the disciplinary relations subservient to the development of knowledge institutions. Bacon’s argument in the *Advancement of Learning* is that Poetry participates in the divine, and must be separated from typical views and methods of knowledge acquisition, not merely for evaluative purposes, but to ensure that the value of Poetry does not reside in the physical existence of the objects it represents. Aligned with this view, Shelley’s argument suggests that a knowledge of the true principles of Poetry, contrary to dominant opinion, would actually support the creation of adequate disciplinary analogies, and assist in maintaining the vitality of those analogies within knowledge institutions.

Such an Institutional position would seem to inform the tenor of the following passage:

Undoubtedly the promoters of utility in this limited sense, have their appointed office in society. They follow the footsteps of poets, and copy the sketches of their creations into the book of common life. They make space and give time. Their exertions are of the highest value so long as they confine their administration of the concerns of the inferior powers of our own nature within the limits of what is due to the superior ones. But whilst the sceptic destroys gross superstitions, let him spare to deface, as some of the French writers have defaced, the eternal truths characterd upon the imaginations of men. Whilst the mechanist abridges, and the political economist combines, labour, let them beware that their speculations, for want of a correspondence with those first principles which belong to the imagination, do not tend, as they have in modern England, to exasperate at once the extremes of luxury and want. They have exemplified the saying, ‘To him that hath, more shall be given; and from him that hath not the little that he hath shall be taken away.’ The

⁴⁶⁹ Shelley, *Major Works*, 696.

rich have become richer, and the poor have become poorer; and the vessel of the state is driven between the Scylla and Charybdis of anarchy and despotism. Such are the effects which must ever flow from an unmitigated exercise of the calculating faculty.⁴⁷⁰

While Poetry may exist without reference to institution, institution without Poetry, without a prior knowledge of “those first principles which belong to the imagination,” will render institutions constantly liable to “corruption,” and incapable of facilitating, in his view, actual social progress. Such failings will always be the result, Shelley concludes, of “an unmitigated exercise of the calculating faculty,” or what he elsewhere calls reason, the “principle of analysis.”

To conclude, the evidence I have provided suggests that Shelley is deliberately emulating the arts-and-sciences Institutional procedures indicative of the scientific lectures at the Royal Institution. While it remains unclear whether Percy ever attended a Royal Institution lecture, he could very well have adopted RI procedures through his careful reading of two of its most prominent lecturers, Humphry Davy and Samuel Taylor Coleridge. Shelley was ordering copies Davy’s major works, such as the *Elements of Chemical Philosophy* as early as 1812, and he actually used them in improving the agricultural management of his estate in Sussex.⁴⁷¹ Likewise, Coleridge’s prose publications relating to Poetry, criticism, and the fine arts, such as the *Biographia Literaria* and relevant sections of *The Friend*, appear to have served as crucial precedents for the *Defence*, so Percy’s emulative style could also have been adopted indirectly through his reading of these works. It is also very possible that Mary Shelley and her father William Godwin, who had attended many arts-and-sciences lectures by the time they met Percy, could have acquainted him with these standard discursive procedures. As such, I have tried to show how the Institutional structure of the *Defence* is a practical attempt to extend the principles of Poetry on behalf of supporting the Institutional act that would secure its

⁴⁷⁰ Shelley, *Major Works*, 694.

⁴⁷¹ See introduction to chapter IV above.

disciplinary survival. Hence, the most immediate target of Shelley's alternative Institutional vision would seem to be the arts-and-sciences Institutions themselves, of which the RI was the most prominent exponent. Such at least appears to be the case in the following passage:

We want the creative faculty to imagine that which we know; we want the generous impulse to act that which we imagine; we want the poetry of life; our calculations have outrun conception; we have eaten more than we can digest. The cultivation of those sciences which have enlarged the limits of the empire of man over the external world, has, for want of the poetical faculty, proportionally circumscribed those of the internal world, and man, having enslaved the elements, remains himself a slave. To what but a cultivation of the mechanical arts in a degree disproportioned to the presence of the creative faculty which is the basis of all knowledge is to be attributed the exasperation of the inequality of mankind? From what other cause has it arisen that the discoveries which should have lightened, have added a weight to, the curse imposed on Adam? Poetry, and the principle of Self, of which money is the visible incarnation, are the God and the Mammon of the world.⁴⁷²

What is Shelley's complaint other than a direct attack on the arts-and-sciences Institutional model?

This passage not only calls attention to its basic objects of cultivating, digesting, and diffusing science and the mechanical arts, but even to the close association between disciplinary structures and the mental faculties, which I have been arguing all along is indicative of arts-and-sciences Institutional discourse. By 1821, the issue is not simply that the fine arts have not been instituted to a degree proportional to the "cultivation of the mechanical arts." Even to the extent that the Royal Institution maintained a limited fine arts curriculum after 1810, its cultivation had taken place "in a degree disproportioned to the presence of the creative faculty which is the basis of all knowledge." It is hence the imagination that is conspicuously absent from the practical results of the Institutional movement to unite the arts and sciences, whether its produce be in the form of fine arts (considered here as branches of Poetry) or philosophically adequate Institutional design. Yet if Poets are the unacknowledged legislators of the world, recognizing the Institutional structure embedded in the *Defence* could suggest a new means of acknowledging Shelley's claim.

⁴⁷² Shelley, *Major Works*, 695-696.

Section II: Aesthetic Practice as Institutional Critique in Mary Shelley's Frankenstein

“The republican institutions of our country have produced simpler and happier manners than those which prevail in the great monarchies that surround it. Hence there is less distinction between the several classes of its inhabitants; and the lower orders being neither so poor nor so despised, their manners are more refined and moral. A servant in Geneva does not mean the same thing as a servant in France and England. Justine, thus received in our family, learned the duties of a servant; a condition which, in our fortunate country, does not include the idea of ignorance, and a sacrifice of the dignity of a human being.”

—Mary Shelley, *Frankenstein* (1818)⁴⁷³

My concluding section explores the ways in which Mary Shelley's novel *Frankenstein* (1818) engages with the veritable rage for “principle and application” that swept through the Institutional culture of her time. Criticism on *Frankenstein* has long noted its association with the Royal Institution through figures like Humphry Davy, but its relation to the arts-and-sciences Institutional movement itself remains obscure.⁴⁷⁴ Shelley, unlike many of her contemporaries, appears to understand that the movement of these Institutions toward a “scientific form,” as Davy had described it in 1810, also implies a profound disciplinary loss. By reading the novel as a critique of the direction this movement had taken by 1818, I hope to help clarify certain disciplinary implications that have hitherto been difficult to understand. While there is no more frequent observation of this novel than that it is a critique of science, a difficulty arises because in this crucial formative period for the Institutional iterations of the arts and sciences in Britain, the array of subject matters under consideration as “sciences” was actually quite different than it is today.⁴⁷⁵ Old categories such as

⁴⁷³ Mary Shelley, *Frankenstein* (New York: W.W. Norton & Company, 2012), 41.

⁴⁷⁴ See Anne K. Mellor, “Frankenstein: A Feminist Critique of Science,” in *One Culture: Essays in Science and Literature*, eds. George Levine and Alan Rauch (Madison: University of Wisconsin Press, 1987), 287-312.

⁴⁷⁵ See Maureen McLane, “Literate Species: Populations, ‘Humanities,’ and Frankenstein,” *ELH*, 63, 4 (1996), 970.

natural philosophy were fading into the background, while its traditional subjects, mechanics, pneumatics, and hydrostatics, had begun to form the basis of new experimental enquiries into subjects like chemistry, physiology, and the improvement of the arts. So too, if Coleridge's collaborators on the *Metropolitana* could by 1817 categorize the fine arts under the general heading of "applied sciences," there is no reason to think that Mary Shelley was not also at least considering terms like "science" as applicable also to recent attempts by the RI to elucidate the scientific principles of the various fine arts.⁴⁷⁶

In attempting to understand the precise contours of Shelley's critique of science, literary critics have ventured in many directions. Some have viewed the work as a critique of specific disciplines, such as chemistry, physiology, or technology.⁴⁷⁷ Others have focused on the critique of the specifically masculine style of scientific inquiry that Shelley portrays.⁴⁷⁸ But if it is the case that the fine arts are increasingly being overtaken and absorbed by that broadly technological domain, and if there is a gender component to this takeover, what means does Shelley have of portraying its implications? Might there be some external source by which science could view itself, a *companion* to "scientific form" capable of counteracting the impending disciplinary imbalance, to reestablish some variant of the communicative ideal between science and art with which Rumford began?

George Levine has argued for a moralistic disciplinary reading of the novel. Staging an overreaching "science" against a benevolent "literature," Shelley's novel converts scientific endeavor

⁴⁷⁶ See Samuel Taylor Coleridge, "Treatise on Method," *Encyclopaedia Metropolitana*, Vol. I, eds. Edward Smedley, Hugh James Rose, Henry John Rose (London: Fellowes, Rivington, etc., 1845), 44.

⁴⁷⁷ See for instance Sharon Ruston, "Chemistry and the Science of Transformation in Mary Shelley's *Frankenstein*," *Nineteenth-Century Contexts* 41, no. 3, (May, 2019).

⁴⁷⁸ See Mellor, "Feminist Critique of Science."

into the subject of literary critique.⁴⁷⁹ But as Maureen McLane has argued, devastatingly I think for Levine's view, the tragic conclusion of the De Lacey episode, far from presenting literature in a favorable light, instead marks its failure, and by implication, the failure of humanistic communication more generally. So if science and literature are in effect on the same side, science producing its monster and humanism confirming it despite itself, what form of *companionship* could there possibly be left to defend?

By invoking that word "companionship," such a crucial word throughout the novel, I aim to treat Shelley's critique in *Frankenstein* as a late attempt to preserve some semblance of a communicative ideal between art and science, an ideal she saw fading in front of her eyes. Preserving a notion of companionship also challenges readers to think of Shelley's work as asking for something other and more powerful than a moral chastening of masculine scientific impulses. In the effort to treat new subjects, especially the arts, systematically, what tends to fall out of Institutional focus is a respect for experience, for the continued practice that informed their theorization in the first place. What I will contend in this section is that an adequate view of Mary Shelley's Institutional critique of science must begin with the recognition that it emerges as a product of aesthetic or Poetic *practice*. As such, the novel (dare I call it a Poem?) inverts the form of the systematic or scientific accounts of Poetry, rendering instead a Poetic account of the impulse to systematic treatment, Mary's own "hideous progeny."⁴⁸⁰ Faced with the increasingly inevitable domination of science within the arts-and-sciences Institutional movement, Shelley, I argue, applies the science of Poetry on behalf of a gendered critique of the masculine Institutional movement toward its "scientific

⁴⁷⁹ See George Levine, "Frankenstein and the Tradition of Realism," *Novel: a Forum on Fiction*, 7, 1, (Fall 1973); George Levine, "Introduction," in *One Culture: Essays in Science and Literature*, eds. George Levine and Alan Rauch (Madison: University of Wisconsin Press, 1987).

⁴⁸⁰ Shelley, *Frankenstein*, 169.

form.”⁴⁸¹ As McLane has suggested, the failure of literature implied by the De Lacey encounter forces the Creature to acknowledge that Victor, “Natural science,” and “not language, literature or consciousness,” must “provide for the monster the community of two he desires.”⁴⁸² I argue that this structural constraint of science can inform a consideration of the unfulfilled narrative promise to create for the Creature a female companion, and that such a consideration in turn casts the historical fact of Shelley’s “hideous” Poetic creation as a rejoinder to Victor’s broken promise. Where Coleridge, Hazlitt, and Percy, apply a systematic or scientific method to the treatment of Poetry, Mary’s novel, I contend, stands as perhaps the first self-conscious attempt in the English language to apply the newly articulated method of Poetry to the treatment of science. In this way *Frankenstein* represents an important attempt to supply that systematic inquiry with its critical Poetic companion, a Poetic Eve to Science’s Adam.

The justification for viewing the novel as a critique of the arts-and-sciences Institutional movement finds its locus in the critical treatment of Victor’s search for the “*principle* of life.” If “every science,” as Coleridge remarks in the *Metropolitana*, “must have its principles,” then Victor’s search for the “principle of life” is inextricably linked to the knowledge, or science of creation. What is the “principle,” or source, whose action results in life? I would like to suggest that the successful derivation of this “principle of life” is the Institutionally inflected subject of the novel. Victor’s quest emerges as a compressed form of the Baconian imperative that motivated the formation of an arts-and-sciences Institutional movement, to bring “the practices of artisans...into dialogue with the sciences because such inventive arts exemplified the progress lacking in traditional natural

⁴⁸¹ Davy, *Lecture on the Plan*, 29.

⁴⁸² McLane, *Literate Species*, 977.

philosophy.”⁴⁸³ Humphry Davy often referred to these arts, what the RI called the “common purposes of life,” as the “Arts of Life,” and Thomas Young explicitly sought to develop scientific principles for these arts of life.⁴⁸⁴ Together with the Institutional emphasis on applying these principles on behalf of invention in the arts, we have in Victor’s narrative the basic form of intellectual practice that defined the RI’s proceedings. In this sense it is possible to read Victor’s character as the Institutional “victor” indicated by the RI’s movement toward its “scientific form.”

Shelley stages her Institutional critique of systematic inquiry by figuring its ultimate motivation as the desire to regain Eden. After eating the forbidden fruit, God sought to prevent Adam and Eve from eating “also of the tree of life,” which would have allowed them to “live for ever,” and so cast them out.⁴⁸⁵ The importance of this parallel becomes especially clear when paired with a passage from Percy Shelley’s *Defence*, which, remember, he structured according to “principles” and “application,” in the manner of a Royal Institution lecture:

Poetry is indeed something divine. It is at once the centre and circumference of knowledge; it is that which comprehends all science, and that to which all science must be referred. It is at the same time the root and the blossom of all other systems of thought: it is that from which all spring, and that which adorns all; and that which if blighted denies the fruit and the seed, and withholds from the barren world the nourishment and the succession of the sciences of the tree of life. It is the perfect and consummate surface and bloom of things; it is as the odour and the colour of the rose to the texture of the elements which compose it, and the form and splendor of unfaded beauty to the secrets of anatomy and corruption.⁴⁸⁶

Percy’s handling of Poetry as the nurturer of the “sciences of the tree of life” echoes Coleridge’s earlier call for a unified Institutional position that productively opposes their respective methods.

⁴⁸³ Richard Yeo, *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture* (Cambridge: Cambridge University Press, 2001), 146.

⁴⁸⁴ See Davy, *Lecture on the Plan*, 5; Thomas Young, *A Course of Lectures on Natural Philosophy and the Mechanical Arts*, 2 vols., (London: Joseph Johnson, 1807), 8.

⁴⁸⁵ *The Bible (King James Version)*, Genesis 3:22-23.

⁴⁸⁶ Percy Bysshe Shelley, *Major Works*, 696.

However, what Percy's handling of this opposition makes quite clear is that it is also a gendered opposition. Poetry is "something divine," while science is eminently of the earth. Where science partakes of the substance, the "elements" and "secrets" of "anatomy and corruption," Poetry partakes of the "form," the "surface and bloom of things," the "splendor of unfaded beauty." If we can recognize Victor in Percy's reference to the "secrets of anatomy and corruption," and view the Institutional task of systematic inquiry as one hitherto dominated by men, it is not difficult to see why Mary might be inclined to take up a critique of gender as it relates to the scientific handling of Poetry and the aesthetic as it had been conducted in this new Institutional environment.⁴⁸⁷ A hideous progeny of her own would appear to be a poignant way of leveling such a critique.

The first albeit insufficient sign that it is important to treat *Frankenstein* as a Poem in the generic Institutional sense I have been arguing for arrives by way of Percy Shelley's "Preface" to the 1818 edition. Posing as the author, Percy writes:

I have thus endeavoured to preserve the truth of the elementary principles of human nature, while I have not scrupled to innovate upon their combinations. The Iliad, the tragic poetry of Greece—Shakespeare, in the Tempest and Midsummer Night's Dream,—and most especially Milton, in Paradise Lost, conform to this rule; and the most humble novelist, who seeks to confer or receive amusement from his labours, may, without presumption, apply to prose fiction a licence, or rather a rule, from the adoption of which so many exquisite combinations of human feeling have resulted in the highest specimens of poetry.⁴⁸⁸

The connection that Percy posits between novel writing and poetry is quite interesting. Despite Coleridge's comment in the lectures that we "yet do not" call novels "Poetry," a counterargument for including the novel as a potential site of Poetry is actually fitting given both Coleridge's and Percy's arguments for creating a more open definition of Poetry as an Institutional domain that could accommodate modes of fine art which had not hitherto been considered as such. Such a

⁴⁸⁷ For an extended treatment of gender dynamics at the Royal Institution, see Harriet Olivia Lloyd, *Rulers of Opinion: Women at the Royal Institution of Great Britain, 1799-1812*, (Dissertation, 2019), esp. 44-46.

⁴⁸⁸ Shelley, *Frankenstein*, 5.

generic understanding of Poetry is clearly at work in the “Preface.” The “rule” it invokes, which is also intriguingly called a “licence,” I want to suggest, is an extension of the Poetry method of Coleridge’s lectures that would also inform Percy’s *Defence*. The passage clearly echoes Coleridge’s emphasis in the lectures on the Greek tragedy, Milton, and Shakespeare, and claims, in line with the Coleridgean view, so long as the “species of composition” excites “emotion for the immediate purpose of pleasure thro’ the medium of beauty,” that species of composition has a claim to Poetry.⁴⁸⁹ Despite Coleridge’s comment that “we do not yet” typically call works in the genre of the novel “Poetry,” the suggestion by Percy is that Mary had in fact accomplished this.

Instead of treating Percy’s “Preface” and Mary’s novel as mutually exclusive, I would like to suggest that *Frankenstein* deserves a distinction which does not *exclude*, but rather *goes beyond* Percy’s claim. That is, the “Preface” is too similar to the Coleridgean line on understanding the category of Poetry. It represents a typically masculine view of the origin and scope of Poetic method, which emphasizes a gendered aesthetic pleasure that tends to isolate “the surface and bloom,” the “unfaded beauty” of things, from its “hideous” other. In the new world of human Institutions, and of the all too human construction of scientific practice, *Frankenstein* moves beyond this perspective by illuminating science’s incompleteness, its lack, in other words, of a truly Poetic companion, an aesthetic product “of the same nature, and with the same defects,” though productively opposed to the method of systematic inquiry.

In articulating these various Institutional connections as they emerge in the text, Mary’s own 1831 “Introduction” is also especially helpful. Her discussion of “galvanism” in relation to the possibility that “the component parts of a creature might be manufactured, brought together, and endued with vital warmth,” immediately connects the novel with the Royal Institution, where Davy

⁴⁸⁹ Samuel Taylor Coleridge, “Essays on the Principles of Genial Criticism,” *CW*, XI, I 358.

had been conducting galvanic experiments, and introduces an implicit parallel between Victor's Creature and her own act of Poetic composition.⁴⁹⁰ Significantly, Mary stages the Introduction as a reply to the publisher's request for an account of the "origin of the story" of *Frankenstein*.⁴⁹¹ Understanding that this request has a relation to the novel's own primary critique, Mary's account troubles the notion of an autonomous creative origin, as the stereotypical view of Romantic genius would have it:

Every thing must have a beginning, to speak in Sanchean phrase; and that beginning must be linked to something that went before. The Hindoos give the world an elephant to support it, but they make the elephant stand upon a tortoise. Invention, it must be humbly admitted, does not consist in creating out of void, but out of chaos; the materials must, in the first place, be afforded: it can give form to dark, shapeless substances, but cannot bring into being the substance itself. In all matters of discovery and invention, even of those that appertain to the imagination, we are continually reminded of the story of Columbus and his egg. Invention consists in the capacity of seizing on the capabilities of a subject, and in the power of moulding and fashioning ideas suggested to it.⁴⁹²

In this passage Shelley's Institutional critique of the goals of Victor's quest for a science of creation takes center stage. It is this critique of a putatively autonomous science of creation that forms the very "subject" upon which Mary's imagination has seized. The significance of Shelley's contribution to the arts-and-sciences Institutional discourse becomes clear at the end of the Introduction, when she bids her "hideous progeny go forth and prosper."⁴⁹³ Shelley's vocabulary is of course analogizing her aesthetic creation with the Creature, Victor's own "hideous progeny." Such an analogy would seem an interesting parallel in its own right, but I think an intriguing possibility exists in seeing Shelley's invocation of a "hideous progeny" as also implying a response to Victor's decision to destroy the female companion he had promised to make for the Creature. Viewing Shelley's and

⁴⁹⁰ Shelley, *Frankenstein*, 168.

⁴⁹¹ Shelley, *Frankenstein*, 165.

⁴⁹² Shelley, *Frankenstein*, 167.

⁴⁹³ Shelley, *Frankenstein*, 169.

Victor's pursuits as mirror images of each other focuses Shelley's critique on the potential narrative role of the female companion. Victor's failure to create a female companion for the Creature leaves the Creature companionless and bars him from any prospect of sympathy. In turn, however, any sympathy we as readers might feel for the Creature would necessarily negate the Creature's despair. Our sympathy, in effect, creates the companionship the creature believes he cannot have. Far from claiming in some fantastic or moralistic way that Victor should have created the Creature's female companion, this section contends instead that Mary Shelley already did, and that the "hideous progeny" of the 1831 preface does indeed refer to the novel itself, but the novel *as female and Poetic companion* to the male Creature of systematic inquiry. The evidence I provide has consequences for how we understand the connected roles of gender, audience, and the aesthetic in relation to our own status as reading audience. More specifically, Mary Shelley's aesthetic creation of the female companion suggests a "medium for the communication of feeling" that is both consistent with Coleridge's "middle" (as media) or "Poetry" method, and critical of his masculinized view of creative autonomy and the scope of aesthetic experience. In this way I think Shelley's novel "justifies" the final lines of *Paradise Lost*, by suggesting a more earthly means by which the intellectual domains of Science and Poetry, "hand in hand with wandering steps and slow,/Through Eden took their solitary way."⁴⁹⁴

Frankenstein:

It is an interesting feature of *Frankenstein* that its special take on the epistolary form limits the literal audience of the narrative to a single individual. That individual is Robert Walton's sister, Margaret Saville (née Walton). The initials of Margaret Saville are of course those of the author,

⁴⁹⁴ John Milton, *Paradise Lost*, XII, ll. 648-649, in John Milton, *The Major Works*, eds. Stephen Orgel and Jonathan Goldberg (Oxford: Oxford University Press, 1991), 618.

Mary Shelley. Adding Saville's given surname even conjures associations with Mary's mother Mary Wollstonecraft, and together the initials perfectly match the author's full name, Mary Wollstonecraft Shelley, a point often noted in the scholarship.⁴⁹⁵ As has also been noted, Margaret Saville would have played a role in the selection and publication of these letters from her brother Robert (no correspondence from Margaret is included, for instance), which immediately introduces the aesthetic element of selection into its composition (a la Wordsworth's claim in the "Preface" to the *Lyrical Ballads* that "selection" had been his primary principle of composition). This strange coincidence of audience and author speaks to a gender dynamic within the discourse of arts and sciences of which Shelley is clearly aware, and which has been much commented on in the criticism of *Frankenstein*, namely, the dominance of male characters with respect to the action of the novel, despite the near equal number of women characters.⁴⁹⁶ But if it is the case that the match between the initials of the author of the novel and its sole audience member is significant, what motivation might Shelley have had for insinuating herself into the narrative in this way?

As we begin the novel, the issue of companionship immediately arises, and has everything to do with the question of reading. Robert Walton's anxious commentary on his own lack of literacy is well known, but worth recounting, as it is seamlessly interwoven into the discourse of companionship that pervades the novel. The relevant passage occurs in Robert's second letter to Margaret. While in the town of Archangel, making the arrangements for his voyage to the arctic, Robert notifies his sister of a mounting concern:

I have one want which I have never yet been able to satisfy; and the absence of the object of which I now feel as a most severe evil. I have no friend, Margaret: when I am glowing with the enthusiasm of success, there will be none to participate my joy; if I am assailed by

⁴⁹⁵ See Ashley J. Cross, "Indelible Impressions": Gender and Language in Mary Shelley's *Frankenstein*," in *Mary Wollstonecraft Shelley*, ed. Harold Bloom (New York: Infobase Publishing, 2009), 31-32.

⁴⁹⁶ See Anne K. Mellor, "Usurping the Female," in *Mary Shelley: Her Life, Her Fiction, Her Monsters* (New York: Methuen, 1988), 115-116.

disappointment, no one will endeavor to sustain me in dejection. I shall commit my thoughts to paper, it is true; but that is a poor medium for the communication of feeling. I desire the company of a man who could sympathize with me; whose eyes would reply to mine. You may deem me romantic, my dear sister, but I bitterly feel the want of a friend. I have no one near me, gentle yet courageous, possessed of a cultivated as well as of a capacious mind, whose tastes are like my own, to approve or amend my plans. How would such a friend repair the faults of your poor brother! I am too ardent in execution, and too impatient of difficulties. But it is a still greater evil to me that I am self-educated: for the first fourteen years of my life I ran wild on a common, and read nothing but our uncle Thomas's books of voyages. At that age I became acquainted with the celebrated poets of our own country, but it was only when it had ceased to be in my power to derive its most important benefits from such a conviction, that I perceived the necessity of becoming acquainted with more languages than that of my native country. Now I am twenty-eight, and am in reality more illiterate than many school-boys of fifteen. It is true that I have thought more, and that my day dreams are more extended and magnificent; but they want (as the painters call it) keeping; and I greatly need a friend who would have sense enough not to despise me as romantic, and affection enough for me to endeavor to regulate my mind.⁴⁹⁷

Perhaps surprisingly, the isolation Robert expresses in this passage has an indirect causal link to his reading practice. Of the two “evils” he describes here, the “greater” is that he is “self-educated.” His self-education importantly begins by indulging in fantasies of adventure, his “uncle Thomas’s voyages.” At fourteen he read the celebrated English poets, but could not (the grammar is a bit ambiguous here), master other languages sufficiently to read foreign poets in the original. We might suppose Robert’s claim, again surprising, that he is “in reality more illiterate than many schoolboys of fifteen,” to result from this inability to master foreign languages, since he has clearly attained a degree of literacy that would at least allow him to read the English poets. He follows, however, with a clarification, “It is true that I have thought more, and that my day dreams are more extended and magnificent; but they want (as the painters call it) keeping.” It is this lack of “keeping” that appears to be primary to Robert’s sense of his illiteracy, and more than that, to his isolation, “I greatly need a friend who would have sense enough not to despise me as a romantic, and affection enough for me to endeavor to regulate my mind.” Robert’s reading habits have gotten him as far as Archangel,

⁴⁹⁷ Shelley, *Frankenstein*, 10.

where he can put into practice the “extended and magnificent” “day dreams” of his childhood. But the feeling that dominates here, on the eve of his own voyage, is one of lack and insecurity. He is to captain a ship of discovery on his own, in isolation, for the first time. How does one do this? Of course, he has seen it done many times as a mate onboard other ships, but this is his first voyage as a captain. How does one voyage, or what is much the same, inquire into the unknown? What species of literacy might be required for success?

“Keeping” already had currency as a technical term in eighteenth-century painting, where it referred, as Joshua Reynolds put it in the *Discourses*, to “the composition of light and shade, or distribution of the work into masses.” In a general sense, the analogy to Robert’s condition is clear even in its eighteenth-century usage. Robert’s desires are not well distributed. His grand visions of discovering a northwest passage dwarf his most immediate tasks, which are the means by which such visions might actually be made manifest. Yet the more immediate reference is to Coleridge, who used the term “keeping” in the seventh lecture of his 1811-12 course, which Mary likely attended, to refer to a peculiar aspect of *Romeo and Juliet*. As recollected by the audience member John Payne Collier,

Coleridge now proceeded to *Romeo & Juliet*, not because it was the earliest or among the earliest of Shakespeare’s works but because in it were to be found all his excellencies such as they afterwards appeared in his more perfect Dramas but differing from them in being less happily combined: all the parts were present but they were not united with the same harmony: there were many passages where the whole of his excellence was discovered and nothing superior could be found in the productions of his after years. The distinction between this play & others was that the parts were less happily combined or to borrow a phrase (sic) from the Painter the whole work was less in keeping: there was the production of grand portions: there were the limbs of what was excellent; but the production of a whole in which each part gave delight for itself and where the whole gave more intellectual delight was the effect of judgment and taste not to be obtained but by painful study & in which we gave up the stronger pleasures, derived from the light dazzling light which a man of genius throws over every circumstance and where we were chiefly struck by vivid and strong images: taste was a subsequent attainment, after the Poet had been disciplined by experience

and adds to genius that talent by which he knows what part of his genius he can make intelligible to that part of mankind for whom he writes.⁴⁹⁸

This passage, although not drawn directly from Coleridge's lecture notes, which unfortunately have been lost, exhibits some provocative similarities with the section of Walton's letter I cited above. Although this version of "keeping" resembles Reynolds' usage in some respects, it differs in the sense that what Reynolds considers a categorical difference of style, Coleridge sees as a sign of immature or unregulated genius. The use of "excellencies" in the first sentence of the passage is clearly Coleridgean and indicates the method of genial criticism that he championed in his lectures and several later publications. Coleridge conducts his genial critique of Shakespeare's play in the same terms as Robert Walton expresses his desire for a friend, and for a literacy of self-critique. He does not dismiss Shakespeare as a "romantic" but does suggest that his more well-formed plays are yet ahead of him, and show a keeping, a "regulation of mind" that he believes *Romeo and Juliet* lacks. So the passage from Walton very interestingly takes us back to Shakespeare, and to Coleridge's notion of a method of criticism that he grounded on the principles of Poetry. Robert, in this sense, "wants" a genial critic.

The other interesting element in Collier's record is its use of the conceit of the human body to integrate this concept of "keeping" with Coleridge's generic understanding of "Poetry." "There was," for instance, "the production of grand portions: there were limbs of what was excellent," which shows flashes of genius without regarding the "whole" body as entirely complete. This use of the body metaphor strikes me as particularly relevant to a work like *Frankenstein*, where the intersection of discourses of the organic, the poetic, the scientific, and even the institutional, figure so prominently, not least in Victor's creation of a new body with "grand portions." This pairing of

⁴⁹⁸ Coleridge, *CW*, V, I, 303. Coleridge also refers to "keeping" in this sense in the 1808 lectures and the *Biographia Literaria*.

friendship and literacy, the human and the poetic, by way of “keeping,” hence suggests a mode of comparison that we can follow throughout the novel. As Robert encounters, in human form, the actors in the following two narratives he is about to hear, the parallel between personal friendship and literary narrative persists, with the novel shifting back and forth to acknowledge the human presence behind the literary form. Robert, finally, is about to read.

Victor’s narrative presents a parallel tale of desire and discovery that ends very differently than “uncle Thomas’s books of voyages.” The similarity Victor observes between his own motivations and Walton’s convinces Victor to relate the tale that he had hitherto determined to keep to himself. “You seek for knowledge and wisdom, as I once did,” Victor begins, “and I ardently hope that the gratification of your wishes may not be a serpent to sting you, as mine has been.”⁴⁹⁹ Victor anticipates the effect of Poetry: “I believe that the strange incidents connected with it will afford a view of nature, which may enlarge your faculties and understanding.”⁵⁰⁰ Robert, for his part, expects aesthetic pleasure: “This manuscript will doubtless afford you the greatest pleasure,” he writes to Margaret, “but to me, who know him, and who hear it from his own lips, with what interest and sympathy shall I read it in some future day!”⁵⁰¹ This parallel is of course well known. What I would like to focus on in the following pages is the disciplinary structure of Victor’s path, and more particularly, the way in which Shelley integrates a gender dynamic that stands as the key introduction to her contribution to the arts-and-sciences Institutional discourse. When Victor recounts his childhood relationships, he identifies a special bond with his cousin, Elizabeth Lavenza:

From this time Elizabeth Lavenza became my playfellow, and, as we grew older, my friend. She was docile and good tempered, yet gay and playful as a summer insect. Although she was lively and animated, her feelings were strong and deep, and her disposition

⁴⁹⁹ Shelley, *Frankenstein*, 17.

⁵⁰⁰ Shelley, *Frankenstein*, 17.

⁵⁰¹ Shelley, *Frankenstein*, 18.

uncommonly affectionate. No one could better enjoy liberty, yet no one could submit with more grace than she did to constraint and caprice. Her imagination was luxuriant, yet her capability of application was great. Her person was the image of her mind; her hazel eyes, although as lively as a bird's, possessed an attractive softness. Her figure was light and airy; and, though capable of enduring great fatigue, she appeared the most fragile creature in the world. While I admired her understanding and fancy, I loved to tend on her, as I should on a favourite animal; and I never saw so much grace both of person and mind united to so little pretension.

Everyone adored Elizabeth. If the servants had any request to make, it was always through her intercession. We were strangers to any species of disunion and dispute; for although there was a great dissimilitude in our characters, there was an harmony in that very dissimilitude. I was more calm and philosophical than my companion; yet my temper was not so yielding. My application was of longer endurance; but it was not so severe whilst it endured. I delighted in investigating the facts relative to the actual world; she busied herself in following the aerial creations of the poets. The world was to me a secret, which I desired to discover; to her it was a vacancy; which she sought to people with imaginations of her own.⁵⁰²

Victor's intriguing description, along with his account of their other "companion" Henry Clerval, the "son of a merchant of Geneva," with interests in romances and other literatures of the moral quest, has often been associated with a Kantian correlate in critical accounts of *Frankenstein*. As Gayatri Spivak remarks, for instance,

In this overly didactic text, Shelley's point is that social engineering should not be based on pure, theoretical, or natural-scientific reason alone, which is her implicit critique of the utilitarian vision of an engineered society. To this end, she presents in the first part of her deliberately schematic story three characters, childhood friends, who seem to represent Kant's three-part conception of the human subject: Victor Frankenstein, the forces of theoretical reason or "natural philosophy"; Henry Clerval, the forces of practical reason or "the moral relations of things"; and Elizabeth Lavenza, that aesthetic judgment—"the aerial creation of the poets"—which, according to Kant, is "a suitable mediating link connecting the realm of the concept of nature and that of the concept of freedom...(which) promotes...moral feeling."⁵⁰³

Spivak's comments here are crucial, and may be adjusted slightly to think through the novel's critique of the Institutional arguments I have been developing. Its apparently "schematic" structure

⁵⁰² Shelley, *Frankenstein*, 20.

⁵⁰³ Gayatri Chakravorty Spivak, "Three Women's Texts and a Critique of Imperialism," *Critical Inquiry*, 12, 1, (Autumn, 1985)243-261, 256.

may be understood, for instance, as part of the push toward method in Poetic composition that had emerged with Coleridge's lectures at the RI. This "genial" method focuses on the shape of composition (cf. Coleridge's practical critique of the Allston painting from Chapter III, p. 171), and Shelley's three characters appear as a triangle of companionship that we can follow throughout the narrative, particularly as Victor isolates himself from the others at Ingolstadt, together with the consequences of that isolation. Spivak's use of "social engineering" is a bit anachronistic, and that matters if Shelley's subject is the very Institutional structure responsible for encouraging the emergence of engineering as a discipline. In other words, we may actually understand the meaning of "Institution" and even "engineering" in a different light, had things gone in another direction. In this sense, as I have been claiming for other Romantic figures, I want to understand Shelley's "schematism" as enabling readers of *Frankenstein* to follow the structure of its composition, not only as a critical exercise against "social engineering," but also as it leads to a methodical alternative to the emerging disciplinary structure that would exclude methods outside of those conducive to "natural philosophy" and the search for "principle."

In viewing Shelley's work as a kind of participatory critique of the arts-and-sciences Institutional movement, I will also understand Spivak's characterization of the three "companions" in terms of "Kant's three-part conception of the human subject," as having a clear disciplinary correlate in the movement to Institutionally unite the arts and sciences. Returning to the passage from *Frankenstein*, Shelley's idealized portrait integrates the 'harmonious dissimilitude' that Coleridge posited between Poetry and Science in his lectures with a parallel discourse of gender embodied by the relationship between Elizabeth and Victor. As I have been arguing in previous chapters, this disciplinary opposition also carries with it a facultative opposition between Reason and Imagination, which is marked in this passage by Elizabeth's employment of her "luxuriant imagination" in "following the aerial creations of the poets." Victor's treatment of Elizabeth's pursuits is telling.

From his perspective, Victor is “more calm and philosophical” than Elizabeth, while Elizabeth’s temper was more “yielding” to the “caprice” of others. Victor could stay on task, while Elizabeth appears prone to only short periods of “severe” exertion. Victor “investigat[ed]” the “actual world,” while Elizabeth “busied herself” and “followed.” Victor “discover[s]” while Elizabeth “sought to people” a “vacancy.” Though somewhat subtle, Victor’s vocabulary consistently enervates the intellectual validity of Elizabeth and her imaginative pursuit of Poetry, not by dismissing it outright, but by aligning it with the unreal, the unscientific, the inconsequential. Elizabeth “possessed an attractive softness,” her “figure was light and airy,” almost “divine” in Percy’s sense, indeed, Victor thought her “the most fragile creature in the world.” My characterization of Victor’s remarks may appear slightly biased against him, but only slightly, as I am trying to highlight a rationale (note my discipline) for Victor’s actual neglect of Elizabeth, and its consequences, as the narrative proceeds.

When Victor does proceed to isolate himself from his companions, he attends the university at Ingolstadt (note similarities with “English state”). Henry and Elizabeth, moral and aesthetic considerations, disappear from his activities. He enters the charnel houses to exhume the dead in what he calls an unholy practice in his maniacal pursuit of the “principle of life.”⁵⁰⁴ Once found, the application of this principle produces a “rational creature.”⁵⁰⁵ What other kind of being could it produce? Not an “imaginative” being, surely, no more than one motivated by “memory,” the facultative correlates of Poetry and history. At the Royal Institution, all the disciplines, including history, the useful arts, and the fine arts or Poetry, had to be handled under the banner of natural philosophy, and rendered in the form of a “science of connecting principles.” The only type of

⁵⁰⁴ Shelley, *Frankenstein*, 31.

⁵⁰⁵ Shelley, *Frankenstein*, 156.

being that *could* be produced, in other words, is a “rational” one, given the contemporaneous Institutional circumstances.

Victor’s explicit disciplinary figuration as natural philosophy helps to illuminate the transition by which we arrive at his creation of a “rational creature.” Understanding that transition as one between the “ideal” and the “real,” I will treat Victor’s “Creature” as the (fallen) product of bringing that arts-and-sciences ideal into the world. The Creature’s lack of a “companion” stands in stark contrast to the tri-partite structure of Victor’s childhood social relations. The Creature feels this lack almost immediately, and tries every option available to him in his limited experience, to acquire a companion, or set of companions, with whom he could enter into an exchange of sympathy. Unable to find this companionship, the Creature demands that Victor make one for him, a “female” companion, “of the same nature as myself,” and with “the same defects.”⁵⁰⁶

Following the novel’s trajectory, I will examine the potential disciplinary critique embedded in the Creature’s desired female companion. The moment of discovery represents the consummation of the Baconian unifying forces behind the arts-and-sciences Institutional movement. Victor’s epiphany gives him exclusive access to the “principle of life.” He alone could view “the immensity of the prospect which it illustrated.”⁵⁰⁷ That such language resonates with the infrastructural vocabulary employed in the RI lectures should by now be familiar. What I would like to focus on more particularly is the moment of Victor’s successful *application* of that principle, that “dreary night in November” when into his composition he “infus[es] a spark of being.”

How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavoured to form? His limbs were in proportion, and I had selected his features as beautiful. Beautiful!—Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more

⁵⁰⁶ Shelley, *Frankenstein*, 101-103.

⁵⁰⁷ Shelley, *Frankenstein*, 31.

horrid contrast with his watery eyes, that seemed almost of the same colour as the dun white sockets in which they were set, his shriveled complexion, and straight black lips.

The different accidents of life are not so changeable as the feelings of human nature. I had worked hard for nearly two years, for the sole purpose of infusing life into an inanimate body. For this I had deprived myself of rest and health. I had desired it with an ardour that far exceeded moderation; but now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart. Unable to endure the aspect of the being I had created, I rushed out of the room, and continued a long time traversing my bed-chamber, unable to compose my mind to sleep.⁵⁰⁸

This passage initiates two important threads of critique in the novel. The first pertains to Victor's rather astonishing narrative recognition that "the different accidents of life are not so changeable as the feelings of human nature." Could it really be that feelings are more changeable than chance? Victor recalls his ardent quest for the principle of life and remembers the immediate reversal of his views upon the completion of the work. Shelley's narration stages this reversal feeling at the moment of creation in stark contrast to the views of the Institutions explicitly established for that purpose. If, as John Landseer had described it in his RI lectures on engraving, the primary function of "principle" was to stabilize and discipline his art, decreasing its exposure to aimless wandering, and paving the way for its steady improvement.⁵⁰⁹ As part of the logic embedded in the RI's scientific lectures, the elucidation of principle sought to bring this steady improvement to the "common purposes of life" on a universal scale. Yet the stark reversal of Victor's attitude belies this view. That which science, its practitioners, and even to some degree its critics, believe will follow from the impact of science on the arts, notably a decreased susceptibility to the...dangers and vicissitudes of life...does not hold, and in extreme cases like Victor's, can produce exactly the opposite effect, where the discovery of the principle of life increases his vulnerability, rather than

⁵⁰⁸ Shelley, *Frankenstein*, 35-36.

⁵⁰⁹ See John Landseer, *Lectures on the Art of Engraving, Delivered at the Royal Institution of Great Britain*, (London: Longman, Hurst, Rees, and Orme, 1807), 340-341.

reducing it. Shelley's prescience here is remarkable, and serves as the first thread of her Institutional critique.

The second thread relates to the issues at stake in the fact that Victor's reversal of feeling is brought on by aesthetic displeasure. As the Creature comes to life, "the beauty" of Victor's "dream vanished, and breathless horror and disgust filled" his heart. Chris Baldick has referred to this passage as an instance that confirms the "ugliness" of Victor's creation, amounting to a fault in Victor for producing such an ugly composition.⁵¹⁰ For the moment I would actually like to turn Baldick's argument on its head, to suggest that Victor's perception of ugliness in the creature has much more to do with the inadequacy of Victor's conception of his own scientific endeavors, than it does with any inherent ugliness in the Creature, despite the empirically universal horror that he strikes in the humans that see him. The more pressing questions are rather, what is Victor's view of beauty? What is Victor's sense of an aesthetic whole? And why is the birth of his creation, the successful "application" of his "principle," the point of transition between aesthetic pleasure and displeasure?

That Victor's initial reaction to the Creature is motivated primarily by aesthetic concerns is striking. His aesthetic displeasure, occasioned by the Creature's putative hideousness, inspires him with a horror that drives him from his laboratory. The tendency to run away from the creative act was nothing new to Shelley. In terms of her intellectual milieu, the allure of science, even a science of Poetry, is reflected in Coleridge's *Biographia*, in her husband's desire to become a man of science in his later years, and in the conservative movement away from the forms of knowledge associated with the French Revolution and more particularly the subsequent Terror.⁵¹¹ Do we abandon creation

⁵¹⁰ Chris Baldick, "Assembling Frankenstein," in *In Frankenstein's Shadow: Myth, Monstrosity, and Nineteenth-Century Writing* (New York: Oxford University Press, 1987), 33-44.

⁵¹¹ For Percy's view of himself as a man of science, see Maureen McLane, *Romanticism and the Human Sciences: Poetry, Population, and the Discourse of the Species*, (Cambridge: Cambridge University Press, 2004), 40-42.

when it enters the world differently than we had anticipated, than we had “dreamed?” So too, it might be helpful to acknowledge, with Anne Mellor, the importance of Mary’s own experience in bearing children, which occurred multiple times in the years prior to the novel’s publication, and the analogous process of conception and birth that informed both.⁵¹² From this perspective, Victor’s horror at his own act of creation appears as that which we might expect from a predominantly masculine science of discovery, experiencing the effects of the creative process for the first time. It would in this respect appear almost laughable and innocent if it had not been a cause of so much harm.

Understood in this way, the consequences that follow are those dependent upon that aesthetic displeasure. The first consequence is that the Creature is now isolated and must begin acquainting himself with life entirely on his own, with no guide to facilitate his education. His awareness begins as a chaotic influx of sensory stimuli, but he gradually gains control over his separate senses, allowing him to focus on his surroundings. Finding a stream for drinking, berries for eating, and tree coverage sufficient to serve as a rudimentary form of shelter, the Creature begins to wander through the forests of Ingolstadt, and is astonished at the sight of a

a fire which had been left by some wandering beggars, and was overcome with delight at the warmth I experienced from it. In my joy I thrust my hand into the live embers, but quickly drew it out again with a cry of pain. How strange, I thought, that the same cause should produce such opposite effects! ⁵¹³

In these few sentences Shelley compresses virtually her entire moral critique of experimental science. The Creature’s experiment evinces in the simplest possible terms the manner in which a single cause can elicit both pleasurable and painful experience. Although at the time of his experience the

⁵¹² Anne K. Mellor, “Making a Monster,” in *Mary Shelley: Her Life, Her Fiction, Her Monsters* (New York: Methuen, 1988), 41.

⁵¹³ Shelley, *Frankenstein*, 71.

Creature could not understand it, he is actually learning about the moral scope of the push toward “principle,” glossed in this passage as “cause,” that motivated his creator. The novel’s references to the Promethean myth and the fall from paradise reinforce the connection between this passage and the morally ambivalent effects of Victor’s quest for knowledge. Insofar as Victor’s quest is related to a critique of the contemporaneous Institutional promotion of quests for principle, that critique is also relevant to the “opposite effects” of aesthetic pleasure and pain in the novel. How does the Creature experience and learn about these opposite effects, and what might that tell us about how the Shelley positions the aesthetic in relation to these morally uncertain and ambivalent quests for knowledge?

Our first hint notably appears just *prior* to the Creature’s encounter with the fire.⁵¹⁴ “I was delighted,” he tells Victor, “when I first discovered that a pleasant sound, which often saluted my ears, proceeded from the throats of the little winged animals who had often intercepted the light from my eyes.”⁵¹⁵ Interestingly, the Creature also treats this rudimentary form of aesthetic pleasure in terms of causation, as it “proceeded from the throats” of the birds, and effected him in the form of pleasure. In his first and I think only foray into the fine arts, the Creature attempts “to imitate the pleasant songs of the birds,” but finds himself “unable” at this early stage of his existence.⁵¹⁶ As his senses become more refined, he can even begin to distinguish between the “harsh notes” of the sparrow and the “sweet and enticing” songs of the blackbird and the thrush, suggesting a rudimentary perception of the beautiful and the ugly.⁵¹⁷

⁵¹⁴ i.e., occurs in line with Coleridge’s view that the arts of ornament are co-original with the arts of comfort and accommodation.

⁵¹⁵ Shelley, *Frankenstein*, 71.

⁵¹⁶ Shelley, *Frankenstein*, 71.

⁵¹⁷ Shelley, *Frankenstein*, 71.

These two causes, the physical and the aesthetic, merge in the Creature's observations of the De Lacey family. And it would seem that, as long as they are kept at a safe distance, the Creature can help warm the De Laceys, while the De Laceys supply a pleasurable form of education. A simple level of human cultivation has relieved the De Laceys of learning's disagreeable features. The fire is the first feature of the De Lacey cottage the Creature is able to identify. In this scene it is only the cause of warmth, father and daughter De Lacey sit nearby as the old man takes "up an instrument, [begins] to play and to produce sounds, sweeter than the voice of the of the thrush or the nightingale."⁵¹⁸ "It was a lovely sight," the Creature says aching, "even to me, poor wretch! who had never beheld aught beautiful before."⁵¹⁹ Cultivation has accentuated the value of aesthetic and physical pleasure while minimizing their portion of pain, and any sadness or hardship is rendered more palatable by a basic level of community. As father De Lacey "played a sweet mournful air, which I perceived drew tears from the eyes of his amiable companion, of which the old man took no notice until she sobbed audibly; he then pronounced a few sounds, and the fair creature, leaving her work, knelt at his feet."⁵²⁰ When she reached him, "he raised her, and smiled with such kindness and affection."⁵²¹ At this point the Creature registers a new kind of sensation, one contingent on experiencing the bonds of social sympathy and benevolent feeling. Witnessing this interaction causes him to feel "sensations of a peculiar and overpowering nature: they were a mixture of pain and pleasure, such as I had never before experience, either from hunger or cold, warmth or food; and I withdrew from the window, unable to bear these emotions."⁵²² That Shelley identifies these

⁵¹⁸ Shelley, *Frankenstein*, 74.

⁵¹⁹ Shelley, *Frankenstein*, 75.

⁵²⁰ Shelley, *Frankenstein*, 74.

⁵²¹ Shelley, *Frankenstein*, 74.

⁵²² Shelley, *Frankenstein*, 74.

sensations as a class of pleasure and pain distinct from the dichotomous sensations represented by “hunger” or “food,” “cold” or “warmth,” confirms that the De Lacey episode is specifically tied to the Creature’s education in those aspects of experience that identify and locate values concerning what it means to be a human.⁵²³

Critical accounts of this episode in the Creature’s narrative have indeed linked it with an early depiction of literary and humanistic education.⁵²⁴ Some, like Maureen McLane, have claimed that “the novel proposes, in its history of the monster, a remedy for the horrifying body which science has produced—the humanities.”⁵²⁵ The locus of the “monster’s experiment in his own humanization” is his experience at the De Lacey household, and the failure of this experiment, confirmed by the De Lacey’s rejection of him despite his best efforts, represents nothing less than the failure of the humanities, the failure of literature.⁵²⁶ There is certainly evidence to support this. As the Creature proceeds, his primary interest is in acquiring the “Godlike science” of letters, as well as the “art” of language.⁵²⁷ He observes the education of Safie and makes enormous progress after he finds the pack containing volumes such as Milton’s *Paradise Lost*, Plutarch’s *Lives*, and Goethe’s *Sorrows of Young Werther*. Having achieved such large literacy in such a short amount of time, and having trained himself in the various norms of human interaction, his hopes of success in entering human society would at least seem possible. But as the Creature recognizes “a fatal prejudice clouds

⁵²³ Shelley, *Frankenstein*, 74-75.

⁵²⁴ See Maureen McLane’s discussion of George Levine in McLane, “Literate Species,” 970.

⁵²⁵ McLane, “Literate Species,” 971.

⁵²⁶ McLane, “Literate Species,” 971.

⁵²⁷ Shelley, *Frankenstein*, 77, 79.

their eyes,” making even the highest level of literary cultivation insufficient for overcoming the aesthetic displeasure incurred by his appearance.⁵²⁸

Upon entering the De Lacey household, the Creature receives his burn. When the Creature is driven out of the De Lacey home, it is once again dependent on aesthetic displeasure, seemingly above any other kind of cultivation. What I think this “failure” of literature should tell us, and I think I am in agreement with McLane here, is that Shelley is pairing the failures of literary cultivation and the cultivation of the sciences, rendered here as natural philosophy. And this pairing would actually fit well into contemporaneous usages of the term “literature,” which had extremely broad signification at the time, and could stand for both imaginative literature and the more instructive forms of literature that formed the basis of that word’s usage in the phrase “literary & philosophical” society.

But if this is true, and the novel is narrating the failure of both literature and philosophy, science and the humanities, then the question becomes, on what does that failure depend? Whether it is Victor, screaming in horror and rushing out of his laboratory without any care for his responsibility to the creature, or the De Laceys, despite their cultivation of all that is good in humanity, the element that is consistently the cause of the Creature’s rejection from society is the hideousness of his appearance. It is hence the aesthetic domain that appears to be at the root of the Creature’s troubles. In the very act of cultivating aesthetic pleasure, the De Laceys cut off their connection to its other, aesthetic displeasure, creating a perpetual barrier between the aesthetically hideous and the putative cultivation of the humanities.

What are we to make of this? When cultivation in science can lead to all kinds of unexpected results, and the cultivation of literature is ill equipped to handle the most extreme of those results,

⁵²⁸ Shelley, *Frankenstein*, 93.

confirming scientific horror despite itself, what is left for education? Is it dead in the water, or does Shelley see a way of handling this difficulty? I think she does see a way of dealing with it, and it has everything to do with this question of aesthetics. The logic of this failure represents Shelley's critique of the direction of the arts-and-sciences Institutional movement, and presents her alternative as an unfulfilled possibility dependent upon the idealized portrait of the gender and disciplinary relations represented by the childhood companionship of Victor, Elizabeth, and Henry.

Jumping, then, to the point at which the Creature requests Victor to create for him a female companion, aesthetic concerns remain a crucial aspect of their negotiation. To ensure that Victor's second creation will not, like the other humans he has encountered, be repulsed by the Creature's physical presence, the Creature insists on the "equality" of his female companion. The companion "must be of the same species, and have the same defects," and the two must be able to exist "in the interchange of those sympathies necessary for [his] being."⁵²⁹ "My vices," the Creature begins,

are the children of a forced solitude that I abhor; and my virtues will necessarily arise when I live in communion with an equal. I shall feel the affections of a sensitive being, and become linked to the chain of existence and events, from which I am now excluded.⁵³⁰

As is evident in this passage, the Creature's need for sympathy, and his demand for equality, go hand in hand. The one will be the cause of the other, and vice versa. So too, the Creature's demands, articulated as a "right" which Victor "must not refuse," contain an important aesthetic component.⁵³¹ Conceding that "the human senses are insurmountable barriers to our union," the Creature's request of Victor to make for him a companion turns into a threat of revenge.⁵³² When

⁵²⁹ Shelley, *Frankenstein*, 101.

⁵³⁰ Shelley, *Frankenstein*, 103-104.

⁵³¹ Shelley, *Frankenstein*, 101.

⁵³² Shelley, *Frankenstein*, 102.

Victor questions why his violent passions appear so strong, the Creature responds by returning to his initial rationale, which hinges primarily on an equality of hideousness:

I intended to reason. This passion is detrimental to me; for you do not reflect that you are the cause of its excess. If any being felt emotions of benevolence towards me, I should return them an hundred and an hundred fold; for that one creature's sake, I would make peace with the whole kind! But I now indulge in dreams of bliss that cannot be realized. What I ask of you is reasonable and moderate; I demand a creature of another sex, but as hideous as myself: the gratification is small, but it is all that I can receive, and it shall content me. It is true, we shall be monsters, cut off from all the world; but on that account we shall be more attached to one another. Our lives will not be happy, but they will be harmless, and free from the misery I now feel. Oh! my creator, make me happy; let me feel gratitude towards you for one benefit! Let me see that I excite the sympathy of some existing thing; do not deny me my request!⁵³³

That the Creature's demands for a female companion, should focus, in order to ensure an exchange of sympathy, on an equality of ugliness, suggests a new direction in the disciplinary arguments I have been pursuing. Whereas Elizabeth, the companion of Victor, was "light and airy," "soft," and "appeared" to Victor the "most fragile creature in the world," the Creature's companion, like the Creature, would be "hideous." Yet the contrast observable in the juxtaposition of these two figures should not overshadow an important consistency. They are both gendered female, and that gendering suggests that the Creature's projected female companion would occupy an analogous disciplinary position as Elizabeth. This position is that of Poetry, of the aesthetic realm as a whole. It is for this reason that her necessary "hideousness" is striking. What does it suggest for the manner in which a Poetry method is to be conducted in this new disciplinary landscape?

The first point to remember is that Victor initially agrees to the creation of this female companion, and then subsequently abandons that agreement. Victor postpones his marriage to Elizabeth to make time to compose this companion. He travels first to London to meet with the foremost men of science there, and afterward heads north to set up his laboratory in the Orkney

⁵³³ Shelley, *Frankenstein*, 102.

Islands. Once settled, he set to work, commenting “It was indeed a filthy process in which I was engaged.”⁵³⁴ While in his laboratory one night, Victor began to reflect on “the effects of what [he] was now doing”:

Three years before I was engaged in the same manner, and had created a fiend whose unparalleled barbarity had desolated my heart, and filled it for ever with the bitterest remorse. I was now about to form another being, of whose dispositions I was alike ignorant; she might become ten thousand times more malignant than her mate, and delight, for its own sake, in murder and wretchedness. He had sworn to quit the neighbourhood of man, and hide himself in deserts; but she had not; and she, who in all probability was to become a thinking and reasoning animal, might refuse to comply with a compact made before her creation. They might even hate each other; the creature who already lived loathed his own deformity, and might he not conceive a greater abhorrence for it when it came before his eyes in the female form? She also might turn with disgust from him to the superior beauty of man; she might quit him, and he be again alone, exasperated by the fresh provocation of being deserted by one of his own species.⁵³⁵

Victor’s concerns about the possible consequences of his second creation, in addition to worrying about her inherent qualities, also have an important relationship to aesthetics. Supposing that this being too will have a freedom of choice, she could conceivably decide not to be the Creature’s companion, turning her instead “to the superior beauty of man,” leaving him in greater despondence than he had been hitherto.⁵³⁶ This aesthetic concern parallels the concern about an opposite possibility, that of propagation. They might, in other words, love each other too much, creating “a race of devils...who might make the very existence of the species of man a condition precarious and full of terror.”⁵³⁷ Either way, Victor reasons, would conduce to consequences worse than those that had existed before. These considerations, occur just prior to a surprise appearance of the Creature outside his window. Upon seeing the “ghastly grin that wrinkled his lips,” Victor “thought with a

⁵³⁴ Shelley, *Frankenstein*, 118.

⁵³⁵ Shelley, *Frankenstein*, 118-119.

⁵³⁶ Shelley, *Frankenstein*, 119.

⁵³⁷ Shelley, *Frankenstein*, 119.

sensation of madness on [his] promise of creating another like to him, and, trembling with passion, tore to pieces the thing on which [he] was engaged.”⁵³⁸ “The wretch,” Victor continues, “saw me destroy the creature on whose future existence he depended for happiness, and, with a howl of devilish despair and revenge, he withdrew.”⁵³⁹

That revenge begins immediately, with the death of Clerval, and is completed by the death of Elizabeth, which in the disciplinary sense that I have been following, means that Victor and the Creature are at that point equal in terms of their companionship. Neither has any companion, science and its products are hereafter the only features to persist within the Institution that sought to unite the arts and sciences. It seems clear that this imagined companionship between Science and Poetry, staged as the childhood companionship of Victor and Elizabeth, has an implicit parallel in the imagined relationship between the Creature and his now unmade companion. What would this new Poetry have looked like? Supposing the Creature’s conditions to be upheld, the companion would have been “of the same nature” as the Creature, with the same “defects.” They would be “equals” in this regard, where Science and Poetry exerted an equivalent intellectual force. However, unlike the idealized arts-and-sciences portrait at the beginning of the novel, which detailed a companionship between Science and Poetry in which Poetry was “light and airy,” “soft,” and “fragile,” this Poetry would be “filthy” and “hideous.” On these two points, the new Poetry cannot, as Percy had claimed, on the authority of Bacon before him, be “indeed something divine.” Instead, a Poetry that could function as a companion to the Creature would be an earthly Poetry, where “hideous” creation is not excluded from the category of the aesthetic. Viewed in this way, Mary Shelley’s uncreated companion represents her contribution to the arts-and-sciences Institutional

⁵³⁸ Shelley, *Frankenstein*, 119.

⁵³⁹ Shelley, *Frankenstein*, 119.

movement, because it makes room in the aesthetic domain for the apparently ugly, horrifying, or hideous creation. Understanding Victor's "inconstancy of feeling" illustrates how expanding the moral and aesthetic realm actually justifies its own existence. In creating an artificial being, the productions of science show themselves not to be confined to the improvement of mankind. They are capable of precisely opposite effects. To adequately critique these scientific vicissitudes, the method conducive to Poetry need not confine itself to the morally good or aesthetically beautiful, so long as it attempts to accurately communicate the full range of relevant feeling. What this says about the domain of the aesthetic and the treatment of perceived ugliness, is that a Poetry method must include the notion of ugliness. It cannot simply be fragile, light and airy. Its scope must include the filthy, the earthly, and the apparently hideous.

It is in this sense that I have claimed a role for the phrase "hideous progeny," which Mary Shelley used approvingly to describe her novel in the 1831 preface. Unlike that man who had approached her, asking "how I, then a young girl, came to think of, and to dilate upon, so very hideous an idea," Shelley "bids [her] hideous progeny go forth and prosper."⁵⁴⁰ This remark, while referring to the novel, also of course plays on the "hideousness" pertinent to the perception of Victor's Creature, and of course, of his proposed female companion. If it is true that the aesthetic pleasure Shelley voices in her prefatory remarks does not exclude the representation of the hideous, then the remarks of that anonymous man would seem to confirm her positions against his assumptions. And her position brings us back to the question of the aesthetic production itself, back to *Frankenstein*. It may be valuable, in this sense, to treat the practice of scientific method as requiring an aesthetic method in the relation of a *critical companion*, a figure, as Robert Walton might say, who had "sense enough not to despise me as a romantic," but "affection enough for me to endeavor to

⁵⁴⁰ Shelley, *Frankenstein*, 165, 169.

regulate my mind.”⁵⁴¹ It is therefore *Frankenstein* itself, considered here in its capacity as a Poem, that affirms the possibility of this sort of companionship. The “hideous” Poem exists as a critical companion to the equally “hideous” application of scientific principle that it narrates.

Finally, the “Poetic” and gendered status of Mary Shelley’s “hideous progeny,” as critical companion, returns us to the questions of audience and literacy with which I began. As a likely audience member in Coleridge’s lectures on the principles of Poetry, her first novel confirms a critique that she could have recognized in the very idea of teaching or lecturing on a science of Poetry. The whole point of these lectures, the “application” if we want to put it in Institutional terms, would be to teach a theory of Poetry on behalf of practice by the audience. If Poetry is teachable, it cannot simply be “divine,” as the Baconian argument would suggest. It too, like the new science, is experimental, earthly, it thinks, reasons, feels, and imagines. It can be cultivated, as Shelley has shown, if we the reader could only grant her work the status of a Poem.

How would the reader do this? How would the reader, the audience of *Frankenstein*, be justified in granting it such a status? Returning to Margaret Saville, Robert Walton’s sister, and the figure with whom we began, her status as both the sole audience member, and yet the imagined selector and compiler of Robert’s letters, may now come into focus. Saville occupies the same position as Mary Shelley, the “devout but nearly silent listener.”⁵⁴² We are presented with a figure in the position of both audience and author, who appears to have been enough convinced by the prospect of a Poetry method to contribute her views to that nascent discourse of art, science, and its Institutions. If the reader finds that the work “communicate[s] from each part the greatest immediate pleasure compatible with the largest Sum of Pleasure in the Whole,” as Robert suggests it

⁵⁴¹ Shelley, *Frankenstein*, 10.

⁵⁴² Shelley, *Frankenstein*, 168.

will please his sister, the narrative has earned its Poetic status.⁵⁴³ For me at least, I am delighted to say that it has.

At the same time, it earns its status as a critical companion to science, not via an ethical avenue, where Victor or the Creature should or should not have acted in a particular way. Rather, it achieves the status of companionship by way of the sympathy it is capable of creating. It is not necessary that everybody feel sympathy for the companionless Creature, but if you did, I think this is why. Such a feeling necessarily negates the Creature's belief that he has no companion, and the aesthetic production itself is that which enables, by practicing a more "hideous" method of Poetry, an adequate medium for modern critical companionship.

⁵⁴³ Coleridge, *CW*, V, I, 218.

CODA

Reading Institutions: A Provocation to Further Research

Does any one read at Canton?...I suppose you might have interest with Sir Joseph Banks to get to be president of any similar institution that should be set up at Canton...There are ten thousand institutions similar to the Royal Institution which have sprung up from it. There is the London Institution, the Southwark Institution, the Russell-square Rooms Institution, &c.

—Charles Lamb to Thomas Manning⁵⁴⁴

“The self that runs the other machine has become so diversified that you can hardly give it the name of a continent or country.”

—Gayatri Chakravorty Spivak⁵⁴⁵

In my Coda, I would like to highlight some key points of interest, as provocations to further research, that concern the legacy of this Institutional movement, and the Romantic category of Poetry within that movement, as it became enmeshed in Britain’s national and imperial institutional cultures of higher education over the following centuries. Rather than producing a formal argument, I will detail these points of interest, as Percy Shelley did in his *Defence*, in the order in which they strike my imagination.

⁵⁴⁴ Charles Lamb, Thomas Noon Talfourd, *The Letters of Charles Lamb, with a Sketch of His Life*, (London: Edward Moxon, 1849), 186.

⁵⁴⁵ Gayatri Chakravorty Spivak, *An Aesthetic Education in the Era of Globalization* (Cambridge: Harvard University Press, 2012), 100.

Jon Klancher has already identified several vectors of influence that emerged in Britain in the 1820s as the arts-and-sciences discourse splintered into the numerous organizations which either formed from them directly or maintained important connections with them. Among the connections Klancher mentions are the *Westminster Review*, Birkbeck's Mechanics Institute, the British Association for the Advancement of Science, London University (now University College London), and by way of the British Institution, the National Gallery of Pictures.⁵⁴⁶ Morris Berman and J.T. Merz have also suggested important links between these Institutions and Britain's civic university movement.⁵⁴⁷ In the case of university formation specifically, the Institutions would often simply be absorbed into the universities that formed from them, as was the case with the Andersonian Institution in Glasgow, which became a basic organizational structure for the design of the University of Strathclyde. In other cases, the Institutions would maintain a semi-autonomous status, but share important organizational and administrative relationships with universities modeled in part on them. This was the relationship between the Royal Institution of Great Britain and London University. Thomas Campbell, the Royal Institution lecturer on poetry after Coleridge, is typically credited with forming the basic idea for the London University, and conducted most of the preliminary research concerning its design.⁵⁴⁸ The University would also hire many prominent lecturers from the arts-and-sciences Institutional circuit, including Thomas Webster, and would eventually share the Royal Institution's laboratory. Even today University College London (UCL) maintains an important relationship with the Royal Institution.

⁵⁴⁶ Jon Klancher, *Transfiguring the Arts and Sciences: Knowledge and Cultural Institutions in the Romantic Age* (Cambridge: Cambridge University Press, 2013), 224.

⁵⁴⁷ Morris Berman, *Social Change and Scientific Organization: The Royal Institution, 1799-1844* (London: Heineman Educational Books, 1978), 94-95; John T. Merz, *A History of European Thought in the Nineteenth Century*, (New York: Dover Publications, 1965), vol. I, 249n.

⁵⁴⁸ Hugh Hale Bellot, *University College London, 1826-1926* (London: University of London Press, 1929), 1-2, 14-17.

With regard to the formation of the *Westminster Review*, Klancher specifically mentions that periodical's "ongoing polemics against the fine arts or those who promoted them" as part of a marked shift of the arts-and-sciences discourse away from the fine arts and toward the more utilitarian perspective with which we associate science and technology today.⁵⁴⁹ As a corroboration of this point I think several facts pertaining to the early disciplinary history of London University suggest a similar shift. The first indication of this shift is Henry Brougham's reversal of opinion concerning the Royal Institution. During the peak of its fine arts curriculum (ca. 1805-1808), Brougham, as Harriet Lloyd mentions in her recent dissertation, was one of the Institution's severest critics.⁵⁵⁰ By the 1820s, however, Brougham would actually come to support the Institution, accepting a position as a trustee to the Royal Institution's Fuller endowment.⁵⁵¹ Brougham was also critical to the foundation of London University, and it is notable that, just as Brougham emerges as a key figure in its foundation, Thomas Campbell, the poet, is relieved of his role in planning its design.⁵⁵²

Hale Bellot's history of University College London, published 1929, includes several helpful charts detailing the university's original curriculum and the timeline of various subsequent curricular changes.⁵⁵³ These charts list a "Faculty of Science," a "Faculty of Arts," a "Faculty of Laws," a "Faculty of Medicine and Medical Sciences," and a "Faculty of Engineering." The subjects considered under the Royal Institution's rubric of *nature* and *useful art*, perhaps unsurprisingly, inform

⁵⁴⁹ Klancher, *Transfiguring*, 224.

⁵⁵⁰ Harriet Olivia Lloyd, *Rulers of Opinion: Women at the Royal Institution of Great Britain, 1799-1812*, (Dissertation, 2019), 27, 27n.; Klancher, *Transfiguring*, 78.

⁵⁵¹ Lloyd, *Rulers of Opinion*, 27n.

⁵⁵² See Bellot, *University College London*, 6-9, 79, 367.

⁵⁵³ See Bellot, *University College London*, Charts 1-6.

the primary subjects of the Faculties of Science, Medicine, and Engineering. By 1870 the departments of Science and Engineering would actually merge, to form a single Faculty of Science. To inaugurate this unification, the university would draft a new constitution for the Faculty of Science, and within a few years the Faculty would begin teaching the first course with titles explicitly mentioning the term “technology.”

Interestingly, the Faculty of Arts appears to have been conceived on the older liberal arts model available at the ancient universities, and forms an early arrangement that we might confidently identify with the humanities. The subjects of Latin, Greek, Hebrew, Philosophy & Logic, History, Political Economy, and the “Oriental” and Western Languages, including one of the first departments of English, which Bellot calls an “innovation,” were all part of the original curriculum taught by the university’s Faculty of Arts. Together, the Faculties of Science and Art as designed here begin to give a more accurate picture of the central framing structure of the modern university, which we know as the college of arts and sciences, or alternatively the college of letters and science.

What is of course conspicuously missing from London University’s initial curriculum, and this is where Brougham comes in, is a Faculty of *Fine Art*.⁵⁵⁴ The case was very different at the University of Virginia, which Thomas Jefferson founded in part on the model of the Liverpool Royal Institution, and which initially did include a department of fine art, so the absence of fine art at London University would appear to have been a deliberate exclusion.⁵⁵⁵ Significantly, this curricular situation would persist until 1870 (notably the same year the Faculties of Science and Engineering merged), when Felix Slade’s legacy provided for the establishment of the university’s

⁵⁵⁴ Bellot, *University College London*, Charts 1-2. As I mentioned in my first chapter, this exclusion appears to parallel the decision to exclude women from enrollment at the university.

⁵⁵⁵ “Report of the Board of Commissioners for the University of Virginia to the Virginia Assembly [4 August] 1818,” *Founders Online*, (National Archives, accessed September 29, 2019), <https://founders.archives.gov/documents/Madison/04-01-01-0289>.

Slade School of Fine Art, attached as a special school to the Faculty of Arts. The Slade School's first director was the painter and eventual president of the Royal Academy, Edward Poynter. Slade also famously endowed coordinated visiting professorships of fine art at Oxford, a post first held by John Ruskin, and Cambridge, in which capacity the architect and art historian Matthew Digby Wyatt would deliver a course of lectures on *Fine Art: A Sketch of its History, Theory, Practice, and Application to Industry*, much in the style of the courses first delivered at the Royal Institution.⁵⁵⁶

In addition to the history of scientific lecturing, the history of the defunct “arts” branch of the Royal Institution, namely its arts repository for inventions and apparatus, and model rooms, is actually quite interesting, and also suggests important opportunities for further research. At London University, for instance, these rooms survive as a museum attached to the department of natural philosophy, which, as Bellot describes, “embraced physics and what would now be called applied mathematics.”⁵⁵⁷ “The principal work of the department,” he continues,

appears to have had relation to Mechanics, Dynamics, and Hydrostatics, but lectures were also given on Astronomy Optics, and Heat. A Museum of Natural Philosophy had been founded, containing apparatus intended to illustrate the lectures. In the Calendar for 1830-31...it is described as containing:--(i) Instruments for philosophical research and experimental demonstration, e.g., air pumps of the very best description, electric and galvanic machines; (ii) working models of machines on a large scale; (iii) wooden models of minute and delicate instruments; (iv) sectional models. In the lectures, ‘as much mathematical investigation is introduced as the generality of students are able to comprehend. At the same time, as most of the subjects treated can be satisfactorily demonstrated or illustrated by experiment, recourse is had to the apparatus provided by the University for the purpose, which is very extensive and has been selected solely with a view to instruction.⁵⁵⁸

⁵⁵⁶ Matthew Digby Wyatt, *Fine Art: A Sketch of its History, Theory, Practice, and Application to Industry* (London: MacMillan and Co., 1870).

⁵⁵⁷ Bellot, *University College London*, 130.

⁵⁵⁸ Bellot, *University College London*, 130.

Although called a “museum,” their use as tools of instruction in illustrating the principles elucidated in the lectures mirrors almost exactly one of the key instructional functions of the various repositories at the Royal Institution.

This transformation in terminology, and eventually actual use, from arts repository to museum, seems to have been part of a more general trend in the nineteenth century. No evidence of this trend is more clear than in the case of the Smithsonian Institution, which was importantly modeled on the English arts-and-sciences Institutions.⁵⁵⁹ It appears to have followed this trend to such an extent that the survival and flourishing of its museums represent an Institutional history almost exactly opposed to that of the Royal Institution, which instead promoted the scientific lectures, allowing the repository and model rooms to fade into the background.

Such divergent trajectories for the arts repositories become all the more interesting when we look to the founding documents of the American research universities formed as a consequence of the Morrill Land Grant Acts of 1862 and 1890, the first of which states as its primary pedagogical goal “without excluding other scientific and classical studies,” as “to teach such branches of learning as are related to agriculture and the mechanic arts...in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.”⁵⁶⁰ The documents I have examined that relate to these acts are those connected with my home institution, the University of California. The assembly bill of March 5 1868, which created the University of California, lists in Section 24 a provision for a space to be designated “the ‘Museum of the University,’” and suggests, that in addition to a large geological collection, the University add, “as fast as the means of the

⁵⁵⁹ Klancher, *Transfiguring*, 228.

⁵⁶⁰ “Act of July 2, 1862 (Morrill Act), Public Law 37-108, 12 STAT 503, Which Established Land Grant Colleges,” *National Archives and Records Administration* (National Archives Catalog, accessed November 29, 2019), catalog.archives.gov/id/299817.

University shall permit, collections of agricultural implements, and objects illustrative of the mechanic arts, science, architecture and the fine arts.”⁵⁶¹ That such a museum is nowhere to be found on the Berkeley campus is of great interest, because it implies that, like the Royal Institution, the American research university may also have begun as part of a more balanced “arts-and-sciences” institutional movement, only subsequently electing to privilege the scientific lecture curricula that currently dominate university instruction.

Continuing with speculations concerning the University of California, this preference for science, or what many university presidents had begun to call “Wissenschaft,” could very well have been connected with the recent arrival of Daniel Coit Gilman, who left a joint-position as fundraiser, secretary, librarian, and professor of geography to Yale’s Sheffield Scientific School (notably the result of Connecticut’s Land Grant), to become the University of California’s third president. Although Gilman would leave his position by 1875, after only three years in office, his presence in California is a key indicator, as it would be of Gilman’s later presidency of Johns Hopkins University, of the turn toward more exclusively systematic inquiry that had been sweeping across the country, represented most strikingly by Charles William Eliot’s reforms of the Harvard curriculum after 1869.

Recent scholarship on the formation of the American research university has tended to trace much of its history back to the German universities formed at the beginning of the nineteenth century. American reformers like Gilman and Eliot are of course much indebted to German thinkers like Humboldt, Schelling, and Schleiermacher, and I by no means wish to contest the importance of that influence. That influence, however, has to some degree obscured the importance of the

⁵⁶¹ “Assembly Bill. No. 583, Introduced by Mr. Dwinelle, March 5, 1868. An Act, To Create and Organize the University of California,” (accessed November 15, 2019), <https://bancroft.berkeley.edu/CalHistory/charter.html>.

founders of the arts-and-sciences Institutions for these later nineteenth-century reformers. Take for instance a longish passage from Gilman's essay, "The Utility of Universities":

Every word I can spare must be given to emphasize the fact which is most likely to be forgotten, that these wonderful inventions are the direct fruit of university studies. I do not undervalue the work of practical men when I say that the most brilliant inventor who ever lived has been dependent upon an unseen company of scholars, the discoverers and the formulators of laws which he has been able to apply to methods and instruments. Nor do I forget that Faraday, like Shakspeare, was not a university man. But I mean to say that the manifold applications of science, about which everybody is talking, are only possible because of the abstract studies which universities promote. The electromagnetic inventions, which are now so multiform, are only possible because scores of the greatest intellects of the century, one after another, have applied their powers of absolute reasoning to the interpretation of phenomena which could have been elucidated in any part of the world, and at any epoch of the past, if only the right methods had been employed. As long as universities held aloof from experimental sciences, these discoveries were not made; but when laboratories for investigation were established, an alliance was formed by mathematics and physics, and a new type of intellectual workers was produced, men whose hands were as cunning to construct and make use of instruments as their brains were cunning to develop the formulae of mathematics. Take the splendid list of leaders who have followed Franklin and Rumford. They may be called the school of Sir Isaac Newton, so much of their inspiration is due to him. Not all were trained in academic walls; but not one failed to derive help from the advantages which universities provide and perpetuate.⁵⁶²

The edition of this essay included in *The Rise of the Research University, A Sourcebook*, contains a note next to Rumford's name that reads, "Presumably Sir Benjamin Thompson, Count Rumford (1753-1814), an American-born physicist who lived in England and Bavaria."⁵⁶³ Rather than "presumably," the Rumford in question is *certainly* the Count Rumford who, along with Joseph Banks and Thomas Bernard, founded the Royal Institution. And it is that Institutional structure that enabled Faraday, whom Gilman describes as the "most brilliant inventor who ever lived," to make his most important scientific discoveries, and to *apply* them to the improvement of the arts. That Rumford's name appears next to that of Franklin, should be some indication of high regard Gilman had for him,

⁵⁶² Daniel Coit Gilman, "The Utility of Universities," *The Rise of the Research University, A Sourcebook*, eds. Louis Menand, Paul Reitter, Chad Wellmon (Chicago: University of Chicago Press, 2017), 183.

⁵⁶³ *Sourcebook*, 374.

though the note appears to not quite recognize his relevance to Gilman's point. At the very least, such a mention would seem to invite further inquiry into the relationship between Rumford and the university reformers of the late-nineteenth century.

At the outset of this project, I requested a copy of the first major history of the Royal Institution of Great Britain, Henry Bence Jones' 1871 work, *The Royal Institution, Its Founder and its First Professors*, from the University of California's Southern Regional Library Facility (SRLF).⁵⁶⁴ Within a few days, a first edition copy of the work arrived at the Young Research Library, part of the University of California Los Angeles. Gilman had come to the University of California only a year after the history was published, and though various pieces of evidence show that the copy I received could not have been Gilman's, I often wondered whether or not he had read it. Despite the absence of any identifying marks by Gilman, the copy nonetheless contains several features of extraordinary interest, which have since become marks indicating just how deeply imbricated the design of this Institution is the development of global higher education. The binding of the book, having not been opened in quite some time, cracked shortly after I had received it. Lifting it up slightly I could make out what appeared to be an old piece of accounting paper, glued in as packing, with the following inscription:

Sicca Rupees
Errors

*Fort William*⁵⁶⁵

While it is of course difficult to determine the exact provenance of this document, these five words nonetheless hint at an important colonial network for the dissemination of publications relating to

⁵⁶⁴ Henry Bence Jones, *The Royal Institution: Its Founder and Its First Professors* (London: Longmans, Green, and Co. 1871).

⁵⁶⁵ See Figure 1.

the Royal Institution, which necessarily predates the publication of Bence Jones' history. The adjective "Sicca" refers to the currency "issued in Bengal before 1836 weighing more than the rupee of the British East India Company."⁵⁶⁶ The date of 1836 coincides with the introduction of a new currency following the consolidation of the Company Raj in 1833. Prior to that consolidation the title of Governor-General of India had been the Governor-General of the Presidency of Fort William, a position created and first held by Warren Hastings.

By the first decades of the nineteenth century, Fort William had also become associated with educational reform in the region. About 1800 Marquess Wellesley, at that time the Governor-General of Fort William, oversaw the organization and construction of the College of Fort William (1800-1854), an academy for training low-level Company employees or "writers," in Bengali, Hindi, Urdu, Persian, Arabic, and Sanskrit. Wellesley had succeeded John Shore, Lord Teignmouth, in his position as Governor-General. Upon returning to England, Teignmouth took up residence in London, where by 1800 he had become among the first proprietors of the Royal Institution of Great Britain, and was elected to the office of Visitor also in that year. In London, Teignmouth did much to foster an organizational relationship between the Royal and the College of Fort William. Perhaps the most telling of these activities was his role in the College's eventual engagement of a Dr. Dinwiddie, who had made a name for himself as a lecturer on experimental philosophy in Bengal, as its first professor of mathematics, natural philosophy, and chemistry.⁵⁶⁷ The post, if I am not mistaken, would have been modeled on the position held by the RI's first professor, Thomas Garnett.

⁵⁶⁶ "Sicca Rupee," Merriam-Webster Online. (accessed September 10, 2019), <https://www.merriam-webster.com/dictionary/sicca%20rupee>.

⁵⁶⁷ See Berman, *Scientific Organization*, 75-99.

Infighting between Wellesley and the Company's court of directors eventually lead to a break away effort to establish a similarly organized college back in England. Morris Berman has found evidence linking an abandoned Prospectus for the Royal Institution (written by John Cox Hippisley and R.J. Sullivan) with this breakaway movement, where Thomas Webster's idea for a mechanics school appears to have been briefly replaced by a plan to educate students intending to begin careers with the EIC. Although the Royal Institution plan was abandoned in favor of the mechanics school, the effort to establish an Institution "where mathematics, physics, and the elements of other science could be taught," did not disappear. By 1806 Francis Baring, a director of the EIC and proprietor of the Royal Institution, would represent this departure by his prominent role in the foundation of two offshoot educational organizations, Haileybury College and the London Institution.⁵⁶⁸

In the following decade Edward Hyde East, chief justice of the supreme court at Fort William, became a key proponent of an effort lead by Raja Radhakanta Deb, David Hare, and Babu Buddinath Mukherjee, with tacit support from Raja Ram Mohan Roy, "to establish an institution for giving a liberal education to the children of the members of the Hindu Community."⁵⁶⁹ This effort began as a reaction to the foundation of the Supreme Court of Calcutta in 1773, which meant that legal administration demanded a knowledge of the English language. It culminated in a meeting at the home of Hyde East in 1816, which resulted in the foundation of Hindu College, officially opened a year later, with Hyde East as its first principal. In 1855 Hindu College was brought under direct control of the government, at which point its name was changed to Presidency College, now Presidency University, a branch of the University of Kolkata.⁵⁷⁰

⁵⁶⁸ See Berman, *Scientific Organization*, 75-99.

⁵⁶⁹ "History," *Presidency Alumni Association, Calcutta*, <http://www.presidencyalumni.com/home/page/3>.

⁵⁷⁰ Rajesh Kochhar, "Hindoo College Calcutta Revisited: Its Pre-History and the Role of Rammohun Roy," *Meghnad Saba Memorial Lecture Delivered Under the Auspices of Indian Science News Association, Kolkata, 28 July 2011* (accessed November 15, 2019), http://www.scienceandculture-isna.org/july_aug_12/04%20Rajesh%20Kochhar/04%20Rajesh%20Kochhar.htm.

The Royal Institution was also well known for its large membership of abolitionists. Many of these figures, William Wilberforce and Henry Thornton, for instance, would go on to found the African Institution, the educational branch of which they plainly modeled on the Royal Institution. Although the African Institution is primarily known as an Institution for enforcing anti-slave trade legislation in Britain's African colonies, and for promoting the resettlement and welfare of freed African slaves in Sierra Leone, the first report of the Institution makes clear that a civilizing educational mission in the arts and sciences would be among its primary objects. As a means of realizing its main goal, "the cultivation of the African soil," the African Institution would introduce "such of the improvements and useful arts of Europe as are suited to their condition," among which would be "useful seeds and plants, and implements of husbandry."⁵⁷¹ In addition, the Institution sought to "promote the instruction of the Africans in letters and in useful knowledge, and to cultivate a friendly connection with the natives of that Continent," which connections could in turn be fostered by "a knowledge of the principal languages of Africa" by its British inhabitants, "to facilitate the diffusion of information among the natives of that country."⁵⁷²

In addition to providing evidence for the Royal Institution's significance in the design of educational Institutions connected with Britain's colonial interests, other markings suggests avenues of research that take us into the twentieth century. A label pasted to the verso of the front cover reads:

ex libris

C.K. Ogden⁵⁷³

⁵⁷¹ *Report of the Committee of the African Institution, Read to the General Meeting on the 15th of July, 1807* (London: Ellerton and Henderson, 1811), 5.

⁵⁷² *African Institution*, 4-5.

⁵⁷³ See Figure 2.

Ogden's prior ownership of this copy is of interest because it indicates that the history and design of the Royal Institution may have formed a significant study for him. This link becomes even more interesting for the literary scholar due to Ogden's various collaborations with I.A. Richards, and is perhaps even a late part of the story concerning the colonial networks by which the book travelled (e.g. in relation to *Basic English*). Their collaboration especially on the ambitiously titled book *The Meaning of Meaning: A Study of the Influence of Language upon Thought and of the Science of Symbolism*, is of direct interest to the questions I have been following out. In the preface to the second edition of that work, the authors describe it as a companion to Richards' independently published *Principles of Literary Criticism*. As they describe it in *The Meaning of Meaning*, the "*Principles of Literary Criticism* (I.A.R.) endeavours to provide for the emotive function of language the same critical foundation as is here attempted for the symbolic."⁵⁷⁴ As is well known, that critical foundation for the emotive function of language in fact took the form of two published works, the *Principles of Literary Criticism* and *Practical Criticism*. In *Principles*, Richards explains the relation he sees between these two in a way that quite precisely mimics the structural attention to principle and application that informed the Royal Institution lecture curriculum:

Between the possession of ideas and their *application* there is a gulf. Every teacher winces when he remembers this. As an attempt to attack this difficulty, I am preparing a companion volume, *Practical Criticism*. Extremely good and extremely bad poems were put unsigned before a large and able audience. The comments they wrote at leisure give, as it were, a stereoscopic view of the poem and of possible opinion on it. This material when systematically analysed, provides, not only an interesting commentary upon the state of contemporary culture, but a new and powerful educational instrument.⁵⁷⁵

⁵⁷⁴ C.K. Ogden and Ivor A. Richards, *The Meaning of Meaning: A Study of the Influence of Language Upon Thought and of the Science of Symbolism* (Eastford, Martino Fine Books, 2013), xii.

⁵⁷⁵ I.A. Richards, *Principles of Literary Criticism* (New York: Routledge Classics, 2001), x (my emphasis).

This passage, in other words, stages the *Practical Criticism* as an “application” of the “ideas” articulated in the *Principles* on behalf of improving what we might now see as the *art* of interpretation as practiced by his Cambridge students. In other words, the entire motivation for the *Principles* and *Practical Criticism* is bound up in the same structural logic of principles and application that informed the arts-and-sciences lectures, and sought to improve art by “the application of science to the common purposes of life.”⁵⁷⁶

Further corroboration of the notion that Richards’ work is at least indirectly affected by the structural norms of the Royal Institution lectures comes in Nigel Leask’s notes to his edition of Coleridge’s *Biographia Literaria*. Just at the point when Coleridge makes the shift from principles to “the application of these principles to purposes of practical criticism” in chapter fifteen, Leask adds the following two notes: “In this chapter Coleridge was drawing on material given as Lecture 4 in his course on Shakespeare and Milton (November 1811-January 1812),” and “Source of the term for the critical method of close reading made famous by I.A. Richards in *Practical Criticism* (1929).”⁵⁷⁷ Leask’s notes both connect Coleridge’s remarks to his earlier Poetry lectures, and show how Richards adopts Coleridge’s Institutionally informed procedure of applying principles on behalf of improving the arts as the explicit rationale underpinning the practice of close reading that is so closely identified with the advent of the New Criticism, and which is still largely accepted as a standard of academic reading practice today, though many other important reading techniques have since emerged.

Despite these structural consistencies, there are of course numerous points of contrast between the work of Richards and that of Coleridge. First is the crucial point that, while both

⁵⁷⁶ This quotation forms part of the full name of the Royal Institution of Great Britain.

⁵⁷⁷ Samuel Taylor Coleridge, *Biographia Literaria* (London: J.M. Dent Orion Publishing Group, 1997), 186, 186n.

Coleridge and Richards observe a consistent Institutional procedure, their objects of knowledge are different. Richards' interest is in elucidating the psychological principles of interpretation generally as they pertain to the symbolic (science) and emotive (art) functions of language, and by extension literature. Coleridge's category of *Poetry* (later *Poesy*), in contrast, developed as a replacement for the Royal Institution's concern with the fine arts. His goal is to identify the principles of a *method of Poesis*, of the actual construction of aesthetic objects calculated to provoke the attribution, 'that is Poetry.' Where Coleridge applies his principles as a ground for his method of genial criticism, and actually attempts to practice it himself in his genial critique of the painter Washington Allston, Richards is more interested in applying his principles to interpretive practices in the university classroom. Richards' language in the above passage also suggests that he is interested in the experimental verification of such improvements, which would presumably hold out the prospect of regularizing the improvement of interpretation in general. Coleridge's, on the other hand, would seek to improve the art of criticism by trusting in the direction of what he calls "genial" energy, but which we might call those energies that seek, by means of pleasure, to understand a work of Poetry by the mental apprehension and appreciation of shape.

These differences all point to the central methodological distinction between Coleridge's and Richards' versions of practical criticism. For Richards, the improvement of interpretation is entirely about the improvement in the accuracy of interpretive acts, so as to increase the number of "true" interpretations, and decrease the number of "false" interpretations. In the methodological distinctions Coleridge identifies between Science and Poetry, as having the respective purposes of "truth" and "pleasure," the goal of Richards' practical criticism is firmly situated in the realm of science. In contrast, insofar as Coleridge's genial criticism is grounded on his principles of a Poetry method, its primary goal is necessarily aesthetic pleasure. Although Coleridge nowhere says that a Poetry method is inimical to the process of accurate understanding, he is nonetheless insistent on

the fact that these two methods, that of Science and that of Poetry, are opposed in terms of their primary goals.

Although Coleridge's critical method (though of course not the study of Coleridge) was found uncondusive to the increasingly technological direction of the arts-and-sciences Institutions within which it formed an integral though methodologically opposed part, that initial exclusion may actually be seen as a sign of its potential effectiveness as a method of intra-institutional critique of science. Despite the persistence of the notion that the discourse of "two cultures" is a debate between science and the nebulous, less than scientific domain of the humanities, my view is that the debates themselves, at least in terms of academic methodologies, are more adequately characterized as debates between two cultures of science, one more rigidly experimental and positive, the other open to a multiplicity of scientific methods, but still, as Onora O'Neill has recently urged, largely dependent on empirical truth claims.⁵⁷⁸

Although the roots of the two cultures debate go back much further than C.P. Snow's acknowledgement of the communicative gulf that had emerged between the two domains of inquiry, science and literature (today often expanded to science and the humanities), his problem seems to be primarily one of coverage. The professor of English does not *know* the second law of thermodynamics, while the physicist does not *know* enough about Shakespeare to have an intelligent conversation about his works. Snow's two cultures represents a much more common theme in intellectual history than we like to acknowledge, one in which the amount of possible knowledge has outstripped the ability of the knower to know. Such a concern helped to generate the great encyclopaedias of the eighteenth century, and similar concerns have been part of our own academic discourse since about the time Snow published.

⁵⁷⁸ See Onora O'Neill, "Two Cultures Fifty Years On," 2010 New Zealand Aronui Lecture Series (The Royal Society of New Zealand, September 2010), <https://vimeo.com/15756075>.

Nowhere does Snow identify a problem of method, and yet this is the problem that his initial concern would eventually come to expose. While the methods of Richards may be characterized as experimental human science, as a psychology of interpretation, the movements of theory and new historicism that the experimental sciences today largely characterize by the conveniently nebulous pejorative “post-modernism,” have produced an enormous body of interesting writing whose relationship to twentieth century science may be tentatively described as scientific antithesis. By that phrase I refer to a method of inquiry that is scientific in the sense that it is basically all still concerned with accurate understanding (my contemporary rephrasing of Coleridge’s “truth”), that is, it is all still basically scientific, but the accurate understanding it communicates is largely critical of the generalizing tendencies embedded in the conclusions of the positivist human sciences. It is for this reason, I believe, that many scientists today hear the attribution of “positivism” as a pejorative in the same way that they use “post-modernism” as a pejorative aimed at the humanities.

The expansion of the rift between science and the humanities, especially since the 1960s, shows itself most plainly as a disagreement between modes of practicing the human sciences. Developments that showcase that rift occur on either side of the divide, and appear in what I can only describe as a kind of ‘tit-for-tat’ strategy for scientific superiority (I am of course guilty of this, though with a different purpose, as shall be seen). On the side of the positivist experimental sciences, evolutionary psychology and its various disciplinary offshoots, such as Literary Darwinism and Darwinian Aesthetics, understand E.O. Wilson’s call for Consilience, or the “vertical integration” of the disciplines, as a potential cure for the rift between the two cultures, and a solution to what they view as the *problem* of post-modernism in university scholarship. Their intellectual enemies are the practitioners of “post-modern” literary criticism and science studies. Science studies is a problem for laboratory scientists because it identifies those scientists and their various experimental pursuits as themselves the objects of human science, though on an expanded

scale, revealing the *truth* that is the constructedness of scientific conclusions. It is in this fashion a sort of rejoinder to what is often seen as an *intrusion* of evolutionary psychology and its related fields into the domain of the humanities.

Vertical integration and any analogous calls for a unity of scientific pursuit in the university have suggested that a lack of unity threatens to degrade the state of knowledge. But in one important sense the premise of division is a false problem. Research in humanities disciplines still largely adheres to strict scientific methods, and I would be surprised to hear any academic in the humanities today say that they are not interested in communicating accurate understanding *in practice*, even if what they are attempting to communicate is that there is no such thing as absolutely accurate understanding *in theory*. Where the two-cultures disagreement actually lies is therefore not with an attempt to communicate accurate understanding, but instead in the willingness within the humanities to tolerate multiple and sometimes mutually exclusive theories with respect to their objects of knowledge, and conversely the experimental sciences' rigid adherence to single theories that directly theorize their objects of knowledge and inform their experiments in the laboratory.

This situation reaches its apex in departments of English and Comparative Literature, where the choice of theoretical approach has even been recently characterized at the level of 'tool use.' No longer a decision necessarily tied to epistemological commitment, the theory employed reflects a choice among several available tools, or what could almost be called *implements* for opening up the possibilities of a given work of imaginative or other literature. But describing a set of theoretical approaches as 'tools' merely brings theory back to an acknowledgement of its constructedness and its potential utility for thought, which Humphry Davy himself acknowledged freely, even while isolating his elements. Theory in today's literary criticism simply does not assume that it can say everything there is to say about an object of study, which to my mind is a point of wisdom, but it is a wisdom that must be treated as fragile and liable to oblivion at any given moment, because the desire

for a unified answer, a single theory, is already so strong. If one end of the spectrum of human science, say experimental biology, relies as exclusively as possible on a unified theory (i.e. Darwinian natural selection after the modern synthesis), and the other end, say a department of English or Comparative Literature, treats theory as a tool, as a product of useful art, to be deployed when the situation calls for it, then it is not difficult to see how attempts to impose an attitude toward theory from one side to an attitude toward theory from the other side would be seen as a problematic and imperious gesture.

Although experimental biologists would likely lump the branch of new historicism practiced by Jerome McGann in with the other forms of “post-modern” humanist scholarship, McGann has recently situated his own historical approach against the theoretical developments of post-structuralism in an article for *Interdisciplinary Science Reviews* entitled “Truth and Method: Humanities Scholarship as a Science of Exceptions.”⁵⁷⁹ For McGann the ideal of humanist scholarship takes the form of a “Science of Exceptions,” wherein “the form of generalization or law” can be ascribed to humanist scholarship insofar as the “focus” of that scholarship is particularly attuned to the individuality of the case considered, to what McGann calls “differentials and variants.”⁵⁸⁰ “Opportunities are of one kind,” McGann says, “and so are experiences and all the singularities that comprise them.”⁵⁸¹ McGann reiterates this mode of humanist scholarship as a situation in which the scholar’s “commitments to ‘mastery’ make a further commitment to meet their master.”⁵⁸² Analogizing the astonishing complexity of both natural ecosystems and literary texts, McGann’s

⁵⁷⁹ Jerome McGann, “Truth and Method: Humanities Scholarship as a Science of Exceptions,” *Interdisciplinary Science Reviews*, Vol. 40, No. 2, 2015, 204-218.

⁵⁸⁰ McGann, “Truth and Method,” 210.

⁵⁸¹ McGann, “Truth and Method,” 210.

⁵⁸² McGann, “Truth and Method,” 211.

claim is relevant to those objects of knowledge that are incapable of adequate characterization by a single individual. Yet, like the ecologist, whose “master” is nature, the humanist is nonetheless steadfastly committed to meeting its master in the complexities inherent in the world of cultural documents, and ascribing its claim to science to the ability to recognize that complexity, and to draw out its “differentials and variants.”

McGann’s argument for a “Science of Exceptions” is noteworthy because it puts the literary scholar on the same level as an ecologist, differentiating the two by highlighting the added complexity of human fallibility inherent in the production of any cultural object. For historical scholarship McGann’s characterization works well enough as a science, but it is again a delicate one, in need of constant justification, and I imagine not likely to be widely appreciated as a rigorous science in the experimental sciences, outside perhaps of a department of ecology, which might be able to appreciate the parallels.

Within humanist study, McGann takes aim at post-structuralism by imputing the ecologically inflected mantra “‘The imposed view, however innocent, always obscures,’” to the theory movement in literary studies, when

humanities scholarship shifted from its traditional grounding in history and material culture toward literary philosophy and interpretive theory. For my generation, the name Paul de Man would be totemic for that shift. Listen to what he had to say about literary studies in 1970 as the Theory Movement in humanities was in serious lift-off: ‘There is no room...for notions of accuracy and identity in the shifting world of interpretation’ (de Man 1971, 110).⁵⁸³

Notice, however, that the entire focus of McGann’s argument against de Man has to do with the question of interpretation. De Man’s contention can be helpfully contextualized by citing a passage

⁵⁸³ McGann, “Truth and Method,” 214.

from his essay “The Rhetoric of Temporality,” in which he accuses Hans-Georg Gadamer of making

the valorization of symbol at the expense of allegory coincide with the growth of an aesthetics that refuses to distinguish between experience and the representation of this experience. The poetic language of genius is capable of transcending this distinction and can thus transform all individual experience directly into general truth. The subjectivity of experience is preserved when it is translated into language; the world is then no longer seen as a configuration of entities that designate a plurality of distinct and isolated meanings, but as a configuration of symbols ultimately leading to a total, single, and universal meaning.⁵⁸⁴

It is Gadamer’s view of the hermeneutic strategy appropriate to “poetic language” that de Man is most obviously trying to controvert. It is not, in other words, so much that de Man had given up on the possibility of accurate communication (his own writings communicate much). Rather, he had given up on the possibility of developing an interpretive theory that could lead “to a total, single, and universal meaning,” in which interpretive acts could be handled as absolutely true or false, if only the interpreter could develop an adequate point of view.

Although further research into the precise contours of Romantic infrastructure is needed, the preliminary findings indicate at least the potential of an intra-institutional way forward. What if, for instance, a rigorous and intellectually generative method of literary critique could be developed in which the *truth* of interpretive acts is not the primary goal of the literary encounter? What if an aesthetic criticism could be developed as a direct and constructive methodical critique of science? Such an addition would not attempt to replace any method, but would act instead in the manner of a methodical growing. Let us take for example, a proposal that begins with a historically sensitive practice of Richards’ practical criticism, or close reading. Insofar as each act of close reading is an application of his principles, and is in that sense already a form of well-established arts-and-sciences

⁵⁸⁴ Paul de Man, “The Rhetoric of Temporality,” in *Interpretation: Theory and Practice*, ed. Charles S. Singleton (Baltimore: Johns Hopkins Press, 1969), 174.

“Institutional” practice, it may be useful to reform that practice already in place. While retaining a form of close reading whose goal is true interpretation, and which would be classified as a scientific method, might it not also be possible to practice an alternative method of close reading whose goal is aesthetic rather than veridical? Exact reading with an aesthetic purpose?

My inspiration for what this could look like actually comes from the Spivak essay I cited in my introduction, in which Spivak describes how she uses Romantic literary criticism and theory as a tool in “promoting the habit of mind that can be open to experience ethics as the impossible figure of a founding gap, of the quite-other,” thereby articulating a practicable path by which it might be “possible to reconcile what I learn in the field with what I teach for a living.”⁵⁸⁵ How, in other words, does Spivak think it could be possible to begin to teach that impossible figuration within a “working definition of agency” as “institutionally validated action?”⁵⁸⁶ Noting first that, for her, as a literary theorist and critic, that agency is “validated by the academic institution, in the United States, as teachers of English literature, to act upon the sensibilities of our students, uncoercively, by their consent,” Spivak begins to describe her method of teaching to Columbia undergraduates the foundations of British criticism, used as an instrument for creating this habit of figuring the impossible, imagining the quite-other.⁵⁸⁷ “I start,” Spivak begins, “with the *Preface* to *Lyrical Ballads*, chapters 13 and 14 of the *Biographia Literaria*, and ‘A Defence of Poetry.’”

We try to understand these three texts (and there were others) as wanting to say, at the inception of the ravages of the economic system attendant upon the Industrial Revolution, that the imagination, which is our inbuilt capacity to other ourselves, can lead perhaps to understanding other people from the inside, so that the project would not be a complete devastation of the polity and of society through a mania for self-enrichment.⁵⁸⁸

⁵⁸⁵ Spivak, *Aesthetic Education*, 97.

⁵⁸⁶ Spivak, *Aesthetic Education*, 110.

⁵⁸⁷ Spivak, *Aesthetic Education*, 110-111.

⁵⁸⁸ Spivak, *Aesthetic Education*, 111-112.

Spivak specifies her method in the following paragraphs, and perhaps most importantly, describes how she *models* that method in the classroom:

Even as we touch upon the conlonial connections of these figures to establish parity with our own connections with globalization, I spend time demonstrating how the textual figure ‘Wordsworth’'s genuine admiration for the imaginative proficiency of rustic culture is, however distanced, not a species of primitivism; and now I would give some of this time to pointing out his lack of engaging with them. Shelley’s expansion of the “poetic” function (which we later contrast with Jakobson’s), seeing the metaphor, establishing connections between dissimilars, as the instrument of the Imagination and the very name of the ‘love’ that is the secret of morals, allows the class to see how far metropolitan literary criticism had gone to think that othering, another name for the ethical angle, might save their world from the moral impoverishment otherwise signaled by economic growth. I keep alive the connection with the students’ own desire to do good in the world. *When turned off by Shelley’s ecstatic tone, a student is asked to describe something s/he really enjoyed recently. I mimic the student’s ecstatic tone as exactly as I can (no diss-ing) and then read the offending Shelley passage.* And so on. Any trick to train them into a mental habit of othering rather than merely provide them with tools to describe.⁵⁸⁹

The following paragraph begins, “And yet, the great experiment didn’t work. The poets had no real involvement with infrastructure.”⁵⁹⁰ What I hope to have shown in this dissertation is that the British Romantics did have a real involvement with infrastructure, and that the availability of that infrastructure was an effect of the arts-and-sciences Institutional movement that produced the Royal Institution of Great Britain. By locating that same infrastructure in the work of I.A. Richards, I also hope to have shown how an arts-and-sciences infrastructure even makes its way into the thought of that foundational figure in the history of the study of English literature (i.e. not “Poetry”) in the twentieth century. Even with Wellek and Austin’s return to the aesthetic in their categorization of “imaginative literature,” that phrasing indicates that they consider the aesthetic as a sub-category of literature, and thus view the “Poetry” of the British Romantics from the perspective of the department of literature, when for the British Romantics, the linguistic form of poetry, or as

⁵⁸⁹ Spivak, *Aesthetic Education*, 112.

⁵⁹⁰ Spivak, *Aesthetic Education*, 112.

Coleridge called it, “measured words,” was actually a sub-category of the aesthetic domain.⁵⁹¹ The fact that the British Romantics do have real involvement with infrastructure means that our lack of recognition of this fact is an effect of those figures having been for a brief period in the early nineteenth century, actively shut out of the mainstream discussion of institutional design, as it became more steadfastly utilitarian and positivist in its standard of experimental demonstration. Spivak suggests that our current time is logically parallel to that of the Romantics; we are “at the inception of globalization, as they were at the inception of industrial capitalism.”⁵⁹² And we have just taken, as of 2016, a turn toward our own strange version of the utilitarian moment. What I find so interesting about the above passage from Spivak’s essay is that she describes a pedagogical moment of communicating, even modeling an aesthetic response that has the potential to be about as close as we can feasibly get to unity in diversity within the classroom. What each student “really enjoyed recently” would be as diverse as the diversity of the individual students, and yet that mental process is unified enough to serve as a single question, and, potentially at least, a ground for an aesthetic critical method. Though aesthetic enjoyment is necessarily individual in a biological sense, it could become collaborative and rigorous by acknowledging dialogue rather than stasis as its steady state. Spivak’s reenactment is actually modeled to some extent on what Percy Shelley has to say about Poetry, which as we know traces directly back to the structural obligations of the Royal Institution lectures. It might be possible, that is to say, to reinvent this forlorn Romantic Institutional infrastructure for Poetry to suit our twenty-first century institutional situation.

A primary difference I see between the situation of the two-cultures today, and the institutional visions of the British Romantics, is that today we have, in the broadest sense possible,

⁵⁹¹ René Wellek and Austin Warren, *Theory of Literature* (New York: Harcourt, Brace & World, Inc., 1942, 1956), 21-22.

⁵⁹² Spivak, *Aesthetic Education*, 112.

methodical unity, but institutional opposition (i.e. between science and the humanities), while the Romantics I have mentioned, and Coleridge most explicitly, envisioned an institutional unity with methodical opposition (i.e. between Science and Poetry). The challenge to reform today is hence whether the modern research university can imagine and accept true methodical diversity in the intellectual disciplines, and allow the aesthetic to be validated as a critical method in the same way that the experimental method is already validated. Can it see this hideous progeny, and bid it, as Mary Shelley did, go forth and prosper?

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