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UNIVERSITY OF ALBERTA

Carlyle's "Poetico-Philosophico" Contribution to Science:
Newton Reincarnated in Sartor Resartus

by

Barbara Ann Hoyt



A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment
of the requirements for the degree of Master of Arts.

DEPARTMENT OF ENGLISH

Edmonton, Alberta
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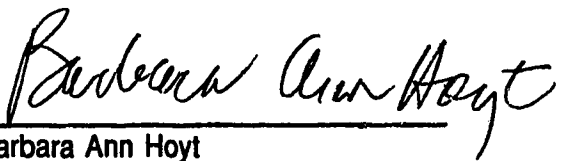
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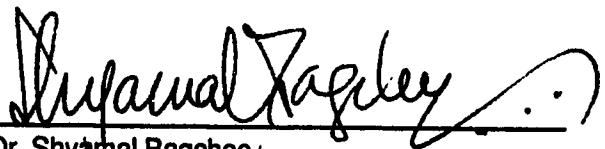
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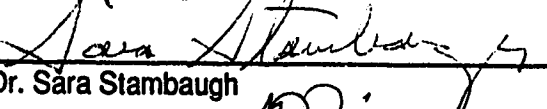
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Carlyle's "Poetico-Philosophico" Contribution to Science: Newton Reincarnated in *Sartor Resartus* submitted by Barbara Ann Hoyt in partial fulfillment of the requirements for the degree of Master of Arts.



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Dr. H. Hargreaves, Chair

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O Heaven! Is the white Tomb of our Loved One, who died from our arms, and had to be left behind us there, which rises in the distance, like a pale, mournfully receding Milestone, to tell how many toilsome uncheered miles we have journeyed on alone, -- but a pale spectral illusion! Is the lost Friend still mysteriously Here, even as we are Here mysteriously, with God! Know of a truth that only the Time-shadows have perished, or are perishable; that the real Being of whatever was, and whatever is, and whatever will be, is even now and forever. This, should it unhappily seem new, thou mayest ponder at thy leisure; for the next twenty years, or the next twenty centuries: believe it thou must; understand it thou canst not.

(Sartor Resartus "Natural Supernaturalism" 262)

For David

ABSTRACT OF THESIS

Thomas Carlyle is probably most memorable for writing Sartor Resartus, the book that in 1831 contained "more of [his] opinions on Art, Politics, Religion, Heaven, Earth and Air, than all the things [he had] yet written." Based on a playful but textually responsible reading of this work, my study reveals it to be essentially a love story that reflects the peculiar affinity Carlyle felt for Isaac Newton. The thrust of my argument is that Carlyle is so influenced by Newton's scientific genius that he deliberately 'misreads,' in Bloomian terms, Newton's principles in order to enter the highest level of scientific argument. Because Newton only argued from visible phenomena and refused to discuss the metaphysical workings of the mind, Carlyle uses his mind, specifically his poetic Imagination, to recall Newton from history to a "poetico-philosophico" debate. By then immortalizing Newton through Sartor in a most concealed fashion, Carlyle eventually 'proves,' at least to his own satisfaction, the transcendent power of mind over matter. Having investigated the extensive similarities between the scientifically inclined Newton and the poetically inclined Carlyle, I argue that Sartor is intended to provide readers with a pseudo-biography of Newton under the guise of the 'autobiography' of Professor Teufelsdröckh, Sartor's most obvious hero. My study sheds new light, I believe, on Sartor's overall sense of mystery, in particular Carlyle's unusual form of 'dualism.' The thesis begins with a comprehensive overview of Carlyle's documented interest in Newton. This is followed by a discussion of the only critical work I found that credits Newton with informing Sartor and Carlyle's philosophy of transcendentalism. I then devote a chapter to each of three characters whom I consider significant in Sartor but who are not discussed as often as Professor Teufelsdröckh and his English Editor, the book's apparent anti-hero. These are Herr Hofrath Heuschrecke, "the *Isis*," and "a *Cast-metal King*." The paper concludes with a discussion of Carlyle's relationship with Sir David Brewster, Newton's first definitive biographer. Here I argue that an important subtext in Sartor reveals a state of professional rivalry between Brewster and Carlyle.

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LIST of ABBREVIATIONS

The following abbreviations have been used for works to which frequent or non-sequential reference is made.

- Barnes** Samuel Gill Barnes, "Formula for Faith: The Newtonian Pattern for Transcendentalism in Sartor Resartus," unpublished Ph.D. dissertation, (North Carolina 1953)
- Boswell's Life** Thomas Carlyle, English and Other Critical Essays, (Dent, London)
- Brewster** David Brewster, Memoirs of the Life, Writings, and Discoveries of Sir Isaac Newton, (Edinburgh, 1855)
- CPP** Carlyle Past and Present, ed. K.J. Fielding and Roger L. Tarr. (London, 1976)
- ERI** Anne Mellor, English Romantic Irony, (Cambridge, Mass., 1980)
- HHW** Thomas Carlyle, Heroes and Hero Worship, (Philadelphia, 1842)
- IN** Isaac Newton: A Biography, Louis Trenchard More, (New York, 1934)
- NH** Derek Gjertsen, The Newton Handbook, (London, 1986)
- Nietzche** Friedrich Nietzche, The Portable Nietzche, ed. Walter Kaufmann, (New York, 1987)
- SCR** G. B. Tennyson, Sartor Called Resartus (Princeton, 1965)
- Signs of the Times** Thomas Carlyle, A Carlyle Reader, ed. G. B. Tennyson (Cambridge, Mass., 1988)
- SR** Thomas Carlyle, Sartor Resartus, ed. Charles Frederick Harrold (New York, 1937)
- TN** Two Note Books of Thomas Carlyle, from 23 March 1822 to 16 May 1832, ed. Charles Eliot Norton (New York, 1898)

I INTRODUCTION: An Overview of Carlyle's Interest in Newton

The following thesis presents new grounds for discussing Sartor Resartus which to my knowledge have not been explored critically before. My intention is to convince readers that Sartor is Thomas Carlyle's subtle, indeed concealed, tribute to the scientific genius of Isaac Newton. Essentially the argument will consider how Carlyle, literature's famous philosopher of clothes, uses Sartor to resurrect and 'reconstruct' Newton, science's famous student of the moon. Although critics have interpreted the meaning and significance of Sartor for over one hundred and fifty years, little attempt has been made to interrelate Carlyle's satirical bent with his interest in science, especially his understated admiration for Newton's work, if not for all his specific principles.¹ I argue that Carlyle wishes to discuss with Newton certain fundamental questions about the moon, questions which require Newton to assume a "poetico-philosophico" point of view.

Carlyle's primary question constitutes Sartor's opening paragraph. Appealing to "the reflective mind" he asks why so little Philosophy or History has been written "on the subject of Clothes:"

[since] the Torch of Science has now been brandished and borne about, with more or less effect, for five-thousand years and upwards ... in these times especially ... so that not the smallest cranny or doghole in Nature or Art can remain unilluminated, -- it might strike the reflective mind with some surprise that ... little or nothing of a fundamental character, whether in the way of Philosophy or History, has been written on the subject of Clothes (Sartor Resartus: "Preliminary" 3).²

Carlyle soon suggests that "this one pregnant subject of CLOTHES" must be "rightly understood" in order to appreciate that the "PHILOSOPHY OF CLOTHES" contains "the

¹ G. B. Tennyson, Carlisle Moore and Ian Campbell are among critics who have discussed Carlyle's interest in science, mathematics and Newton, and their views will be noted throughout my work.

² All references to Sartor Resartus will be to the Charles Frederick Harrold edition (New York, 1937) and indicated as SR. I will note chapter titles since they reinforce the quotations used in my argument.

essence of all Science" (SR: "Prospective" 74). My thesis speaks specifically to the question of why Carlyle and not Newton, in Carlyle's view history's most profound natural philosopher (as scientists were then called), felt compelled to write such a Philosophy.

Briefly, the Philosophy of Clothes or "Story of the Time-Hat" as it is elsewhere called, is about how man is enclosed or 'enclothed' in Time. His earthly existence is literally time-bound. Born into time through woman, man assumes a "Time-Hat" which can only be removed by death or through the power of the imagination (SR: "Natural Supernaturalism" 264). In this sense every person's life is inherently a "Philosophy of Clothes" with his or her Time-hat as its most significant feature. This philosophy manifests itself literally as biography, or more accurately as autobiography since one's complete written life would describe the entry into and exit out of that lifetime.³ Piercing his own Time-Hat with his imagination Carlyle transcends time, envisions the entire history of mankind, and recalls past lives such as Newton's into the present. The result is a timeless and cosmic view of life and death that Carlyle weaves into Sartor Resartus with inimitable legerdemain. Carlyle's "Story" is intended "to show forth to the men of these days that they also live in the Age of Miracles!"⁴ In Carlyle's view Newton did not "rightly understand" life as a miracle, nor the force behind life as miraculous just

³ James Olney, "Some Versions of Memory/Some Versions of Bios: The Ontology of Autobiography" in Autobiography: Essays Theoretical and Critical (Princeton 1980), p. 237. Discussing memory and the ontology of autobiography, Olney points out that as an informing principle "bios" (life or lifetime) lies literally and figuratively at the center of autobiography. He is concerned, as is Carlyle, with restoring to life "that which is no longer living."

⁴ Early Letters of Thomas Carlyle, ed. Charles Eliot Norton (London 1886), p. 376. This letter is quoted in Samuel Gill Barnes' unpublished Ph.D. dissertation, "Formula for Faith: The Newtonian Pattern for Transcendentalism in Sartor Resartus," University of North Carolina, 1953. Barnes' thesis provides the documented basis of my Newton-Carlyle argument and will be discussed at length in Chapter II.

because it is invisible and as yet unexplained. Carlyle, then, sets out to recuperate the miraculous from Newton's empirical eye.⁵

My research into both men's work takes an unusual twist, and suggests strongly that Carlyle characterizes in Sartor what he had earlier declared to be an impossible phenomenon -- a Newton for the "Mind" or spirit.⁶ In 1816, eight months into the study of Newton's Principia, Carlyle wrote:

When *will* there arise a man who will do for the science of Mind what Newton did for that of Matter -- establish its fundamental laws on the firm basis of induction -- and discard for ever those absurd theories that so many dreamers have devised? I believe this is a foolish question, -- for its answer is -- never" (Early Letters: 81; Barnes 1).

Newton students know that he refused to discuss the workings of the mind as they involved the field of metaphysics, and Carlyle students know how extremely interested he was in the mind, seeing himself at one point as only "Mind." In the spring of 1830 he writes: "I am Mind: whether matter or not I know -- and care not. -- Mighty glimpses into the spiritual Universe I have sometimes had ... would they could but stay with me, and ripen into a perfect view!"⁷

⁵ Carlyle wishes through his hero Professor Teufelsdröckh: "O, could I [with the Time-annihilating Hat] transport thee direct from the Beginnings to the Endings, how were thy eyesight unsealed, and thy heart set flaming in the Light-sea of celestial wonder!" (SR: "Natural Supernaturalism" 264). Newton's philosophy is most simply stated in Optiks: "The main business of natural philosophy is to argue from phenomena without feigning hypotheses, and to deduce causes from effects, till we come to the very first cause [which for Newton's own reasons he kept separated from the realm of his scientific study]." See E. A. Burt, The Metaphysical Foundations of Modern Science (London 1980), p. 287. Newton's view of miracles is clearly stated in Louis Trenchard More's biography of Newton, Isaac Newton: A Biography (New York 1934), p. 623.

⁶ While I must consider the extent to which Carlyle renders language elusive in Sartor, for the sake of clarification in my own work I use certain terminology as literally as possible simply to distinguish between noumena and phenomena. For example metaphysical is beyond physical, spiritual is opposed to sensual (literally of the senses). 'Divine' describes the highest degree of noumena -- the miraculous unseen spirit or force behind life -- the spirit that literally 'inspires' life or sensibility into an object.

⁷ Two Note Books of Thomas Carlyle, ed. C. E. Norton (New York 1972), p. 151.

Carlisle Moore argues that Carlyle merges science with transcendentalism (physics with metaphysics) to found "Mathesis," a poetical philosophy or "purer Truth" than mathematics.⁸ He suggests that by implication mathesis names the "science of mind" Carlyle sought to complement Newton's "science of matter." This 'science' "practically addresses," in Carlyle's words in 1829, "the primary, unmodified forces and energies of man, the mysterious springs of Love, and Fear, and Wonder, of Enthusiasm, Poetry, Religion, all which have a truly vital and *infinite* character; as well as ... the finite."⁹ Moore makes no connection between Newton and Sartor except by association when he suggests that Newton (a "gifted spirit" alongside select others)¹⁰ practices mathesis, then further suggests that mathesis informs Sartor. I suggest that when Carlyle eventually concluded that "[t]he Principia do but enlighten one small forecourt of the mind," he ceased to think of Newton as a practicing 'Mathesian' or philosopher-poet, at least on earth.¹¹

The germ for a 'scientifically' based Sartor can be found, I believe, in Carlyle's Notebook (December 1826) which reveals his idea for a Literary Annual Register (TN: 78). This register would present "a compressed view of the actual progress of Mind in its various manifestations during the bygone year" and would include "[b]iographical portraits of distinguished persons lately deceased," "[c]ritiques ... of the most considerable books," "a similar account of the *works of Art* for the year," and in case

⁸ Carlisle Moore, "Carlyle, Mathematics and 'Mathesis'" in Carlyle Past and Present (London 1976), p. 188.

⁹ "Signs of the Times" in Tennyson's A Carlyle Reader: Selections from the Writings of Thomas Carlyle (Cambridge, Mass. 1988), p. 42.

¹⁰ Quoting Carlyle, Moore argues that science is not inherently formal but originated "in the obscure closets of the Roger Bacons, Keplers, Newtons; in the workshops of the Fausts and the Watts" ("Signs of the Times" 43).

¹¹ The Last Words of Thomas Carlyle (New York 1892) pp. 22,23.

"no better might be" Carlyle himself would "undertake to say something about *Science*" (IN: 79,80). By closely comparing Carlyle's notes and their incorporation into Sartor, and then studying Carlyle's interest in Newton, we see an essentially 'sensible' idea for a serious journalistic Review develop gradually but directly into a 'nonsensible' idea for the satirical extravaganza of Professor Teufelsdröckh's "Philosophy of Clothes." By the fall of 1830 Carlyle declares emphatically: "I am going to write -- Nonsense! It is on 'Clothes'" (IN: 176).¹² In obvious contemplation of how to write this "Nonsense" he soon asks himself: "are the true Heroic Poems of these times to be written with the *ink of Science*? Were a correct philosophic Biography of a Man (meaning by philosophic *all* that the name can include) the only method of celebrating him? ... I partly begin to surmise so" (IN: 188).¹³

Carlyle's essay on "Biography" was written in 1832 following Sartor. In it he explains his view that "*Biography and Autobiography*" constitute the "grand phenomenon still called "Conversation," and by Conversation Carlyle means the continual dialogue between man and his art, which necessarily involves input from *the Artist*.¹⁴ In Carlyle's mind the epitome of art is "*the Picture*," God's "Temple of Immensity" with its "star-fretted Dome" ("Biography" 66,67). From this pinnacle man's art becomes relative to God's.¹⁵ Carlyle complains that Biography is the one thing lacking "in all Art, which is or should be the concentrated and conserved essence of what men can speak

¹² Moore notes that when Carlyle began his satirical "Thoughts on Clothes" he did not use the term "mathesis" again (CPP: 88; IN: 132).

¹³ Here we see Carlyle experiencing the Bloomian "anxiety of influence" as he struggles to improve upon heroic scientific works.

¹⁴ Thomas Carlyle, "Biography," in English and Other Critical Essays (Dent, London), p. 66.

¹⁵ Carlyle notes that "no Michael Angelo was He who built that "Temple of Immensity;" therefore do we, pitiful Littlenesses as we are, turn rather to wonder and to worship in the little toybox of a Temple built by our like" ("Biography" 67).

and show," i.e. man's collective Autobiography to date ("Biography" 66). In other words, only when biography successfully conserves autobiography can it be considered Biography or Autobiography or Art. As we "descend into lower regions of spiritual communication; through ... what is called Literature," we find that Carlyle considers biography as Literature particularly far removed from Art. I quote him: "'History,' it has been said, 'is the essence of innumerable Biographies.' Such, at least, it should be: whether it is, might admit of question" ("Biography" 67). The idea that "Biography or Auto-Biography" constitutes "our whole conversation," is reinforced in Sartor. (SR: "Prospective" 75,76).

We understand that biography is necessarily written from the biographer's point of view. But the "correct philosophic Biography" that Carlyle envisions is a work of Art that involves poetically reading and poetically writing the autobiography (birth/life/death) of the subject who is coincidentally the biographer's object. Hence we find in Carlyle's idea of a "true Heroic Poem" on Newton, autobiography within biography, poetry crossed with science, all artfully woven into the singular and unexampled "Philosophy of Clothes." The fact that Carlyle measures himself to suit himself, as it were, by writing this work with the *ink of Poetico-Philosophy* is ironic since Newton was "singularly indifferent to and even contemptuous of all forms of art," describing poetry in particular as "ingenious nonsense" (IN: 15).¹⁶ Arguing against the rigid conventions of autobiography in general, and in particular whether or not the genre can take the form of a poem (or vice versa), Olney suggests that all literary work is essentially autobiographical and claims, in sum, that "autobiography is what a genius makes of it," an opinion that would surely agree with Carlyle (AE: 258). Although

¹⁶ I note Goethe's opinion of mathematics here since it counters Newton's opinion of poetry: Says Goethe: "I conceive mathematics ... noble science as they are ... to be mere nonsense" (GPP: 86).

Sartor is generally considered to be Carlyle's "spiritual biography" we might read his "true Heroic Poem" as the autobiography of a 'spirit' by a genius.

The nineteenth century's critical focus on Sartor as Carlyle's spiritual biography was logical since spiritual biography was the form that autobiography took in the Victorian era. The designation was also appropriate given Carlyle's concern with man's spirituality and his interest in biography, especially given his work on Schiller and expressed desire to write a biography of Goethe. Goethe and the German Romantics are considered the main sources for Sartor for the obvious reason that in Sartor an English Editor is writing the biography of a romantic German philosopher-poet.¹⁷ (I remind readers that Carlyle was a Scottish editor translating foreign works into English for a British reading public¹⁸). Tennyson, who avoids a biographical approach to Sartor, suggests strongly that readers concern themselves with the "spirit" that Carlyle worked in, stressing the point that Sartor is "not a scientific treatise, nor a philosophic one; it is a work of the imagination, an unorthodox novel by an inventive and original mind."¹⁹ It is Carlyle's inventive and original mind, however, that conceived of juxtaposing 'autobiography' with 'biography' to provide the unconventional foundation of Sartor's *whole* artistic structure.

My approach to what Carlyle calls a "satirical extravaganza on Things-in-General" necessitates a close and "extravagant" reading of Sartor. While I consider the

¹⁷ In his essay, "The Hero as Man of Letters" (1840) in Heroes and Hero-Worship (Philadelphia 1842), p. 211, Carlyle declares that Goethe would be his "chosen specimen of the Hero as Literary man," except for the fact that "at present, such is the general state of knowledge about Goethe, it were worse than useless to attempt speaking of him in this case." While I cannot rule out the possibility that Teufelsdröckh represents Goethe, the fact that Carlyle says we have had no such "great heroic ancient man, speaking and keeping silence as an ancient Hero, in the guise of a most modern, high-bred, high-cultivated Man of Letters! ... for the last hundred-and-fifty years" (1680's c. Newton) suggests to me that Newton was his likely choice as subject to immortalize in a 'novel' form that is yet to be repeated or categorized.

¹⁸ Carlyle hints at this peculiarity when he tells us the Clothes Philosophy is "more like a Scottish Haggis" than "an enormous, amorphous Plum-pudding" (SR: "Farewell" 292).

¹⁹ G. B. Tennyson, Sartor Called Resartus, (Princeton 1965), Preface vii, Intro 6.

satirical implications of the work as a whole, my reading is based on the premise that Professor Teufelsdröckh from *Weissnichtwo* ("I know-not-where"), the work's most obvious hero, represents Newton as an enlightened 'Man-in-the-Moon,' and Teufelsdröckh's skeptical English Editor represents, on one significant level, Newton on the path to self-discovery. Although he does not refer to Newton by name in *Sartor*, except to note the "fresh heaven-derived force in Newton" and his need to "rise to still higher points of vision," Carlyle's concern with Newton and the limitations of his earthly vision is hinted at throughout the book (SR: "Organic Filaments" 247).²⁰ What Carlyle attempts to do is only fictionally possible, and that is to mirror and measure the human imagination in an objective world, to render an objective account of the mind that complements Newton's objective account of matter. His revolutionary lesson to Newton on metaphysics teaches all readers the significance of invisible phenomena. For Carlyle the moon is a repository for human memory, and regardless of tradition he imagines the Man-in-the-Moon to be the 'Man' most able to answer both poetic and philosophical questions about the moon. Because the imaginary Man-in-the-Moon lives through time yet no longer wears a mortal "Time-Hat," I suggest that Carlyle designates him autobiographer of men who do. As such the Man-in-the-Moon's story includes all autobiography and biography to date. By juxtaposing Newton with the Man-in-the-Moon, as biographer and autobiographer respectively in *Sartor*, Carlyle controls the dialogue between them and thus becomes the 'real' Newton for the mind. On close reading of *Sartor* we see how Carlyle gradually establishes the Man-in-the-Moon as an

²⁰ Here we have the only direct evidence that Carlyle is anxious about Newton's influence in the Bloomian sense. In order to be credible, Carlyle's challenge to Newton necessitates exemplary standards in his own quest. Accordingly, he has Professor Teufelsdröckh attempt to earn his "spiritual majority" through his Philosophy of Clothes which, again in Bloomian terms, aspires to bring "the Highest ... home to the bosoms of the most Limited," to render with clarity and certainty "what to Plato was but a hallucination, and to Socrates a chimera" (SR: "Pause" 198). In the context of his autobiography Teufelsdröckh will attempt to reveal the significance of woman to the life of man.

invisible, or at least only imaginatively visible, metaphor at the heart of his Philosophy of Clothes, Story of the Time-Hat, or a "correct philosophic Biography of a Man," as well as the key to his satirical style.

The image of the moon is possibly the most subtle thread in Sartor's densely-woven prose. Inasmuch as female power is subtle yet indispensable to the life of man, I argue that Carlyle's moon symbolizes eternal woman. 'She' provides a cosmic focus for Carlyle's transcendentalism -- a point for Teufelsdröckh's editor to reach and a point of departure for Teufelsdröckh's "philosophico-poetic" autobiography.²¹ In this sense Carlyle's moon provides a finite frame of reference for each "Story of the Time-Hat," which story symbolizes the infinite framework of mankind's original and as yet uncompleted story. Man sees only a woman as the finite source of his life -- he cannot see beyond her.²² Because Newton was apparently uninspired by earthly women, and for reasons unknown remained celibate, Carlyle wants Newton to comprehend both the spiritual and sensual indispensability of woman in the life of man.²³ He wants Newton to know that his "Soul" will not "lie blinded, dwarfed, stupefied, almost annihilated!" through carnal knowledge of woman, as Newton implicitly believed (SR: "Helotage" 229).²⁴ As we will see, Carlyle deliberately imparts a sexual aspect to Teufelsdröckh's

²¹ Discussing the aesthetics of memory and the "rhythm of emergent consciousness" behind all man's visible creation, Olney argues for an eternally female force, a voice or "I" such as the Greek Muse behind all language (AE: 253).

²² Teufelsdröckh notes that "what you see, yet cannot see over, is as good as infinite" (SR: "Genesis" 83; Barnes 230).

²³ Teufelsdröckh wonders why this knowledge about woman, this "miserable fraction of Science which our united Mankind, in a wide Universe of Nescience, has acquired" is not "with all diligence imparted to all" (SR: "Helotage" 229). It was Voltaire who first announced publicly "that Newton 'had neither passion nor weakness; he never went near any woman'" (IN: 467; NH: 104,05). Although I disagree with it, I am aware of the general critical opinion that Carlyle's own marriage was never consummated.

²⁴ In his essay on Burns (New York 1898), Carlyle writes: "seldom is a life morally wrecked but the grand cause lies in some internal mal-arrangement, some want less of good fortune than

philosophy in order to seduce a skeptical Newton into studying the irrational "poetico" side of his rational "philosophico" knowledge.

As the Man-in-the-Moon, Teufelsdröckh is Carlyle's scientist for the mind, a 'Seer' of astronomical proportions. He exemplifies the spirituality of every poet who has lived, died and returned to a womblike 'poetic soul' or what Teufelsdröckh calls "a living, literal *Communion of Saints*, wide as the World itself, and as the History of the World" (SR: "Organic Filaments" 247). My metaphor evokes the Freudian idea of an instinctual death wish to return to the womb.²⁵ While that womb lies beyond man's earthly reach, he knows that he once existed there. Metaphorically speaking, the womb is the only place where 'life' out from under Carlyle's "Time-Hat" occurs and a return to this place is the death man desires as long as he lives on earth. Figuratively speaking, life viewed from the 'eyes' of death provides a timeless and omniscient vantage of both states of existence. Chris Vanden Bossche supports this view when she argues that Carlyle has a "totalizing vision" of history and that he idealizes enclosure as the "comforting familial womb and the house his father built."²⁶ Within Carlyle's all-encompassing vision of man, however, he has a particular "totalizing vision" of a brilliant Newton, limited on earth by skepticism, evolving into an exemplary poetic soul. It is this spectrum that allows Carlyle to re-present the two sides of Newton together as both Teufelsdröckh and Teufelsdröckh's skeptical Editor. As Newton's

of good guidance. Nature fashions no creature without implanting in it the strength needful for its action and duration; least of all does she so neglect her masterpiece and darling, the poetic "soul" (*Essay on Burns* 119). This passage relates to Newton insofar as Carlyle wants to see Newton, as one of Nature's more extraordinary "creatures," endure and if, for whatever "internal mal-arrangement" Newton chose not to endure or procreate, Carlyle will have him poetically immortalized, indeed will guide him to poetic immortality.

²⁵ Sigmund Freud, *Beyond the Pleasure Principle* (London 1961), pp. 31,32.

²⁶ "Desire and Deferral of Closure in Carlyle's *Sartor Resartus* and *The French Revolution*" in *Journal of Narrative Technique* No.16 (Winter 1986), pp. 72,73.

metaphysical alter-ego Teufelsdröckh provides the "fresh heaven-derived force" that attracts Newton's earthbound other self.

Carlyle's documented interest in a "natural supernatural" communication seems to anticipate his discussion with Newton about the mystery of man's being, and eventually the more sophisticated idea of artistically mediating the same discussion between Newton and the Man-in-the-Moon.²⁷ Carlyle's concern for Newton's afterlife is part and parcel with his sympathetic view of Newton's frustrated earthly life. Like a kindred spirit Carlyle worries that in death "the lamp of [Newton's] soul should go out; that no ray of heavenly, or even of earthly knowledge, should visit him; but only, in the haggard darkness, like two spectres, Fear [of Woman] and Indignation [toward Her] bear him company" (SR: "Helotage" 229). Within a very vague and very indirect sexually suggestive paragraph Professor Teufelsdröckh bemoans the tragedy that "one Man [should] die ignorant who had capacity for Knowledge" (SR: "Helotage" 229).²⁸ By placing Newton metaphorically in the moon, Carlyle ensures Newton's eternal welfare and averts the tragedy of an incomplete education in a man whose capacity for Knowledge was greater than that of most men. As an "earthly Craftsman" as well as an "inspired Thinker," Newton deserves "Light ... Guidance, Freedom, Immortality" (SR: "Helotage" 228).

²⁷ In 1826, the same year he considered writing "something about *Science*" for a Literary Annual Register, Carlyle writes: "Two infants reasoning in the womb about the nature of *this* life might be no "unhandsome" type of two men reasoning here about the life that is to come" (IN: 68). Much earlier (1823) in a letter to Jane about thoughts travelling through "space and time," Carlyle informs her that "being dead we yet speak." The Love Letters of Thomas Carlyle and Jane Welsh, ed. Alexander Carlyle (London 1909), I, p. 138.

²⁸ Although the "Helotage" chapter is devoted to Teufelsdröckh's interpretation of Hofrath Heuschrecke's Malthusian Tract on population control, we must remember that we are reading it through the eyes of Teufelsdröckh's naive Editor, whom Carlyle sees enslaved in a sensual society. The Malthusian discussion is intended to warn readers -- particularly Newton I argue -- about spiritual bankruptcy in the event of overpopulation. I intend to clarify Hofrath Heuschrecke's enigmatic nature in Chapter III.

According to Carlyle's philosophy which holds that all man does is divinely inspired by an "unseen Author," Newton was inspired not only to think about the moon but to craft the *first mirror telescope* to study it with (IN: 165). Together with his telescope Newton then brought physical knowledge of the moon closer to man than ever before, yet refused to consider its metaphysical or poetic qualities as Carlyle now urges him to do. Teufelsdröckh explains: "Our Works are the mirror wherein the spirit first sees its natural lineaments" -- "only our Works can render articulate" a "certain inarticulate Self-consciousness [that] dwells dimly within us" (SR: "The Everlasting No" 162). In relation to telescopes, Carlyle's "Work," essentially Teufelsdröckh's Clothes Philosophy, requires Newton to use an 'inner telescope' to see an inspired picture of the moon, of man miraculously enfolded in woman. Newton will thereby see "the Picture" of life.

The story of Newton as "perplexed dreamer" is now legend. Following the publication of *Principia*, Newton's written Work which documented his theory of the moon's motions, "the students at Cambridge said, as [Newton] passed by, there goes the man who has writ a book that neither he nor any one else understands" (IN: 133). Of course Newton understood the book he had written. But in Carlyle's view Newton did not understand the magnitude of his own role as a God-inspired man in writing the book, as Carlyle does. The anecdote, however, is just the sort of earthbound story that endears Carlyle to Newton's exclusive 'head-in-the-clouds' existence. It has the gossipy "ever humano-anecdotal" quality of "our whole conversation" between this world and the next, which we are told is "little or nothing else but Biography or Auto-Biography" (SR: "Prospective" 75,76). By publishing his own conversation with *the* artist, Carlyle 'advances' Newton's knowledge about the moon and illumines the source of both men's dreams. Essentially he gives Newton the opportunity to understand himself and his life's work as art. As Newton's guide Carlyle advises him to

Pierce through the Time-element, glance into the Eternal. Believe what thou findest written in the sanctuaries of man's Soul, even as all Thinkers, in all ages, have devoutly read it there: that Time and Space are not God, but creations of God; that with God as it is a universal HERE, so is it an everlasting NOW" (SR: "Natural Supernaturalism" 261).

Here we have evidence of the "Conversation" just discussed. As author of the dialogue Carlyle articulates the flux of spirit between life and death, evoking in particular the "inarticulate Self-consciousness" that he saw dwelling dimly within Newton on earth. In sum Carlyle challenges Newton, the man most apparently "like a man dropped ~~from~~ from the Moon," to retell his story about the moon from the vantage point of one who has returned 'from whence he was dropped' (SR: "Characteristics" 29).

Ian Campbell, discussing Carlyle's admiration for Newton, suggests that Carlyle's own "spiritual awakening" occurred while studying "mathematics ... particularly geometry" under John Leslie at Edinburgh.²⁹ Campbell sees Carlyle's study of Newton "till long past midnight" -- of "differential calculi, secondary quadratics, and systems of pneumatics, ontology, theology and cosmogony" reflected in Carlyle's earlier unfinished novel, Wotton Reinfred (1827), progenitor to Sartor Resartus and Professor Teufelsdröckh:

Of his progress in the learned languages he himself made little account; nor in metaphysics did he find any light, but, rather, doubt or darkness; if he talked of the matter it was in words of art, and his own honest nature whispered to him the while that they were only words. Mathematics and the kindred sciences, at once occupying and satisfying his logical faculty, took much deeper hold of him; nay, by degrees, as he felt his own independent progress, almost alienated him for a long season from all other studies. 'Is not truth', said he, 'the pearl of great price, and where shall we find it but here?' He gloried to track the footsteps of the mighty Newton, and in the thought that he could say to himself: Thou, even thou, art privileged to look from his high eminence, and to behold with thy own eyes the order of that stupendous fabric (TC: 22,23 - emphasis mine).

Campbell suggests that in this passage Carlyle "is trying to express the sudden liberation of the spirit, coupled with a feeling of pride at self-recognition, which was felt when he

²⁹ Ian Campbell, Thomas Carlyle (London 1974), p. 21. Campbell credits Leslie's particular style of teaching, his "short-cut ways" of blending mathematics and philosophy, with launching Carlyle's metaphysical speculations on the universe.

first achieved some understanding of the "higher mathematics" (TC: 23). The tension between science and literature is clearly evidenced, but more important to my thesis is evidence of Carlyle's early artistic naivete, and by this I mean the desire to incorporate his hero so undisguisedly in a creative work.

In Sartor Newton's "higher mathematics" may be represented by the "higher circles" that Professor Teufelsdröckh (the Man-in-the-Moon) was "unversed in," as well as the "higher walks of Literature" that his Editor had not reached but hopefully would through translating the Professor's Clothes Philosophy (SR: "Characteristics" 29):

the Professor look[s] in men's faces with a strange impartiality, a strange scientific freedom; like a man unversed in the higher circles, like a man dropped thither from the Moon In our wild Seer ... there is an untutored energy, a silent, as it were unconscious, strength, which, except in the higher walks of Literature, must be rare. Many a deep glance, and often with unspeakable precision, has he cast into mysterious Nature, and the still more mysterious Life of Man (SR: "Characteristics" 29,30).

While the "higher walks of Literature" imply poetry they certainly refer also to Carlyle's own transcendental experience at Leith Walk, which heralded his self-professed "newbirth" and is known to have inspired the genesis of Sartor. Carlyle's point is that poetic heights are not easily reached by mechanical earthbound minds, and Professor Teufelsdröckh exemplifies a philosopher-poet who has travelled far enough spiritually to know true inspiration. In Sartor we are told: "Our Professor, like other Mystics, whether delirious or inspired, gives an Editor enough to do. Ever higher and dizzier are the heights he leads us to; more piercing, all-comprehending, all-confounding are his views and glances" (SR: "Prospective" 71).

In order to appreciate the strength of Carlyle's interest in Newton, and the degree to which he finds British editors unimaginative, we must consider the circumstances of his life while working on Sartor. I refer in particular to the unexplored relationship between Carlyle and David Brewster during the years 1821-31 when Brewster,

Newton's first major biographer, was Carlyle's first journalistic employer.³⁰ Coincidentally, Brewster was writing Newton's memoirs while Carlyle was writing Sartor and both books were published in 1831.³¹ During this time Carlyle was also writing hack articles for Brewster's Edinburgh Encyclopaedia. When Brewster gave Carlyle the letters M-P to review for the Encyclopaedia, he did not give him Newton, though Carlyle's interest in Newton should have been obvious to Brewster (CPP: 76). Brewster's work on Newton was considered a poor example of biography and I can only speculate, on the basis of textual evidence in Sartor, that Brewster's work was recognizably poor to Carlyle as they worked side by side, and may have provoked Carlyle's attempt to better such a work with a "correct Philosophic Biography" of Newton.³² Referring back to Carlyle's essay on biography, especially to his opinion that biography as literature is far removed from art, I note that he makes no reference to Brewster's biography of Newton. He does, however, seem to refer to Newton's life by describing the spiritual hopelessness in "turning over those old interminable Chronicles" as Newton did relentlessly in a futile effort to document man's genealogy ("Biography": 67; LN:609,662,615). Two failings come to mind here: first, Brewster's biography is lacking as a literary work of art, and secondly, Newton's life lacked artistic direction. I will discuss what I see as a very real rivalry between

³⁰Brewster actually wrote two biographies of Newton, the first in 1831, a major consolidation of encyclopaedic information, and the second in 1855, a reworking of the first but enhanced with more personal memorabilia gained as a result of Brewster being allowed to view Newton's private papers.

³¹ Carlyle's working relationship with Brewster is discussed briefly by Tennyson in Sartor Called Resartus, pp. 26-28. Tennyson does not mention the fact that Brewster was writing Newton's biography while Carlyle wrote Sartor; his point in discussing the Carlyle-Brewster relationship is to explain Carlyle's eclectic fund of knowledge and the many scientific references in his work.

³²Carlyle had, after all, recently written The Life of Schiller (1825) and was acclaimed a master of the genre.

Carlyle and Brewster in my conclusion, but my point for the moment is that through Sartor Carlyle gives Newton the chance to become inspired by studying human history in a poetical art form, the autobiography of the Man-in-the-Moon.

Carlyle's technique is profoundly philosophical. He knows that as a biographer of the Man-in-the-Moon, Newton must document what can only exist in his imagination, yet because he is a scientist he will approach the job objectively. As a student of 'sensible' objects only, Newton the spiritual skeptic is challenged to recognize the invisible influence of divine inspiration in the autobiography he is editing. The Man-in-the-Moon's autobiography unfolds in the form of an editor's translation, as all biography essentially does. His autobiographical scraps are placed in the hands of an English-speaking Editor. The experience of the subject's 'I' (from "know-not-where") can then be interpreted by a sympathetic but objective 'I' (namely Newton). Theoretically, this imaginative process allows Newton to comprehend on one level that it is the inspired living self, the "Divine ME," which is responsible for the level of his work or "Art," while on another level Newton remains the skeptical scientist that he was in real life.³³ Technically, Carlyle establishes an Editor's role as one of self-editing even as he persuades an Isaac Newton that an inspired invisible self is most *apparently* responsible for visible phenomena.

Carlyle cannot of course alter Newton's skepticism or the course of his after-life one way or another except imaginatively. Carlyle's own skepticism toward Newton stems from the fact that although he was producing the greatest scientific works, Newton remained unimpressed with the fact that mankind, especially himself, had the miraculous ability to create these works. Reading Teufelsdröckh's autobiography

³³ Carlyle's gesture is significant insofar as Newton left no creative memoir (writing Principia was not his idea and was almost forced from him), and insofar as Newton denied his own genius. Newton claimed that "if he had any genius not common to other men it lay in the fact that when an idea first came to him, he pondered over it incessantly until its final results became apparent," which is how Carlyle appears to have worked through Sartor (IN: 42).

through Sartor, Newton the skeptical Editor realizes that Professor Teufelsdröckh was once a skeptic like himself. The Editor translates: "Disbelieving all things, the poor youth had never learned to believe in himself" (SR: "Romance" 142). While Harrold (1837) footnotes this quotation as being "of course definitely autobiographical" of Carlyle, I add that it is just as "definitely biographical" of Newton insofar as both Carlyle and Newton were self-doubting youths (SR: 142, f2).

Ultimately I propose that what Samuel Johnson was to Boswell, Newton was to Carlyle, that Sartor articulates Carlyle's love for a truly god-inspired man. Carlyle claims that "a loving Heart is the beginning of all Knowledge," and constitutes the one "grand, invaluable secret" of all man's powers including his genius ("Biography" 76). In Carlyle's opinion, Boswell's biography of Johnson remains England's singular genuine biography ("Biography" 76). While Carlyle refers to "few genuinely good *Biographies*" throughout literary history ("those chiefly of very ancient date"), he refers to Boswell's Johnson as England's singular "good Biography," and I again note here he makes no mention of Brewster's biography of Newton ("Biography" 79). History, says Carlyle, "which should be 'the essence of innumerable Biographies,' will tell us, question it as we like, less than one genuine Biography may do, pleasantly, and of its own accord!" ("Boswell's Life of Johnson" 19). Carlyle's low opinion about the quality of "innumerable Biographies" reflects his belief that biography in general will never illuminate man's perception of history. Through Sartor, then, Carlyle assumes another artistic challenge by attempting to write as good a biography as Boswell did by capturing Newton's unique genius, his "grand, invaluable secret." He will thus advance, and arguably enhance, the "Volume of universal History" to include both himself and Newton as great Men-of-Letters.³⁴

³⁴ Linda Peterson notes Professor Teufelsdröckh's ironic position in Sartor -- that even as Teufelsdröckh is the autobiographer he rejects "these Autobiographical times of ours." See "Carlyle's Sartor Resartus: The Necessity of Reconstruction" in Victorian Autobiography: The

To the extent that he has Newton writing his own story, albeit fictitiously, Carlyle refutes Johnson's suggestion that a man's life is best written by himself.³⁵ Carlyle also takes his own advice and brings a "likeness" of his subject, or "the very image thereof in a clear mirror," to the British reading public (IN: 79; "Boswell's Life of Johnson" 12). By describing Newton as he does, as both the Man-in-the-Moon and his mechanical English Editor, Carlyle presents readers of Sartor with "the best possible resemblance of [Newton's] Reality" ("Boswell's Life" 12).³⁶ Discussing the dearth of Newton's portraits, biographer More points out that most do not convey a reality and are so "evidently idealised to express the artist's conception of an heroic thinker that one gets but a vague impression of the man." As an *exception* More describes, without a hint of irony, a realistic profile of Newton which sounds like our traditional concept of the Man-in-the-Moon: "the forehead high and receding ... a most

Tradition of Self-Interpretation (Yale 1986). p. 32. It is important to note that neither Teufelsdröckh nor the Editor is rejecting "these Autobiographical times of ours," but rather the Editor is unsure about Teufelsdröckh's attitude toward autobiography. He wonders "whether [Teufelsdröckh] is laughing in his sleeve at these Autobiographical times of our, or writing from the abundance of his own fond ineptitude" (SR: "Idyllic" 94). Teufelsdröckh is merely contemplating [from the idyllic viewpoint of his childhood] the "duty of all men, especially of all philosophers" to "note-down" their own histories. As his vision expands he concludes that only as each man documents the events or circumstances of his life does history unfold itself (SR: "Idyllic" 95). In response to Peterson I propose that what Teufelsdröckh appears to be questioning, on the basis of his observations of "many a German Autobiographer," is the revelation of truth in autobiography (SR: "Idyllic" 94). What Carlyle doubts is the possibility of accurate self-documentation of man's life in general, and the perceived self-importance of German philosophers in particular. Carlyle notes in 1830: "I have now almost done with the Germans. Having seized their opinions, I must turn me to inquire *how* true are they? That truth is in them, no lover of Truth will doubt: but how much?" (IN: 150). This consideration is noted just before Carlyle concludes he is "Mind" on the basis of his "Mighty glimpses into the spiritual Universe" (IN: 150).

³⁵ The Life of Samuel Johnson (London 1931), p. 5.

³⁶ Boswell adds that "had [Johnson] employed in the preservation of his own history, that clearness of narration and elegance of language in which he has embalmed so many eminent persons, the world would probably have had the most perfect example of biography that was ever exhibited" (Boswell's Life 5). Carlyle appreciates that Newton deliberately employed obscurity in the preservation of his own history insofar as writing was concerned which is largely why Carlyle does the same. Both Newton's and Carlyle's styles will be discussed.

extraordinarily long and unbroken curve from the chin to the crown of the head. The nose is long, thin and prominent, and the line of the bridge is wavy" (LN: 126,27). Newton's family described him as having a "lively and piercing eye" and portraying a "penetrating sagacity" (LN: 127). Both descriptions would likely be familiar to Carlyle whose description of Professor Teufelsdröckh, though stylized, captures the "penetrating sagacity." The Professor's look is

probably the gravest ever seen: yet it is not of that cast-iron gravity ... but rather the gravity as of some silent, high-encircled mountain-pool, perhaps the crater of an extinct volcano; into whose black deeps you fear to gaze: those eyes, those lights that sparkle in it, may indeed be reflexes of the heavenly Stars, but perhaps also glances from the region of Nether Fire! (SR: "Characteristics" 32).

On the strength of Carlyle's artistry and our own close reading we cannot help but see a connection between Professor Teufelsdröckh, the Man-in-the-Moon and Newton. As Boswell made Johnson, Carlyle makes the *whole* of Newton "a living mirror, wherein the wonders of this ever-wonderful Universe are, in their true light (which is ever a magical, miraculous one) represented, and reflected back on us" ("Biography" 76).

Carlyle states that an artist should aim to be "*memorable*." While he considers Boswell a memorable artist for immortalizing Johnson as he did, Carlyle considers Johnson memorable only because of Boswell's inspired work ("Biography" 76; "Boswell's Life" 14).³⁷ Carlyle's task is somewhat different. He wants to make both himself and Newton memorable as artists, but must and does pay tribute to his hero more discretely than Boswell (for example, we do not read Carlyle's Life of Newton nor the more provocative Carlyle's Life of the Man-in-the-Moon). Indirectly Carlyle supersedes Boswell, Johnson, and by a very important implication Johnson's Dictionary. Here I refer to Carlyle's determined effort to defy the boundaries of the English language

³⁷ Carlyle suggests that "all Johnson's own Writings, laborious and in their kind genuine above most, stand on a quite inferior level to [Boswell's biography]; already, indeed, they are becoming obsolete for this generation; and for some future generation may be valuable chiefly as Prolegomena and expository Scholia to this Johnsoniad of Boswell" ("Boswell's Life" 14).

as established by Johnson's historic work.³⁸ This is an example of Carlyle's subtle artistry in combining ideas. His clear disregard for Johnsonian English largely defines his artistic style which camouflages his intention to write a biography of Newton, and as good a biography as Boswell's. Following his own guidelines Carlyle writes as genuine a biography as Boswell by describing Newton as covertly as Newton lived. By respecting Newton's lifelong desire to retain his privacy, Carlyle's work exemplifies a discretion that Newton would appreciate. Ironically, however, it seems that Carlyle will be most remembered for his flagrant violation of the English language, and not as literature's most artistic biographer.

Newton, as we know, showed no inclination to leave a written memoir, and is thought to have burned his most personal papers shortly before he died (IN: 665).³⁹ (Carlyle was also against writing his own biography or having it written, a fact which adds to the mystery and speculation surrounding autobiographical implications of

³⁸ Anne Mellor agrees that Sartor reveals Carlyle's personal frustration with the limitations of language, and argues that silence is his choice of tool for comprehending the "divine Me." See "Carlyle's Sartor Resartus: A Self-Consuming Artifact" in English Romantic Irony (Cambridge, Mass. 1980), p. 129. I add that both Newton and Carlyle would prefer silence for comprehending the "divine ME" except, as mentioned, Newton did not appear to be concerned with comprehending his which is why Carlyle is concerned with Newton. It was Carlyle's silent communication with Newton, I believe, that compelled him to write this Newtonian memoir in such a secret code.

³⁹ More notes that "One of the most puzzling traits of [Newton's] character was his seemingly total lack of desire to disclose to others the fruits of his meditation" (IN: 42). Newton writes to a colleague: "I see not what there is desirable in public esteem, were I able to acquire and maintain it. It would perhaps increase my acquaintance, the thing which I chiefly study to decline" (IN: "Letter to Collins" 142). My own apparent overdependence on Louis Trenchard More's Isaac Newton (1934) is due to lack of biography on Newton up until More, with all due respect to Brewster's work. Also, biographers since More (notably Richard Westfall, Never at Rest 1980 and Frank Manuel, Portrait of Isaac Newton 1968) had access to information Carlyle would probably not have had, a point to be discussed in Chapter III. Although I read the biographies mentioned, for cross-referencing and thereby cross-checking More, I turn to Derek Gjertsen's The Newton Handbook (London 1986), which appears to have incorporated them all. Insofar as Frank Manuel's book largely ignores Newton's scientific work in favour of a Freudian 'psycho-history' on Newton, I note that Carlyle's Sartor, without sacrificing scientific details of Newton's work, indicates a pre-Freudian Oedipal understanding of Newton's life story.

Sartor). Newton's essence, however, like that of every great man in his own age, remains immortal in spite of himself, and in Carlyle's view: "Well is [a Great Man's] Life worth writing, worth interpreting; and ever, in the new dialect of new times, of re-writing, and reinterpreting" ("Boswell's Life" 25). This raises the question of standards, of who is and who is not worth immortalizing in a work of art. Worthy of Carlyle's effort apparently are the Man-in-the-Moon, and Newton -- the Man-on-Earth most distinguished for his knowledge about the moon.⁴⁰

It must be appreciated that in his apotheosis Newton was heralded as being incomparable to other men. Though human, he was thought to be especially selected by God to divulge the laws of Nature. Men argued that "his virtues proved him a saint and his discoveries might well pass for miracles," and that if he had lived "in Greece and Rome [he] would have been ranked among the gods." In his prefatory 'Ode to Newton' in the first edition of Principia, Halley writes of Newton: "Nearer the gods no mortal may approach." David Hume considered Newton to be "the greatest and rarest genius that ever arose for the ornament and instruction of the species" (LN: 44,45). After his death, Newton was eulogized variously as the "first of men," "our philosophic sun," and the "beloved of Heaven" (NH: 434). Goethe labelled 1642, the year of Newton's birth, the "Christmas of the Modern Age."⁴¹

If the 'being' of Newton overawed the most educated, the 'birth,' as it were, of his Principia in 1687 was also an unprecedented event that could be seen, without

⁴⁰ Carlyle notes that to the "general eye" Boswell's "mighty 'constellation,' or sun [i.e. Johnson], round whom [Boswell] as satellite, observantly gyrated, was ... but a huge ill-snuffed tallow-light, and [Boswell] a weak night-moth, circling foolishly, dangerously about it, not knowing what he wanted" ("Boswell's Life" 19). My point is that Carlyle knows exactly what he is doing in Sartor. is thinking and writing in cosmic terms, and not by any public estimation could either Newton or the Man-in-the-Moon be considered "a huge ill-snuffed tallow-light."

⁴¹ The Scientific Background to Modern Philosophy, ed. Michael Matthews (Cambridge, Mass. 1989), p. 133.

exaggeration, as akin to the 'second coming.' More describes it as "something extraordinary, something amazing ... even the most brilliant mathematicians were unable to comprehend it!" (IN: 234). He reports "the world was amazed with the realization that the new science, begun by Copernicus, had been brought to fruition, and that a new philosophy of life had been born ... It was at once recognised that here was a work of such transcendent quality ... that no living persons could challenge its originality or power" (IN: 287). Implicitly we see Carlyle rising to meet this challenge when he asks himself: "are the true Heroic Poems of these times to be written with the *ink of Science?* ... I partly begin to surmise so" (IN: 187,88). Following Newton, Carlyle adds the poetical counterpart to Newton's mechanically inclined philosophy on the moon. By incorporating the spiritual which is infinite, with the sensual which is finite, Sartor manifests Carlyle's "feeling" of "what a *Whole* is" -- "how an individual Delineation may be 'informed with the Infinite'; may appear hanging in the universe of Time & Space" (IN: 187).⁴²

Discussing the issue of copyrighting, and despairing of the many "facsimiles" throughout history, most notably men and books, Carlyle observes that "copy-rights and copy-wrongs" are a particular problem of the Hero as "Man-of-Letters" (HHW: 207). Finding "one Life ... too servilely the copy of another" Carlyle offers Newton as an exemplary exception -- an original Hero whom all men might wish to copy, or as Carlyle says in 1832, "*imitate:*"

To imitate! which of us all can measure the significance that lies in that one word? By virtue of which the infant Man, born at Woolsthorpe, grows up not to be a hairy Savage, and chewer of Acorns, but an Isaac Newton and Discoverer of

⁴² By contrasting Newton's necessarily transient analysis of the moon's motions with the Man-in-the-Moon's timeless and cosmic experience, Carlyle dramatizes the concept of skepticism and the problems in distinguishing fact from fiction, of establishing arbitrary 'truths' or "fundamental laws based on induction," as Newton did. As a Newton for the mind, Carlyle challenges the acceptance of scientific evidence, including the written word. As a satire Sartor parodies the possible misinterpretations that result from erroneous translating and editing, a 'metaphysical' problem of the mind that Carlyle himself as a translator-editor understands.

Solar Systems! -- Thus both in a celestial and terrestrial sense are we a *Flock*, such as there is no other: nay looking away from the base and ludicrous to the sublime and sacred side of the matter (since in every matter there are two sides), have not we also a SHEPHERD, "if we will but hear his voice"? Of these stupid multitudes there is no one but has an immortal Soul within him; a reflex and living image of God's whole Universe: strangely, from its dim environment, the light of the Highest looks through him; -- for which reason, indeed, it is that we claim a brotherhood with him, and so love to know his History, and come into clearer and clearer union with all that he feels, and says, and does ("Boswell's Life" 22,23,24).

This passage clearly reveals Newton to be Carlyle's idea of a "celestial and terrestrial SHEPHERD." The phrase "infant Man, born at Woolsthorpe" also carries New Testament overtones of God's only begotten son, the "infant Jesus, born at Bethlehem." Significantly, Newton was born on December 25th, 1642 years after Jesus. While such a suggestion may strike some readers as blasphemous, this passage must be seen as Carlyle's attempt to articulate a scientific fact about the Western world's most spiritualized leader: that "Jesus of Nazareth," as Professor Teufelsdröckh realistically refers to him, was at least on one level no more or no less a mortal man than Sir Isaac Newton of Woolsthorpe, and that ultimately both men, like all men, return to *Weissnichts* from whence they came (SR: "Symbols" 225). Discussing the symbols of "Christianity and Christendom," Teufelsdröckh adds that like "all terrestrial garments [they] wax old," and he clearly believes their "significance will ever demand to be anew inquired into, and *anew made manifest*" (SR: "Symbols" 225 emphasis mine).

For Carlyle, Newton's voice clearly has a spirituality that must be heard, and yet for reasons unknown perhaps even to Newton, is not being publicized:

For the plain truth ... is that minds are opposed to minds in quite a different way [than mechanically]; and *one* man that has a higher wisdom, hitherto unknown spiritual Truth in him, is stronger, not than ten men that have it not, or ten thousand, but than *all* men that have it not; and stands among them with a quite ethereal, angelic power, as with a sword out of Heaven's own armory, sky-tempered, which no buckler, and no tower of brass, will finally withstand ("Signs of the Times" 47,48).

Carlyle's revelation of Newton's "hitherto unknown spiritual Truth," emanates textually through Professor Teufelsdröckh's "remarkable Treatise." Newton is the "*one* man" who has a higher wisdom than all other men who "have it not," and Carlyle is the one man who

is going to reveal it philosophico-poetically because his mind takes a spiritual turn from Newton's. Again, Newton did not appear to recognize his own genius or the inspired self in his work. Discussing Principia and its power to reinforce man's belief in divinity, Newton claimed that "if I have done the public any service this way, it is due to nothing but industry and patient thought" (IN: 377). For Newton, Man was a "miserable reptile," a "puny, irrelevant spectator" in the ground-scheme of the universe (Metaphysical Foundations: 238).⁴³ Nevertheless, in Carlyle's view Newton has earned a divine trust, and as a mouthpiece for the divine should be listened to.

Admiringly, Carlyle observes that "No Newton, by *silent* meditation, now discovers the system of the world from the falling of an apple" (SR: 13; "Signs of the Times" 36 - emphasis mine). Carlyle's own ears were unusually sensitive, and to be in silence, as every student of Carlyle knows, was imperative to his working conditions. He evidently hears Newton (by reading his works) only to find that Newton had no desire to be read or heard. Not only did he have no desire to publish Principia but he kept the main scientific principles in it, including the apple story and his theory of gravity, to himself for twenty-one years (IN: 286,89).⁴⁴ Newton lived a solitary life and declined to share whatever spiritual views on life he might have had. Carlyle appreciates the irony that Newton, so scientifically 'worldly,' had no desire to impress other men and with rare exceptions was not impressed by other men (IN: 42,296,297,393). In spite of his voluminous works, which to a point speak for him, Newton could be described as a silent individual, and therefore difficult to hear. This returns us to Carlyle's quiet "SHEPHERD," who is capable of guiding us all "if we will but hear his voice" (HHW: 207).

⁴³Cotes' Preface to Principia in Motte's Translation of Principia Revised. ed. Florian Cajori (Berkeley 1934), p. xxxii.

⁴⁴ Sir Edmund Halley is given direct credit for the publication of the First Edition of Principia.

When we are told in Sartor that "who or what" the Editor may be "must remain conjectural," but that undoubtedly he is "a Spirit addressing Spirits," we understand that Carlyle intends a metaphysical message from the Editor to sensitive listeners -- "whoso hath ears, let him hear," advises the narrator (SE: "Editorial Difficulties" 13). My argument that the Editor's voice is Newton's voice "publishing tidings of the Philosophy of Clothes," corresponds with the idea that although the Editor is a spiritually unenlightened character at the beginning of Sartor, he is finally also a "Spirit addressing Spirits" insofar as he is Newton's resurrected spirit addressing the spirits of British readers, and appealing to their sympathetic ears. In my view Carlyle singles Newton out as God's closest representative in man, and just as clearly singles out himself, as Newton's disciple, to be the 'diviner' of this revelation. His reverence for Newton appears to be like "the old reverent feeling of Discipleship (such as brought men from far countries, with rich gifts, and prostrate soul, to the feet of the Prophets)," and such as brought Boswell metaphorically to the feet of Johnson ("Boswell's Life" 9).

II NEWTON SUBSTANTIATED in SARTOR RESARTUS

Newton's enormous influence on Carlyle was made clear in Samuel Gill Barnes' 1953 doctoral thesis, "Formula for Faith: The Newtonian Pattern for Transcendentalism in Sartor Resartus." Through extensive and specific similarities drawn between Sartor and Principia, Barnes claims that Carlyle,

consciously or subconsciously, was attempting to be a Newton of the Mind, that he was applying Transcendentalism to the "appearance of things" in a grand development from Newton's original delineation of the limits of Absolute and Relative Time and Space (Barnes 123).

Barnes' work establishes in almost step-by-step progression the close analogy between Sartor and Principia, and the strong affinity between the books' two authors. Barnes acknowledges Carlyle's debt to the German Romantics and metaphysicians (thereby including Carlyle's beloved Goethe) by devoting a chapter to "The Kantian Link" between Newton and Carlyle, suggesting that the German metaphysicians themselves emerged from Newton through Kant (Barnes 50-88).¹ His chapter "The Newtonian Pattern in Sartor Resartus" is supplemented by a 22-page Appendix of passages from Sartor that in Barnes's view are "suspect of Newtonian influence or coloration in thought, dialectic, and mode of expression." Given the analogies Barnes finds between Sartor and Principia, it is ironic that he does not allude to Newton being "like a Man dropped thither from the Moon" (SR: "Characteristics" 29).

Although Barnes does not account for the disparity between the minds of Teufelsdröckh and his English Editor, his Appendix distinguishes Teufelsdröckh's words by offsetting them with quotation marks. As I have argued, this distinction is extremely important to my thesis since it constitutes the fundamental difference between Carlyle

¹ Barnes establishes chronologically "Kant's borrowing from Newton, the post-Kantian interpretations of Kant, and then Carlyle's borrowing from both Kant and Kant's interpreters." He notes that Kant used Newton's method and concepts chiefly in the opening sections of his Critique of Pure Reason, and that "Carlyle's direct acquaintance with Kant seems rather certainly limited to the same opening sections of the Critique" (Barnes 51).

and Newton in terms of their spiritual beliefs, as well as the dichotomy between Newton's two selves. This difference has come to be considered evidence of Carlyle's own divided consciousness, of his simultaneous enthusiasm for and skepticism about Teufelsdröckh's Clothes Philosophy.² I argue that it is the oneness of Carlyle's consciousness that gives him the strength to challenge Newton's philosophy. While the "grand development" of Carlyle's metaphysics is the main focus of Barnes's work, there is no indication in his thesis that Carlyle is teaching Newton about metaphysical advancements (i.e. the mechanics of the mind) to Newton's own work (Barnes 1,127).

Barnes's research suggests that he is the first to make the connection between Carlyle and Newton, and my own research discloses no subsequent commentary on Barnes's work. I find nothing to complement, amplify, detract from, or contradict his main argument, that Carlyle had the highest regard for Newton's mind, and that Newton's scientific principles provide a strong basis for much of Carlyle's work, in particular Sartor Resartus. While Barnes acknowledges the difficulty of tracing any "Carlylean" idea to a single source, he suggests that Chapters II-IV of Sartor -- "Editorial Difficulties," "Reminiscences," and "Characteristics," bear a Newtonian influence beyond "any other that has so far been traced in Carlyle" (Barnes 126,27). My own quotations from Sartor generally correspond with Barnes's, and his Appendix includes what I consider to be Sartor's primary theme:

What changes are wrought, not by Time, yet in Time! For not Mankind only, but all that Mankind does or beholds, is in continual growth, re-gensis and self-perfecting vitality. Cast forth thy Act, thy Word, into the ever-living, ever-working Universe: it is a seed-grain that cannot die (SR: "The World in Clothes" 40; Barnes 227).

² Tennyson, SCR pp. 180,178,183,175; M. H. Abrams, Natural Supernaturalism (New York 1971), pp. 130,133; George Levine, The Boundaries of Fiction (Princeton 1968), 55-7,30,54-5; Mellor, English Romantic Irony pp. 113,120-1; and Janice Haney, "Shadow-Hunting": Romantic Irony, Sartor Resartus, and Victorian Romanticism," Studies in Romanticism, 17 (1978), pp. 319-20, 325-6,328-9, are among theorists who discuss but ultimately do not explain this dichotomy, particularly why the Editor is skeptical and critical of Professor Teufelsdröckh.

In less poetic words, Professor Teufelsdröckh states the essentially same significance of a pebble: "It is a mathematical fact that the casting of this pebble from my hand alters the centre of gravity of the Universe" (SR: "Organic Filaments" 246). This quotation is attributed to Newton as early as Harrold's edition of Sartor, although Harrold made little of Newton's influence on Carlyle, except to acknowledge Carlyle's comprehension of Newton's work. On close reading it is difficult to find any text in Sartor not relating to Newton, either directly or obliquely. Conversely, it is hard to find any text relating to Newton which does not inform Sartor (Barnes 159).

Barnes notes that "the close of Book II" in Sartor states "the heart of [Carlyle's] message," which for Barnes is "a complete revelation that Carlyle was attempting to be a "Newton of the Mind"" (Barnes 127). Referring to Teufelsdröckh's autobiography (as Sartor Book II), Vanden Bossche notes the ironic anomaly in his life cycle, that Teufelsdröckh's "Genesis" becomes an "Exodus" before his "genesis as an author" actually seems to occur at the end of his autobiography as he echoes the Old Testament words: "Let there be light!" (JNT: 75; SR: "Genesis" 81; "The Everlasting Yea" 197). In this context Teufelsdröckh is discussing the "miraculous" and "God-announcing" quality of the Command, having just noted that "the beginning of Creation is -- Light." I suggest here that the close of Book II is where Teufelsdröckh's genesis as an Author occurs through the fictional 'birth,' as it were, of Newton's "Biography" of Teufelsdröckh, which marks simultaneously the spiritual 'rebirth' of Newton through Teufelsdröckh's "Autobiography" (Barnes 127). According to my argument we have Newton emerging symbolically at this point as the imaginary Man-in-the-Moon. In support of this view Sartor hints at Pope's popular epitaph to Newton: "Nature and Nature's laws lay hid in night:/God said, Let Newton be! and all was light" (Scientific Background: 134). It also seems more than coincidental that the end of Sartor Book II verbally echoes the end of Principia Book II insofar as each summarily concludes the work accomplished to that point and promises to illuminate this work further in Book III (SR: "Pause" 205,206;

see thesis Appendices A & B). Here the close reader/researcher begins to see how Carlyle is re-editing Newton's "genesis as an author" by trying to imitate his style in Principia. Because Carlyle values originality of form, he uses his Professor Teufelsdröckh, as the imaginary Man-in-the-Moon, to symbolize man's earliest storyteller, and Newton, the man who until Carlyle best understood the Moon's story, to translate that story for British readers.

Whereas Barnes explores the philosophical analogies between Sartor and Principia, I hope to illuminate the satirical and more poetical aspects of the Newton-Carlyle relationship, beginning with the idea that Carlyle is challenging Newton's scientific genius by writing a 'spiritually scientific' Theory of Gravity. On this basis I propose Carlyle's "remarkable Treatise" on Clothes to be a playfully backhanded compliment to Newton's remarkable Theory of Gravity, the new knowledge which caused such havoc in the intellectual world's concepts of Time and Space. By 'backhanded compliment' I mean that Carlyle cannot overlook Newton's contributions to science, yet neither can he resist challenging their spiritual, or metaphysical, limitations by remarking on them through the medium of Professor Teufelsdröckh. We must know that in Carlyle's time Principia had become an authoritative body of doctrine insofar as it explained the beginning of the universe as being caused by God's will -- the First Cause or what Carlyle calls "the unseen Author" or "the Artist." For Newton Creation involved an Absolute deity who "is utterly void of all body and bodily figure, and can therefore neither be seen, nor heard, nor touched" (NH: 464). Newton's God exists separately from man, an "omniscient and omnipotent" God whom man could know "only by his most wise and excellent contrivances of things, and final causes," i.e. visible phenomena (Principia: "General Scholium" 545f; NH: 331,223,34). We know that Carlyle's God is one and indivisible with man, indeed highly visible through man, and we begin to see why Teufelsdröckh, who is both human and divine, is designated Professor of "Things-in-General" from Weissnichtwo. Textually we see Carlyle's attempt to keep this

metaphysical 'duel' between Teufelsdröckh and Newton evenly matched. Following a verbal shot at spiritual one-up-manship, the Professor is warned by his English Editor: "Beware, O Teufelsdröckh, of spiritual pride!" (SR: "Idyllic" 100).

Barnes points out that both Carlyle and Newton, in their respective times, were confronted with an apparent contradiction between faith and knowledge, and hence a potential dichotomy between religion and science (Barnes 7). Both men were seeking a divine truth but Carlyle appears to have found it first, or at least recognized a divine truth or governing force when it presented itself as inspiration, or love. Knowing that Teufelsdröckh's Editor is "undoubtedly a spirit addressing spirits," we again recall Carlyle's Leith Walk. Though he later forgot the exact year of the Walk, Carlyle always remembered the moment and the place at which he gained his full understanding of life.³ I suggest that this epiphanic moment connected Carlyle's spirit with Newton's, at least so far as Carlyle is concerned, and that the moon provided a catalyst between them. Discussing how central this moment is to Sartor, Tennyson notes that it took Carlyle the decade following Leith Walk to work out the metaphysical experience "on what Teufelsdröckh would call 'the living subject,'" who I argue is a fictionalized Newton (SCR: Intro 14,16;40). Carlyle knew that Newton anticipated corrections or extensions to his scientific principles, in particular to his theories on absolute time and space, and his technique of having Newton do the correcting by having him edit the Man-in-the-Moon's 'Autobiography' is ingenious (Barnes 151).⁴ As Editor Newton reads the

³ Although this walk is thought to have been taken in the summer of 1821 or 1822 (SCR: 13,14), Carlyle includes a poem by Andrew Macnay in his Notebooks, presumably from a poetry reading in March 1823 which sounds particularly relevant to Carlyle's "spiritual new birth" as I see it. The gist of the poem is that all sciences are "sickly farthing tapers" though their "flaring light," like "moons or suns," once inspired the poet; and now science's "art" only supplies the poet "With excellent words and terms to come & go." Norton footnotes Carlyle's remembrance of the night forty-three years later: "On the margin against [these] verses is written: 'At Mrs. Wilkie's, near Pilrig Street, Leith walk; I still dimly remember the night. (May, 1866!) --'" (IN: 47,48, f1).

Autobiography, he translates the Man-in-the-Moon's memoirs as a student of the Universe:

A certain groundplan of Human Nature and Life began to fashion itself in me; wondrous enough, now when I look back on it; for my whole Universe, physical and spiritual, was as yet a Machine! However, such a conscious, recognised groundplan, the truest I had, was beginning to be there, and by additional experiments might be corrected and indefinitely extended (SR: "Pedagogy" 113; Barnes 151; IN: 150).

Barnes uses this quotation to prove Newton's humble view of the limits of scientific knowledge in view of the overwhelming realm of divine knowledge. I intend it to prove Carlyle's less humble attitude toward scientific possibilities insofar as he is about to prove his share of divine knowledge.

Carlyle's most obvious attack on Newton's scientific method ("mechanical philosophy of physical phenomena") is levelled at Newton's refusal to hypothesize. Carlyle congratulates the "Wise man ... who counselled that Speculation should have free course," and then goes on to blame "pure Science, especially pure moral Science" for cramping the "free flight of Thought," and for keeping the Philosophy of Clothes, which contains "the essence of all Science," from being published up until now (SR: "Preliminary" 7; "Prospective" 74).⁵ Although the Clothes Philosophy is admittedly a "grand Proposition," or "grand Theorem," which the scientist is unlikely to accept, much, "if not the whole, of that same *Spirit of Clothes* [Teufelsdröckh] shall suppress,

⁴ Jerry Dibble compares the opening chapters of *Sartor* to Kant's first *Critique*, noting Books II and III are then "free to add to the laws of Newton and Laplace deeper laws which embrace their truth but limit their effective sphere." "*Sartor, Resartus and Historicity of Idealism*," in *The Pythia's Drunken Song* (The Hague 1978), p. 47. Dibble is arguing for *Sartor's* attempt at a "higher spiritual truth" or perhaps his "mathesis." Although he does not distinguish Newton otherwise, Dibble's view strengthens the argument that Carlyle is the real life 'scientist' or philosopher chosen to "extend and correct" Newton's scientific principles.

⁵ More acknowledges that inasmuch as Newton rebuked the process of hypothesising, he "could match the best of them in unbridled speculation, when he gave free rein to his imagination," but "rarely confused speculations with science" (IN: 182). Based on his discoveries Newton's capacity for "unbridled speculation" is assumed by scientists; but it is his revolutionary Scientific Method that formally denies room for speculation that factors in Carlyle's satire. It is Newton's capacity for "unbridled speculation" that I argue Carlyle is appealing to in Newton.

as hypothetical, ineffectual, and even impertinent: naked Facts, and Deductions drawn therefrom ... are [his] humbler and proper province" (SR: "The World in Clothes" 36). What is observable to Carlyle has not yet been observable to Newton, and that is the "naked Facts" of life. Their views seem similar but their methods are opposite: Carlyle argues from cause to effect, while Newton argues backwards (in Carlyle's opinion) from effect to cause. Newton is looking for visible answers to "invisible" phenomena, even while admitting to an invisible First Cause. Carlyle's most profound point may be that Editor Newton is about to receive metaphysical answers to what he supposes to be merely physical questions.

In retrospect it seems that Newton and Carlyle, each in his own way, were both natural philosophers, although as mentioned Carlyle's knowledge in mathematics and science (natural philosophy) has been largely overlooked by critics. Barnes is apparently the first to bring to readers' attention the fact that "Carlyle knew, mastered, even tutored students in Principia before he advanced to German Romanticism and a literary career" (Barnes 8). He explains that Newton has been ignored as a Carlylean source largely because of 18th century misrepresentations of the scientist's work, which resulted in a "Newtonism" antithetical to Carlyle's philosophies (Barnes 3). As an explanation of "Newtonism," I include a lengthy quotation from E. A. Burtt. I do not intend to analyze it, as it speaks for itself clearly to my thesis:

it was of the greatest consequence for succeeding thought that now the great Newton's authority was squarely behind that view of the cosmos which saw in man a puny, irrelevant spectator (so far as a being wholly imprisoned in a dark room can be called such) of the vast mathematical system whose regular motions according to mechanical principles constituted the world of nature. The gloriously romantic universe of Dante and Milton, that set no bounds to the imagination of man as it played over space and time, had now been swept away. Space was identified with the realm of geometry, time with the continuity of number. The world that people had thought themselves living in -- a world rich with colour and sound, redolent with fragrance, filled with gladness, love and beauty, speaking everywhere of purposive harmony and creative ideals -- was crowded now into minute corners in the brains of scattered organic beings. The really important world outside was a world hard, cold, colourless, silent, and dead; a world of quantity, a world of mathematically computable motions in mechanical regularity. The world of qualities as immediately perceived by man became just a curious and

quite minor effect of that infinite machine beyond (Metaphysical Foundations: 236).

Barnes quotes Burt to stress how and why Newtonism defined the "triumph of Reason" based imperfectly on Newton's scientific principles. Barnes argues that Newtonism grew away from Newton's ideas until the gap between religion and science widened to such an extent that the two areas seemed "completely irreconcilable." Natural philosophers, eager to comprehend the beginning of "things-in-general," and creation in particular, put pressure on Newton and his scientific method to solve the enigma.⁶ The fundamental question was whether an 'invisible' God must be seen to be believed in, or whether he can be believed in through his works, specifically gravity. As the *source* of Newton's gravity threatened to become a dilemma (even for Newton) the dichotomy between religion and science became a pre-eminent social concern. The dilemma for Newton was to prove how his God could be at once separate and Absolute, and at the same time be an active participant in the force of gravity.

Criticism of his theory provoked Newton to issue his most famous dictum: "I frame no hypothesis ... it is enough to know that gravity does really exist, and act according to the laws which we have explained, and abundantly serves to account for all the motions of the celestial bodies, and of our sea" (Principia: 547). I note Newton's public position on gravity simply to alert readers to the faith he held in his own principles and the almost cavalier attitude he took toward history's most profound scientific discovery, an attitude which I believe influenced Carlyle. When Newton "clearly recognised the futility of speculating on an initial state of the universe, or on the causes of its development," he announced that "Gravity must be caused by an agent acting constantly according to certain laws; but whether this agent be material or immaterial, I have left to the consideration of my readers" (IN: 379). The fact that

⁶ Roger Bacon was one who believed that "the discovery of all causes and sciences would be but the work of a few years" (Barnes 30).

Newton himself could not explain the dichotomy in his own theory of gravity prompted Dr. Johnson to remark that it "gives occasion to observe how even the mind of Newton gains ground gradually upon darkness" (IN: 377).

Johnson's remark is ironic in view of the fact that Newton's mind literally gained ground upon darkness, since his most profound discoveries in light and colour took place in the dark. I refer to Newton's first article, "New Theory of Light," published when Newton was only a student at Cambridge. It was early criticism of this theory that prompted Newton to formulate his scientific method, and that led gradually to what can be considered Newton's pathological fear of opposition of any kind, particularly one in print (IN: 78,196,97,176).⁷ What makes Carlyle's "poetico-philosophico" method in Sartor so cunning, and from Carlyle's point of view more personally challenging, than Newton's, is the fact that Newton refused to argue his principles once they were established in his own mind. We begin to see how Carlyle speaks to Newton's dilemma with Gravity by playing on the ambivalent sounding "material or immaterial" cause of it. Carlyle's hypothetical Theory of Levity, and I use 'levity' in the full punning sense of 'lightness' including the 'levitation' of Newton, depends on both a material *and*

7 As examples, I offer the following: 1) Newton's letter to Hooke: "There is nothing which I desire to avoid in matters of philosophy more than contention, nor any kind of contention more than one in print; and, therefore, I most gladly embrace your proposal of a private correspondence. What's done before many witnesses is seldom without some further concerns than that for truth; but what passes between friends in private, usually deserves the name of consultation rather than contention" (IN: 177); 2) letter to Collins regarding his early controversy with Leibnitz: "I could wish I could retract what has been done [i.e. "scattered letters" discussing his scientific method], but by that I have learned what is to my convenience, which is to let what I write lie by till I am out of the way" (IN: 196); 3) letter to Oldenburg, again regarding Leibnitz, and which precedes Newton's "resolve to forsake science altogether as a profession:" "I see I have made myself a slave to philosophy, but if I get free of [an antagonist's] business, I will resolutely bid adieu to it eternally, excepting what I do for my private satisfaction, or leave to come out after me; for I see a man must either resolve to put out nothing new, or to become a slave to defend it." (IN: 196,97).

immaterial First Cause. Moreover, Carlyle 'forces' Newton to argue his principles on metaphysics in a hypothetical 'Conversation' with the Man-in-the-Moon.

Miraculously, Carlyle is able to recall Newton from "Weissnichtwo" to translate Teufelsdröckh's story "philosophico-poetically" so that he and Principia will be more clearly understood -- "could anything be more miraculous than an actual authentic Ghost?" asks Teufelsdröckh (SR: "Natural Supernaturalism" 264).⁸ Carlyle's ability to resurrect such a Ghost is implied by Teufelsdröckh, who faces an "illuminated" but skeptical class which asks: "But is not a real Miracle simply a violation of the Laws of Nature?" (SR: "Natural Supernaturalism" 256). Teufelsdröckh replies that to him "perhaps the rising of one from the dead were no violation of these Laws, but a confirmation; were some far deeper Law, now first penetrated into, and by Spiritual Force, even as the rest have all been, brought to bear on us with its Material Force" (SR: "Natural Supernaturalism" 256). Through the "God-like force" of the fictitious Teufelsdröckh, Carlyle "casts forth his seed" or "utters forth as best as he can" the Philosophy of Clothes. In "Signs of the Times" Carlyle clearly acknowledges his respect for Newton's scientific method in spite of the fact that it excludes metaphysics (IN: 78):

an inward persuasion has long been diffusing itself, and now and then comes to utterance, That, except the external, there are no true sciences; that to the inward world (if there be any) our only conceivable road is through the outward; that, in short what cannot be investigated and understood mechanically, cannot be investigated and understood at all ("Signs of the Times" 39,40).

Carlyle believes that the spiritual relationship between the "outward" and "inward" worlds of nature can be made greater only by scientific inquiry, because the knowledge gained continually reaffirms the power of the mind over matter. Only mechanically,

⁸ In Carlyle's effort to conceal his intention he deliberately does not mention Principia. The closest reference we have to the work comes in Sartor's second paragraph where he informs us that "Our Theory of Gravitation is as good as perfect" (SR: "Preliminary" 3, f1). Carlyle's point is that there is no problem with Newton's Theory of Gravity per se, but the spirit behind it, or the spirit responsible for it, has not been written about. This is another way of seeing Teufelsdröckh's Philosophy of Clothes as the untold story that will explain how Newton lived and worked.

through working out the form of Sartor, is Carlyle able to reveal his inner spiritual belief. In effect Carlyle 'spiritualizes' mechanics. By way of example Teufelsdröckh's "remarkable Treatise, with its Doctrines" offers the visually oriented Newton the observable unfolding of an imaginative idea, made manifest in Sartor (SR: "Preliminary" 8).

Barnes contends that by the nineteenth century Principia had been so misunderstood and exaggerated that Newton would not have recognized his own philosophies. Essentially Newtonism ridiculed Newton's attempts to reconcile science with religion. His ideas "of a visible and universal miracle" of Nature based on mechanical laws gave scholars the positivistic idea that with further study the intricate workings of the mind (eg. an explanation of how the brain interprets what the eye sees) could become visible, and explained away scientifically. A belief in the possibility of absolute knowledge carried the implication of phenomenal knowledge of Newton's absolute God. The mechanistic nature of Newton's world view implied a "Deism" which reduced God to an incompetent "clock-maker" who must control and continually repair his mechanical clock, which for man is the solar system (Barnes 29). Although Newton did appear to be "synthesizing the physical world," he would not have endorsed an irreverent attitude toward God, nor the presumptuous attitude that the mind of man could actually come to know God (Barnes 29,30). (More interprets Newton's refusal to allow the subject of the mind into his scientific method as "the most striking evidence of the sanity of Newton's genius" IN: 379). Although Carlyle implicitly claims a personal knowledge of God, he clearly supports Newton's scientific principles and comprehends the abuses perpetrated by Newtonism, noting:

No Newton, by silent meditation, now discovers the system of the world from the falling of an apple; but some quite other than Newton stands in his Museum, his Scientific Institution, and behind whole batteries of retorts, digesters, and galvanic piles imperatively 'interrogates nature,' -- who, however, shows no haste to answer ("Signs of the Times" 36 - emphasis mine).

Carlyle just as clearly does not anticipate another Newton in the foreseeable future. Therefore the imminent discovery of all causes and scientific answers to their effects, specifically the mysterious First Cause of creation, does not threaten him. My larger point is that whatever Newtonism does or does not represent for critics of Newton, it clearly does not interfere with Carlyle's appreciation of Newton and may indeed strengthen that appreciation insofar as Carlyle empathizes with being misunderstood and incorrectly copied. Barnes suggests that when Newton's principles of physics are misapplied to philosophy (by followers Locke⁹ and Hume for example, who exaggerated the extent of Newton's empiricism) they result in "the exact opposite of...truth" (Barnes 29,30).

By attempting to render the invisible visible Carlyle does not misapply Newton's principles except in deliberate satire, and in fact uses poetico-philosophy to reconcile science with religion just as Newton attempted to do "historico-descriptively" (Barnes 33).¹⁰ Carlyle is mocking Newton's inability to conceive of anything in other than 'sensible' form, as well as Newton's desire to conquer "new ideas" by documenting whatever he sees within his concept of absolute time. We see this in Sartor's "Editorial Difficulties." The narrator notes: "If for a speculative man, 'whose seedfield ... is Time,' [and] no conquest is important but that of new ideas, then might the arrival of Professor Teufelsdröckh's Book be marked with chalk in the Editor's calendar" (SR: "Editorial Difficulties" 9). In the following paragraph we read that the Editor is indeed attracted to

⁹ Barnes argues that one reason critics have not followed up Carlyle's interest in Newton is because Locke, whose philosophy Carlyle disdained, openly followed Newton's principles.

¹⁰ As an example of Newton's rigid adherence to First Principles of visible evidence for conclusive knowledge, as well as an example of his dry, unaccommodating wit, I relate an anecdote from More's biography, although I believe More intends it as an example of Newton's absentmindedness: One evening a friend dropped by to visit, the dinner was set out but Newton was not yet home. The friend lifted the cover, ate the dinner and replaced the cover. When Newton arrived, he sat down, lifted the lid, and exclaimed: "Dear me ... I thought I had not dined, but I see I have" (IN: 14).

both Professor Teufelsdröckh and his Clothes Philosophy, and is subsequently compelled to publish it:

Directly on the first perusal, almost on the first deliberate inspection, it became apparent that here a quite new Branch of Philosophy, leading to as yet undescribed ulterior results, was disclosed; farther, what seemed scarcely less interesting, a quite new human Individuality, an almost unexampled personal character, that, namely, of Professor Teufelsdröckh the Discloser The first thought naturally was to publish Article after Article on this remarkable Volume (SR: "Editorial Difficulties" 10).

Although this passage appears to contradict the fact that Newton hesitated to publish, it figures in Carlyle's satire insofar as Newton's reasons for not publishing were of interest to Carlyle, notably the fear of being "copied wrong" and therefore misunderstood. But Carlyle does capture the sense of Newton's curiosity over new phenomena. We soon learn that the Editor fears misapprehending both Teufelsdröckh and his new work without adequate documentation on Teufelsdröckh himself, such as Biography.¹¹ By mocking the methodology of contemporary science, Carlyle alerts scientists in general to the end their work must continually illuminate -- that is, our consciousness of the spirit within us.

While both men believed in a spiritual metaphysics, Newton did not presume to understand the principles behind it, and clearly described his disdain for a Thomas Carlyle who does. Said Cotes, with Newton's approval:

He who is presumptuous enough to think that he can find the true principles of physics and the laws of natural things by the force alone of his own mind, and the internal light of his reason, must either suppose that the world exists by necessity, and by the same necessity follows the laws proposed; or if the order of Nature was established by the will of God, that himself, *a miserable reptile*, can tell what was fittest to be done (Principia, Cotes' Preface, xxxii; Barnes 153 - emphasis mine).

¹¹ In addition to Newton, this passage probably refers to Editors anxious to use Newton's work for money. Whether Brewster's motive for writing Newton's first major biography was financial or not I do not know, but the First Edition of Principia is known to have been published to raise money for the Royal Society, although ostensibly it was published to share Newton's wealth of knowledge.

Carlyle laments that since Locke (a Newton adherent who significantly, Barnes argues, misapplies Newton's principles) "our whole Metaphysics ... has been physical; not a spiritual philosophy, but a material one" ("Signs of the Times" 38). It is this "spiritual" component, even within the concept of metaphysics, which separates Carlyle's higher "intuitive" Truth or "Mathesis" from a merely physical or mathematical truth, and for Newton separates philosophy as such from "Pure Philosophy." Carlyle's satirical approach to Newton's belief in the unattainability of a spiritual metaphysic is to: 1) reveal it as representing woman, and 2) reveal it physically or mechanically against Newton's own scientific principles which forbade discussing metaphysics at all. Through Sartor we see that Carlyle is presumptuous enough to speculate on the metaphysical understanding of a divine will. On the presumption that the world exists for a reason, the Clothes Philosophy informs Newton that according to the merely physical principles of Nature, the "fittest to be done" is to "cast forth thy seed" and perpetuate this miserable species called the human race.

I digress momentarily to Newton's "New Theory of Light" which Carlyle playfully links to the birth of Teufelsdröckh as a newborn baby Sun (a "little red-coloured Infant!"), since Newton's revolutionary work proved that light comes from the Sun (SR: "Genesis" 84). Newton became the first scientist to discover and measure the properties of light and subsequently the properties of colour, in particular the heterogeneous nature of the "colour" white (IN: 63,77). In Newton's own words his discovery was "*the oddest, if not the most considerable detection, which hath hitherto been made in the operations of nature*" (IN: 81,72 - emphasis More's). Carlyle's subtle acknowledgment of this discovery in Sartor is little less amazing. Playing on Newton's new theory, which offers the revolutionary explanation of "chromatic aberration," and his belief that "real colour" exists in a body but requires the "presence of light to illuminate it," Carlyle has Editor Newton describe the discovery of Teufelsdröckh: "*Lifting the green veil [of Nature], to see what invaluable it hid, [his parents] descried*

there, amid down and rich white wrappages ... a little red-coloured Infant!" (SR: "Genesis" 84 - emphasis mine). Moreover, Carlyle's description incorporates the fact that Newton's sophisticated theory was based on one of the earliest and crudest theories on the subject, that "if a body contained an abundance of fire it would be white" (NH: 123). Thus we have the phenomenon of Teufelsdröckh's birth described as not only a baby Sun, but as a prescient baby 'Mankin-in-the-Moon.' As a vision of 'light' on many levels, we again see Carlyle's comic inversion of Newton's two selves, past and present, as well as another hidden allusion to Pope's epitaph "Nature and Nature's laws lay hid in night:/God said, Let Newton be! and all was light."

Newton's Theory of Light is the notable exception to his practice of expressing himself uniquely and deceptively. Although he "warned men of science against the confusion of thought which results from the careless use of words," Newton's own words were deliberately obscure, and his style, like Carlyle's, can only be considered aberrant. Like Carlyle, he manipulated language to suit his own requirements.¹² Newton's use of anagrams among other tricks was a bane to colleagues, and his apparently careless mathematical documentation the plague of his editors.¹³ His language of preference was

¹² It must be kept in mind that in Newton's time his scientific colleagues were struggling to establish a standardized set of signs and symbols that would do for mathematicians what letters did for linguists, and Newton was almost singularly unco-operative in this effort. As Augustus de Morgan points out: "He who can make existing language serve his purpose never invents more: and Newton was able to think clearly and powerfully without much addition to the language he found in use," which was Latin. Essays on the Life and Work of Newton (London), pp.33,34. As a point of interest here, I note that Newton himself published a paper "Isaac Newton's 'Of an Universal Language'" based on the premise that words could be as universally comprehensible as numerical signs (NH: 402).

¹³ Noting that Newton defied the conventions that even anagram had, Gjertsen gives an "absurdly difficult" example: "Discussing two solutions he had developed to the problem of tangents, Newton perversely concluded that: It seems best to write down both, at present, in transcribed letters, lest if others should discover the same, I should be compelled to change the method into another:

5accdae10effhlll413m9n6oqqr8sllt9v3xkllab3cddlOeaeglOill4m7n603p3q6r5sllt8vx3acae4egh5l414m5n8oq4r36t4vaaddaeieeiijmmnnooprsssttuu" (NH: 16; IN: 190).

Latin, followed by Greek and Hebrew. Naively, Newton considered Hebrew the prototype of language on the premise that mankind is descended from Adam and Eve, whose mother tongue was Hebrew (IN: 25).¹⁴ Significantly, like Sartor's Editor who is lost in a German Clothes Philosophy, Newton was unfamiliar with German, and did not own a German book (IN: 103). Equally significant insofar as Newton's 'edition' must transcend "mere dictionary Style"¹⁵ and be written "poetico-philosophically," Newton was renowned for his poor facility in English, particularly in grammar and spelling. His biographer partly attributes this deficiency to the "license in spelling" in Newton's day, and notes his spelling and capitalizing "Pall-Mall" in as many different ways as the sound of the words could suggest to an ingenious mind" (IN: 151). Carlyle is obviously aware of the "Pall-Mall" anomaly in the hierarchy of English-speaking people since he has Professor Teufelsdröckh leave "the Tower of Babel" and the "twilight region" of an incompetent British "Hebraist," and hasten toward a modern state of "true concentrated and purified Learning" which has "tumbled-down quite pell-mell" into Carlyle's Clothes Philosophy (SB: "The World in Clothes" 37,38). I make two points in this paragraph: 1) it is understandable that Newton's principles were incorrectly copied and misunderstood (without exception biographers sympathize with his editors); 2) readers must appreciate the extraordinary fineness of detail in Carlyle's satire on Newton, and how it reflects Carlyle's modest comprehension of Principia. Struggling with the work in 1817 he wrote:

¹⁴ Joseph Mede's "monumental work" on language, Clavis Apocalyptica, was popular in Newton's time. Mede asserted that "all words in all languages could be traced back ultimately to that [Hebrew] prototype if one had only sufficient ingenuity and diligence" (IN: 25). Significant to us is the book's "direct influence" on the linguistically naive Newton, who was profoundly interested in such exegesis."

¹⁵ I repeat Carlyle's reply to John Sterling's criticism of Sartor's style: "If one has thoughts not hitherto uttered in English Books, I see nothing for it but that you must use words not found there, must *make* words [D]o you reckon ... that Style (mere dictionary Style) has much to do with the worth or unworth of a Book? I do not" (SB: Appendix III, 316).

To see these [mathematical] truths ... to *feel* them as one does the proportion of the sphere & cylinder! 'Tis a consummation devoutly to be wished -- but not very likely ever to arrive. Sometimes, indeed ... I say to myself -- away with despondency --- hast thou not a soul and a kind of understanding in it? And what more has any analyst of them all? But next morning, alas, when I consider my understanding -- how coarse yet feeble it is" (CMM: 82).

In retrospect we can only appreciate the powerful understanding Carlyle eventually *felt* for Newton and his work. I return to his views on Newton's "true principles of physics and the laws of natural things."

As suggested in my Introduction, Carlyle's notion of man and nature differs widely from Newton's. Not only does Newton separate man from God, but he also separates nature from God which we know Carlyle does not. Newton's God is the "creator and governor of this mechanistic universe" who relegates "to a *lesser power*, Nature, the duty of forming and operating the perceptible mechanical universe" (IN: 182 - emphasis mine). In Newton's view,

the frame of nature may be nothing ... but various contextures of some certain aethereal spirits, or vapours, condensed as it were by precipitation ... and after condensation wrought into various forms, at first by the immediate hand of the Creator, and ever since by the power of Nature, who by virtue of the command, 'Increase and multiply,' became a complete imitator of the copies set her by the Protoplast. (IN: 182; Principia II:389).

Here we have a vision of Newton's God as a mechanical clockmaker, but one who relegates to Mother Nature the job of maintaining his clock. In effect Newton reduces nature to God's handmaiden. We then understand another of Carlyle's grievances with Newton since we know that for Carlyle God and nature are on *equal* terms, nature being "what the Earth-Spirit in Faust names it, *the living visible Garment of God*" (SR: "The World out of Clothes" 55, "The Everlasting Yea" 188, "Pause" 205; Barnes 228,235). In Carlyle's view nature should be named God. Teufelsdröckh declares: "O Nature! ... why do I not name thee God? [It is] in very deed, HE ... that ever speaks through thee; that lives and loves in thee, that lives and loves in me" (SR: "The Everlasting Yea" 188). It is in the "decisive Oneness" of Carlyle's "*Garment ... woven and ever aweaving in the 'Loom of*

Time" that we find "the outline of [his] whole *Clothes-Philosophy*; at least the arena it is to work in" (SR: "Pause" 205).

Working artistically, Carlyle is wholly involved with the divine, knowing that words are only an attempt at revealing a divine or miraculous hand, while Newton separates his science from an absolute divinity. Carlyle's dissatisfaction with this aspect of Newton's scientific principles is reflected in the words of Professor Teufelsdröckh, who asks his Editor:

Is there no God, then; but at best an absentee God, sitting idle, ever since the first Sabbath, at the outside of his Universe, and seeing it go? ... Foolish Wordmonger and Motive-grinder, who in thy Logic-mill hast an earthly mechanism for the Godlike itself, and wouldst fain grind me out Virtue from the husks of Pleasure, -- I tell thee, Nay! (SR: "The Everlasting No" 160; Barnes 157,234).

Carlyle's point to Newton is that Carlyle has actually 'seen' the idea of his work develop spiritually, and that as a work of art Sartor renders the transcendental visible. We also have another hint at Newton's earthly or sensual self-denial as he grinds out "Virtue from the husks of Pleasure." What Carlyle is ridiculing in Newton, however, if ridicule be the appropriate word, is his mechanical as opposed to spiritual method of reading or 'deconstructing' the system of the universe. As indicated earlier, Carlyle studied Principia closely ('deconstructed' it, as it were, poetico-philosophically), and in order to prove the existence of a God-source within man, he 'reconstructs' the work spiritually and scientifically as Teufelsdröckh's *Clothes Philosophy* or *Story of the Time-Hat*. In sum, although both Newton and Carlyle believe in a divine force existing at the helm of the universe, Carlyle appears to see further than Newton -- that is, Carlyle's perception of himself as a god-inspired human being gives him the strength to "pass from the field of physics into metaphysics where [Newton had declared] there is no criterion of knowledge" (LN: 78). His work can be seen as an attempt to spiritualize Newton, even as he satirically attempts to humanize him.

Here we recall that in Sartor, at the end of Book II, Teufelsdröckh attempts to earn his "spiritual majority" by bringing "the highest ... home to the bosoms of the most Limited" (whom we now understand to include Newton), and clarifying "what to Plato was but a hallucination, and to Socrates a chimera" (SR: "Pause" 198). Barnes notes that philosophically both Carlyle and Newton followed Socrates and Plato insofar as all these men were struggling to account for and transcend the differentiation between absolute and relative, mind and matter, or "Creator and creation" (Barnes 8-10). We know how seriously Carlyle believed in the need for "an intellectual Scheme, or ground plan of the Universe, drawn with one's own instruments," but we must keep in mind the 'nonsensical' nature of Carlyle's instruments and that in Sartor he is only playing with, or deliberately 'misreading,' these monumental minds in what Harrold calls an "elaborate literary hoax" (IN: 150,51; SR: Intro xiii). Harrold maintains that Sartor remains vital because it "expresses, in a highly metaphorical way, some of the elements of a philosophy as perennially attractive to men as that of Plato, regardless of what the contemporary data of knowledge happen to be: namely idealism" (SR: Intro li). While I understand that Harrold is referring to Carlyle's unusual portrayal of idealism and the comprehension of universal realities (which is indeed why his work remains vital), I suggest that Sartor satirizes some elemental 'facts' about Plato's philosophy, most notably the truth of Plato's absolute, or 'ideal form' which to Carlyle does not appear to reflect a female component. A skeptical Teufelsdröckh, who professes that "*Amicus Plato, magis amica veritas*" ("Plato is my friend, but Truth is more my friend"), suggests to me that for Teufelsdröckh there is a higher Truth than Plato's which Teufelsdröckh himself as the "highly metaphorical" Man-in-the-Moon represents, and which Newton must come to know (SR: "Editorial Difficulties" 14, f1).

Plato is the first philosopher to introduce the notion of the necessity to divide things-in-general in order to be particular. His biggest division is the difference between logos and mythos (what is, and what seems to be). Carlyle's philosophy then

attempts to explain what is missing from Plato's new philosophy and that is the self-consciousness about the division itself. Sartor, on the other hand, includes the idea of difference and the invisible force which causes differentiation. Professor Teufelsdröckh asks, "Which of your Philosophical Systems is other than a dream theorem; a net quotient, confidently given out, where divisor and dividend are both unknown?" (SR: "World out of Clothes" 54; Barnes 228). Plato's division is so immaculate that once a logos (Word/order/truth) is established, the mythos behind the logos is in effect forgotten. In terms of gender, logos is seen as male in relation to the female mythos. So Plato's exclusion of mythos is eventually politically extended to exclude woman, whose role in life literally disappears in Plato's Republic. For Plato, memory of woman appears to be obliterated and he lives, perhaps with the likes of Teufelsdröckh's Editor, in an unrealistic world -- "a boundless Phantasmagoria and Dream-grotto" (SR: "World out of Clothes" 53, f3). Carlyle, however, will never forget, no matter how separate or invisible it becomes, the fact of mythos being intrinsically connected to logos, or conversely, logos being complementary to mythos. Therefore, by weaving both science and poetry into Sartor, Carlyle restores and incorporates both mythos and logos into one "symbolical myth all" which is how he describes the "close of the Book" (SR: Intro xxxi,ii).

In Teufelsdröckh's more 'realistic' world (cosmic and *timeless*) man and the "Assiduous old dame!" seem to enjoy a quiet and mutual respect for one another's existence, whereas Plato's modern citizen forgets he is "Man born of Woman" (SR: "Reminiscences" 24, "Genesis" 86). Sartor's narrator describes "Old Lieschen, [Teufelsdröckh's] bed-maker and stove-lighter," as the most ancient of Man's 'better halves,' no pun intended:

We can still remember the ancient woman; so silent that some thought her dumb; deaf also you would often have supposed her; for Teufelsdröckh, and for Teufelsdröckh only, would she serve or give heed to; and with him she seemed to communicate chiefly by signs (SR: "Reminiscences" 24).

As the Man-in-the-Moon, Professor Teufelsdröckh conveys a complete union or re-union of man with woman. In this pure/mixed state of existence 'He' is the Man and 'She' is the Moon. Because there is no mixture in Plato's revolutionary purist philosophy (once divided never re-united) Carlyle, never disregarding purity itself, reveals a higher comprehension of purity by creating a more complete or 'purer' character in the Man-in-the-Moon (SR: "Characteristics" 29).¹⁶ This complete Knowledge accounts for the "high Platonic Mysticism of our Author, which is perhaps the fundamental element of his nature" (SR: "Pure Reason" 66). Like some "radiant, ever young Apollo," Teufelsdröckh fictionally fulfills the dream of all men by reaching man's heretofore unreachable ideal form of life (SR: "Characteristics" 33).

Although Carlyle idealizes the continued role of woman in the "ground-scheme of the Universe," he is no more an idealist in the formal sense of the term than he is a Deist, or as he insists "any Theist or *ist* whatsoever" (SR: Appendix III, 317). This point relates to Newton insofar as he too was not formally "any Theist or *ist* whatsoever." His natural philosophy evolved directly from Plato's insofar as both men were 'dualists' searching for a transcendental Absolute by following a pattern of relative and observable phenomena. Although Barnes argues that Carlyle's "transcendentalism" evolved directly from Newton's concepts, and therefore indirectly from Plato's, I feel, as I have argued, that Carlyle supercedes both men by re-introducing the concept of an invisible mythos and giving it a poetico-philosophico authority. In this way Carlyle's supposed "literary hoax" challenges both Plato and Newton to acknowledge the significant fact that it takes two together (man and woman) to create the observable phenomena on which their scientific method is based (Barnes: 11,13,15).

On the basis of Carlyle's quarrel with Plato, I want to show how Carlyle invites readers to remember Socrates in Sartor. This vision of Socrates as possibly the earliest

¹⁶ Carlyle, himself a purist in his own way, notes "I love to be particular" (IN:150).

Man-in-the-Moon is delivered in what I consider to be Carlyle's most blatant satire on language, particularly in terms of following observable phenomena. To begin with we must consider that we know nothing of Socrates except through Plato, his student who documented his thoughts and opinions. Socrates himself left no written record of his life. The parallels in Sartor are twofold: in 'reality' we have Carlyle revealing the "higher Truth" of Newton, and 2) fictionally we have Newton revealing the "higher Truth" of Teufelsdröckh who, indirectly quoting Socrates, informs Newton that "they only are wise who know that they know nothing" (SR: "The World out of Clothes" 54, f5). Sartor's Socratic-Platonic dimension is reinforced when we learn through Teufelsdröckh's autobiography that as a child he anticipated the eventual revelation "by hand and tongue" of his Philosophy, "as History, as Biography" (SR: "Idyllic" 95). The subtle introduction of Socrates occurs in "the angry noisy Forum" during what I suggest is a drunken university debate.¹⁷ The scenario draws for close readers a primordial yet strangely familiar "Dream-Grotto" for the "surprising Volume on *Clothes*" to emerge from (SR: "The World out of Clothes" 53; "Reminiscences" 27). Socrates' identity, like Teufelsdröckh's, I admit remains conjectural and the strongest evidence we have that these two men resemble each other is hinted at in the final remarks of the night as

¹⁷ Tennyson argues that "to conceive of the scenes in the *Grune Gans* [Green Goose] as the 'framework' of Sartor is to let desire overpower reason" (SCR: 129). I argue, however, on the side of Carlyle's brother who claimed that

the framework of Sartor was suggested by what I used to tell him of my experiences in Germany ... There was a Schelling Club ... devoted to beer, tobacco and philosophy. I used to amuse my brother remembering their free and often wild speculative talk; and Sartor recalls his comments and laughter" (SCR: 129).

I argue that the nightly scene in the *Grune Gans* with its angry, noisy debating reflects Carlyle's carnivalesque world view, and his suspicion that young, formally educated 'idealists,' whose tongues are loosened by alcohol, may well provide a strong source of social and political prophesying. The scene especially seems to convey the evolution of Teufelsdröckh's youthful vision of a mechanically-based "groundplan for Human Nature and Life" into something 'higher' (SR: "Pedagogy" 113). I will eventually argue that in this chapter on "Reminiscences" Carlyle is playing with the idea of 'spirit,' with a view to creating a 'spirited' atmosphere for Newton to observe.

everybody leaves: "*Bleibt doch ein echter Spass-und Galgen-vogel*, said several; meaning thereby that, one day, he would probably be hanged for his democratic sentiments" -- not unlikely a subtle reference to Socrates' political trial (SR: "Reminiscences" 16).

The reference to Newton in this passage is even more subtle. On the basis of Newton's 1) knowledge of the moon, 2) reputation as the biblical scholar of his time, 3) belief that the earliest documented men were in love "with a woman named Venus,"¹⁸ and 4) interest in anagrams and phonetics, I take the liberty of translating Sartor's German phrase anagrammatically and phonetically to suggest the pronunciation "Bible doc in outer Space and Gal inveigel" (inveigel = Latin "without eyes") (SR: "Reminiscences" 16). The final question of the night, "Wo steckt doch der Schalk?" ('Was that Dr. Shoc?'), remains unanswered because "Teufelsdrockh had retired by private alleys" (SR: "Reminiscences" 16). All this suggests to me that an evening of ribaldry ended as the Man-in-the-Moon went down and the Sun came up (to speak silently for himself). As outrageous as such an interpretation may seem, it corresponds thematically with Teufelsdrockh's surmised contributions to "the *Isis*" (SR: "Reminiscences" 15). (Isis is the Greek Goddess of Nature and is also named Venus, the goddess of Love Her role will be discussed in Chapter IV). Carlyle's portrayal also mocks England's "shocked" reaction over the philosophical views that Newton deigned to make public, and which form the basis of Barnes's thesis. Barnes explains a fundamental difference between Newton's and Carlyle's directions of curiosity, and one which accords with my interpretation of the above scene. While Newton felt the need to

¹⁸ The ideas in this paragraph will recur throughout my thesis, but at the moment I allude to Newton's Chronology and a literally Classical illustration of his "mechanico-philosophico" approach to Mankind's history. Having established the paternal connection between all Egyptian, Greek and biblical history in one short step before the fall of Troy, Newton casually concluded that Osiris/Dionysus/Sesac all "loved a woman named Venus" (IN: 619). In effect Newton's scientific method telescoped more than two millenia of Egyptian history into a single generation.

explain "force acting at a great distance through space," Carlyle "wished to explain why at certain times and places men were attracted, repelled, or bound mutually together for a common aim by 'awe' or 'wonder'" (Barnes 137).

What Carlyle appears to be doing in "Reminiscences" with his preliminary Socratic imagery is introducing Teufelsdröckh as the Father of Philosophy. Professor Teufelsdröckh endeavours to distinguish himself as the superior natural philosopher because his poetico-philosophy offers something "of a fundamental character ... on the subject of Clothes," notably the inclusion of woman as a necessary equal to man (SR: "Preliminary" 3). In a most satirical and roundabout way Carlyle begs the question of who or what made the first contribution to the creation of man. When we are told during the "angry Forum" debate that Teufelsdröckh's "special contributions to the *Isis* could never be more than surmised at," we are invited to wonder about the role of "the *Isis*" in relation to Teufelsdröckh. In presenting, however obscurely, the Socratic attitude toward knowledge, that no 'fact' can ever be more than surmised at, Carlyle gradually leads us full circle to the knowledge that they only are wise who know that they are men born of women. Once more Carlyle attempts to convey the significance of woman's relationship to the life of man, and the naivete of a man who considers life without her such as Newton, Socrates and Plato. I conclude this chapter by quoting the ancients who referred to Diogenes the Cynic as a "Sokrates gone mad."¹⁹ This "madness" is nothing more than Carlyle's "sheen ... of Inspiration," a transcendental insight into the nature of things (SR: "Symbols" 222). Such insight, which Teufelsdröckh enjoys, but which Socrates, Plato and Newton appear to disregard, or take for granted, recognizes the feminine inspiration (such as the Greek Muse) behind any art, including philosophy.²⁰

¹⁹ Herakleitos and Diogenes, trans. Guy Davenport (San Francisco 1983), p. 35.

²⁰ We might consider the possibility that Socrates is the "unChristian" namesake for Carlyle's Diogenes. Peter Dale makes the same suggestion based on Carlyle's appreciation for Richter,

and Richter's referral to the humourist per se as a "raving Socrates." "Sartor Resartus and the Inverse Sublime: The Art of Humorous Deconstruction" in Allegory, Myth, and Symbol (Harvard 1981), p. 312.

III THE ENIGMA OF HOFRATH HEUSCHRECKE and CARLYLE'S REVOLUTION

Although the role of Herr Hofrath Heuschrecke remains an unresolved issue for critics, the "chief friend and associate" of Professor Teufelsdröckh is undeniably too significant a character to remain ignored,¹ and I now propose that "the Hofrath," as he is most often called, represents Carlyle in his capacity as God's inspired messenger (SR: "Editorial Difficulties" 11).² Moreover, I suggest that the Hofrath symbolizes the Sun as man's most visible heavenly Father. This image of the Sun as Father complements Carlyle's image of the Moon as Mother, or eternal woman, while Teufelsdröckh symbolizes the Child of their union. On the strength of his conversation with *the* artist, the most enigmatic of entities, Carlyle attempts to convey through the Hofrath the enigmatic power behind a complete creation, the *Whole* process whereby a thought is "bodied forth" into a work of art. Through the body of Sartor, which contains Teufelsdröckh's autobiography, Carlyle recounts the "Auto-biography or Biography" of his own otherwise ineffable spirit. The Hofrath also accounts for the sexual innuendo that flows through Sartor and is most subtly directed toward Newton. We gradually come to see that for Carlyle a body of literature, as a work of art, is analogous to the body of man, with the body of woman inherent within it. Both man and books are 'sensible' products of inspiration insofar as both represent 'life,' and as such are gifts from God.

¹ Tennyson, noting that Hofrath Heuschrecke is rarely identified by critics, suggests that the "real meaning of Heuschrecke must reside in the fabric of Sartor itself." This observation supports my idea that the Hofrath's "singular power" is represented by Carlyle himself as he is responsible for delivering the facts of Professor Teufelsdröckh's life (SCR: 190; f29).

² I use the term "God" frequently in this chapter, as I do more sporadically throughout the thesis, because both Newton and Carlyle name God the highest enigmatic force, or First Cause, behind all creation. I believe Carlyle is attempting to reinstate the highest degree of reverence toward Art and Poetry that accompanied the earliest epics -- when in his words, "the epithet 'divine' or 'sacred' as applied to the uttered Word of man, was not a vain metaphor, a vain sound, but a real name with meaning" ("Biography" 71).

When we are told that "Fragments of a genuine Church-Homiletic lie scattered" in "this immeasurable froth-ocean ~~we~~ name LITERATURE,"³ we see that in Carlyle's idiosyncratic way he expresses the same view as Blake does in Marriage of Heaven and Hell where Blake claims that "the nakedness of Woman is the act of God" (SR: "Organic Filaments" 253).⁴ It is the "nakedness of Woman" which inspires art; and it is this divine nakedness that Carlyle wants revealed or 'disclosed' to Teufelsdröckh's Editor. Thus he has the Hofrath initiate the publication of Teufelsdröckh's life story.

The Hofrath's job in Sartor, at least on one significant level, is to inform Newton in a poetic yet appropriately 'scientific' way that he was a God-inspired man miraculously born of woman and must see his 'life' as a work of art, even in death. "What other Work of Art is so divine?" asks Teufelsdröckh, suggesting further that in "Death too ... as the last perfection of a Work of Art [we may] discern symbolic meaning" (SR: "Symbols" 224). Because Carlyle is concerned that his symbolism be both scientifically and spiritually relevant to Teufelsdröckh's story, he chooses the Hofrath, as the Sun, to personify the Man-in-the-Moon's "chief friend and associate" in the solar system.

³ As well as another reference to "divine Conversation," Carlyle's image of "this immeasurable froth-ocean" alludes to the Greek goddess Aphrodite (Venus in Latin; Isis in Egyptian - the subject of the following Chapter) who "materializes" from the sea-foam of Chronus's private parts, and runs off with Eros to begin the race of Man. Classical Mythology in Literature, Art, and Music (New York 1971), pp. 23,25.

⁴ Blake Dictionary, Ed. S. Foster Damon, (New England 1988), p.155. Discussing the antipathy between Blake's and Newton's visions in general (Blake said "Single vision & Newton's sleep"), Donald Ault argues that "it is possible to construct a historically viable model ... from the perspective of which Blake's relationships to Newton make sense." He argues that "Newton's vision, however esoteric, complex, and obscure it might be, seemed ultimately to make sense in its general implications and images since, ultimately, it tended to reinforce a commonsense view of the world. Blake's vision, on the other hand, still presents manifold problems even in a superficial encounter with his poetry and art. For Blake's language and vision turns the commonsense world of naive sense-data inside out; it radically and uncompromisingly opposes the way we normally experience language and the world." Blake's Response to Newton (London 1974), Preface xi,xii. In my own way I am trying to interpret Carlyle's vision of Newton as Ault did Blake's, and therefore I see Carlyle artistically representing Newton with "double vision" as both a naive Man-on-Earth and an enlightened Man-in-the-Moon. As a character, the Hofrath assumes Carlyle's task.

Newton *assumes* the sun's central place in his scientific theories and *hints* that a "subtle spirit" emanating from the sun acts as God's agent through space to produce matter (*Principia* "General Scholium" 546,47). Pursuing Newton's assumption, Carlyle imaginatively *demonstrates* through the Hofrath the sun's subtle but indispensable role in delivering God's message to man which is to "Produce, Produce! ... in God's name" (SR: "The Everlasting Yea" 197). Really man produces art, which, as discussed, Carlyle synthesizes to poetico-philosophically written "Auto-biography or Biography." In keeping with the sexual dimension which Carlyle applies to his work, the Hofrath can also be seen as representing the Paradisial serpent, the mysterious spirit that compels life to begin. The Hofrath thus symbolizes an all-inclusive 'God-source' of good and evil.⁵ The point I am working toward is that Carlyle is mindful of two notable Edens in man's history, the Old Testament Eden with an allegorical apple and its attendant 'laws of gravity,' and the other in Newton's Woolsthorpe Garden with a real apple and the scientific laws of gravity associated with it. At the moment, however, my intention is to reveal the deceptive way in which Carlyle illustrates the mechanics of artistic compulsion, especially as they concern Newton. Appropriately, given his profession as a literary man, Carlyle conceals the Hofrath's enigmatic nature in the letter 'S.'⁶

In a sort of step-by-step process Carlyle portrays through his characters the enigmatic process of becoming inspired. Early in *Sartor* we see the idea for Teufelsdröckh's Biography being put into the Editor's head.⁷ The idea is *literally*

⁵ More recently, Nietzsche's Zarathustra, who is also "like the sun," also teaches "what is good and evil *no one knows yet*, unless it be he who creates." Nietzsche, like Carlyle I argue, refers to this enigmatic creator as the "spirit of gravity." Friedrich Nietzsche, "Thus Spoke Zarathustra," *The Portable Nietzsche* (New York 1982), pp. 308-10.

⁶ I note that Newton also referred to the Sun as 'S.' *Theory of the Moon's Motion* (London 1732), Intro 55.

⁷ The effect on the Editor's mind of Hofrath's offer to provide him with Teufelsdröckh's biographia is comparable to the crystallization of "some chemical mixture:" "Form rose out of

delivered in a Letter from the Hofrath who hints "with great circumlocution" that "some knowledge" of Teufelsdröckh and his Philosophy of Clothes might stimulate "revolutions in Thought" throughout England (SR: "Editorial Difficulties" 11,12). In concluding, the Hofrath intimates *"not obscurely*, that should the present Editor feel disposed to undertake a Biography of Teufelsdröckh, he, Hofrath Heuschrecke, had it in his power to furnish the requisite Documents" (SR: "Editorial Difficulties" 12; emphasis mine). Teufelsdröckh's biographia is eventually delivered to the Editor in a *"too long-winded Letter"* from the Hofrath (SR: "Prospective" 75). I emphasize the Hofrath's method of delivery because Carlyle, himself a distinguished Man-of-Letters, distinguishes the Hofrath from other characters by subtly dramatizing the importance of delivering his written "Letter" to the English Editor. By extension Carlyle dramatizes the general importance of letters, as signs or symbols of communication, to all British readers since written English cannot be further reduced. The Hofrath's Letter can be seen as the Editor's informing symbol, not the enigmatic inspiration itself which remains the enigma, but the literal linguistic representation or usable form of the inspiration. As far as readers can tell, the Hofrath is the Editor's most personal source of inspiration. As a character he is directly responsible for providing the "philosophico-poetico" edition of Professor Teufelsdröckh's "new book" on Clothes.

I note that for some months *before receiving the Hofrath's letter*, the Editor had "read and again read" Teufelsdröckh's "Volume on Clothes." Yet the Author's personality had become only "more and more surprising [and] more and more enigmatic" (SR:

void solution and discontinuity; like united itself with like in definite arrangement." From this point "our Sartor Resartus [begins its] hourly advancing" (SR: "Editorial Difficulties" 12). Newton was renowned (infamous may be more accurate) for his dabbling in alchemy -- his pursuit of the Philosopher's Stone that would turn base metals into gold and silver (NH: 11,12). Coincidentally More (quoting Prof. H. E. Armstrong) writes that modern understanding of chemical affinity is as vague as it was in Newton's day, that modern chemistry, with its "astounding knowledge of fact" needs "a Newton with the perspicacity to order our knowledge into a philosophy" (LN: 166). My point is simply that Carlyle, the satirical alchemist, uses the Philosopher's Stone (poetry) to turn Newton into the silver-like Man-in-the-Moon and himself into gold as we will see.

"Editorial Difficulties" 11). On the basis of Teufelsdröckh's "obscure, chaotic and often unintelligible" style, Mellor declares that the "'hieroglyphic' character of Teufelsdröckh remains an enigma" (ERI: 125). We must realize, however, that Professor Teufelsdröckh does not characterize an enigma except to his Editor. Although he is, as Mellor concludes, a "paradox embodied," Teufelsdröckh is non-enigmatic: he explains, he professes, he is all that he says. If we are to speak hieroglyphically (with "sacred script"), it is the letter 'S,' as characterized by Herr Hofrath Heuschrecke, which *literally characterizes enigma* (ERI: 125,26). The Hofrath's "too long-winded Letter" to the Editor is equally important as the formal (in form) message of inspiration. It is his form, his figure, his embodiment that appears most crucial to his role as Counsellor. Closely studying Carlyle's satire I suggest that as the Editor receives his idea for Teufelsdröckh's biography it comes, figuratively speaking, like a 'brainwave' as the light 'dawns' on him. Literally we are told that the Editor sees before him "a cheerful daystar of hope" in the "expected Aid of Hofrath Heuschrecke" (SR: "Prospective" 76). The Sun's image is reinforced paradoxically when we are told that "Wits" in Weissnichtwo "no more thought of accounting for [Teufelsdröckh] than for ... the domestic habits of the Sun" (SR: "Reminiscences" 18). Here Carlyle distinguishes himself from Newton and the rest of us insofar as he does not take the Sun nor the Man-in-the-Moon for granted. Recognizing the necessarily enigmatic dimension of the Hofrath's "letter" is a key to the elucidation of Teufelsdröckh's life history as the Man-in-the-Moon, as well as a clue to understanding Sartor Resartus because the letter 'S' represents the mysterious source of inspiration in Carlyle's own work of art.⁸

⁸ Professor Teufelsdröckh, encircled by this "mystery of Existence" as a child, recognizes it later as "the ring of Necessity whereby we are all begirt; happy he for whom a kind heavenly Sun brightens it into a ring of Duty" (SR: "Idyllic" 97,98). In reference to the English Editor's concern that readers will mistake Rousseau's "ill-cut Serpent-of-Eternity for a common poisonous reptile," Harrold notes that "The Serpent-with-tail-in-mouth is an emblem of Eternity, and was adopted by Carlyle for his Seal." This choice of personal seal reflects Carlyle's awareness that the male and female cannot be separated, neither metaphorically nor

Although Professor Teufelsdröckh appears to be the most obvious teacher in Sartor, Carlyle's "didactic" tone comes across largely through the Hofrath. We are told

it might have seemed wonderful how Herr Heuschrecke should be named a Rath, or Councillor, and Counsellor, even in Weissnichtwo. What counsel to any man, or to any woman, could this particular Hofrath give; in whose loose, zigzag figure; in whose thin visage, as it went jerking to and fro, in minute incessant fluctuation, -- you traced rather confusion worse confounded; at most, Timidity and physical Cold? Some indeed said withal, he was 'the very Spirit of Love embodied': blue earnest eyes, full of sadness and kindness; purse ever open, and so forth; the whole of which, we shall now hope, for many reasons, was not quite groundless (SR: "Reminiscences" 25).

The Hofrath's power is cleverly concealed in Carlyle's choice of the name Hofrath. Although his love for Teufelsdröckh is "by far [his] most decisive" feature, as well as the "main point, doubtless, for us all," the Hofrath (of wrath/have wrath/half wrath) implies a type of disciplinary figure, albeit a loving one. Nobody is more a Rath than God himself and I suggest that the Hofrath, like the Old Testament Creator, exudes wrath concerning man's Fall, even while loving man absolutely (SR: "Reminiscences" 26). This seeming contradiction is another of Carlyle's provocative paradoxes. By translating Hofrath into "Half wrath" I suggest that Carlyle conveys Hofrath's equal portions of wrath and love for those he counsels. Because of the implication that he counsels both man *and* woman (pointedly added by Carlyle in a distinct clause) I believe the Hofrath's ultimate duty is to inspire both sexes with the divine idea of the world, which is to attract and be attracted to each other in the name of God's love. Whether a He, She, or It, this enigmatic "Spirit of Love" suggests sexual impulse or desire.

From the above passage we can see how the Hofrath's "loose, zigzag figure" ('S') resembles the Serpent. In his "thin visage" we trace "confusion worse confounded" since

symbolically, within the single enigmatic force responsible for the first human 'being'. (SR: "Pause" 203). Teufelsdröckh's reference to Rousseau's "ill-cut Serpent" may allude to Newton's low opinion of man, whom he considers to be "a miserable serpent" (Principia, Cotes' Preface xxxii). Another possible reference is to Rousseau's writing which Carlyle, in his ambition to achieve the highest literary goal, does not wish to have confused with his own, Carlyle's argument with Rousseau being that the written Word is far from being a mythology of presence, or at least Carlyle's is not.

no matter how destructive man's Fall proves to be (life begotten inevitably begets death) the enigmatic spirit behind the union is essentially one of love. As described, the Hofrath's "embodiment" is "the very Spirit of Love." Insofar as I see the Hofrath counselling man and woman about the confusion of good and evil in life, I find him predating Zarathustra who says "[g]ood and evil have always been created by lovers and creators. The fire of love glows in the names of all the virtues, and the fire of wrath" (Nietzche 172).⁹ Ultimately the Hofrath, as the "very Spirit of Love," attempts to convey both the sensual and spiritual indispensability of man and woman to each other, to teach Newton in particular that man's sensual 'Fall' does not imply a spiritual 'death,' but rather that man's spirit remains indestructable and immortal, indeed evolves from a "melodious Deathsong" into a "more melodious Birthsong" (SR: "Organic Filaments" 244,45). We note that Carlyle's "Yea" and "No" are both everlasting responses in an eternal revolution. Both proceed together in what Teufelsdröckh calls the "Phoenix Death-Birth" -- "that Fire-whirlwind [of] Creation and Destruction" (SR: "The Phoenix" 237). In a word, the Hofrath presents man and woman with mankind's most confounding and irreconcilable dilemma -- desire versus obedience.

The Hofrath understands, as does his "little sage" Professor Teufelsdröckh, that "so cunningly has Nature ordered it, that whatsoever man ought to obey, he cannot but obey" (SR: "Organic Filaments" 251). Historically the desire to experience love and life has been overwhelmingly greater than any fear of its consequences. In keeping with Carlyle's cunning style, Hofrath's counsel is metaphorically concealed in a curious turn of phrase, "purse ever open, and so forth," a subtle suggestion that the spirit of love

⁹ The principle behind the Hofrath also seems the same as behind Blake's Marriage of Heaven and Hell -- that man can only know and create within a framework of good and evil. The Hofrath's inclusive nature is consistent with Carlyle's belief in the inherent nature of contraries, that man's being is founded in "Dualism, Equipoise; a perpetual Contradiction." Thomas Carlyle, "Characteristics" in A Carlyle Reader (Cambridge, Mass., 1988), p. 89. I note that as a possible symbol of heaven and hell, the name Hofrath Heuschrecke can be reduced to the letters H.H.

must be "sewn" into a purse always open to receiving that spirit (SR: "Reminiscences" 25).¹⁰ By adding that the "whole of [the purse] for many reasons, was not quite groundless," Carlyle may be advising Newton that there is a fundamental reason why God created mankind in spite of Newton's low opinion of the race. While playfully mocking Newton's celibate lifestyle, Carlyle is teaching Newton the spiritual 'facts of life' -- that Newton already has experienced divine knowledge, as has Carlyle, and that both men have expressed it through their work -- Carlyle most particularly through his poetic Imagination which through Sartor he now shares with Newton.

Carlyle refers to the Hofrath as "the large-bodied Poet" and to Teufelsdröckh "the small" (SR: "Characteristics" 33). On closer scrutiny of Sartor we see that Carlyle methodically but poetically establishes the sun and the moon as symbols of enlightenment.¹¹ In this way the Hofrath and Teufelsdröckh parallel God's "two great lights" as described in the Old Testament: "the greater light to rule the day, and the lesser light to rule the night" ("Genesis" 1:16). By implication we have an inseparable pair of "Celestial Luminaries" which like "all things ... have their rise, their culmination, their decline" (SR: "Symbols" 225). Within the solar system this pair symbolizes a birth-death cycle on a cosmic but recognizable level since the sun appears to rise as the moon declines, and vice versa. The distinction made between the large and small poets illustrates Carlyle's idea of "the Conversation" insofar as the small-bodied

¹⁰ This idea was conveyed in a poem sent to Carlyle by his wife (December 30th, 1830), documented in his Notebook and subsequently burned: "Fortunatus' Purse was a mighty fine thing, / Yet a pest, nothing else, to its owner; / For me, neither guineas nor troubles I bring, / My whole worth is the Love of my donor" (IN: 182). My point is simply that this metaphoric phrase was familiar to Carlyle, although it is also an example of how Carlyle incorporates every "seed-grain" of experience into Sartor Resartus.

¹¹ I believe that as a historical figure the Hofrath is meant to represent Shakespeare, whom Carlyle describes as "wide, placid, farseeing, as the Sun, the upper light of the world" and "the chief of all Poets hitherto" (HHW: "The Hero as Poet" 137,139). Thus we see Carlyle suffering the anxiety of Shakespeare's influence.

poet, the Hofrath's "living oracle," would not be seen or heard without his artist. We are told that the Hofrath hangs onto Teufelsdröckh with the "fondness of a Boswell for his Johnson." Readers clearly comprehend the love of a biographer for his subject. The narrator remembers:

it was curious to observe with what reverent kindness, and a sort of fatherly protection our Hofrath, being the elder, richer, and as he fondly imagined far more practically influential of the two, looked and tended on his little Sage, whom he seemed to consider as a living oracle (SR: "Reminiscences" 26).

Elsewhere the Hofrath is implied master in a symbiotic relationship when Teufelsdröckh addresses him as "thou Gold-Hofrath" (SR: "Helotage" 230). Yet on his mere human level Teufelsdröckh loves the Hofrath, much as we love the Sun, "out of gratitude and by habit" (SR: "Reminiscences" 26). Scientifically established as the centre of the solar system, the sun must be recognized as the "elder, richer" and "far more practically influential" of the two "Celestial Luminaries," and ultimately the higher visualization of divine spirit. Through Hofrath's love for Teufelsdröckh we further comprehend the love of the unseen Author for all of us, his human art. As the most creative manifestation of God's Word, man continues to "utter forth" God's message of love as he continues to write about his life through "Auto-biography or Biography," which in Carlyle's view circuitously proves the existence of God (SR: "Symbols" 224). Because the Hofrath represents inspiration itself and Professor Teufelsdröckh is an inspired entity, the conversation between these two characters is a level higher than the one between Teufelsdröckh and the uninspired Editor, and is instrumental in attracting the Editor (Newton) to "higher points of vision" where he will come to see God.

Carlyle's belief in symbolic expression reflects his awareness of man's need to render the Godlike visible (SR: "Symbols" 224). He, and to be fair, Newton as well, understands that within his lifetime, man cannot know a First Cause for creation other than a symbolic one. But on that same subject of symbols, Teufelsdröckh notes that "like all terrestrial garments" even sacred symbols become dated. Taking Homer's Epos as an

example he points out that with Time, its shining fades "like a receding Star [that] needs a scientific telescope ... before we can so much as know that it was a Sun" (SR: "Symbols" 224). Here Carlyle makes two subtle points: 1) it takes Carlyle's 'spiritually scientific' telescope to see that the Sun of our solar system was God's primary gift to man; and by playing on the word 'Sun' I suggest, without blasphemous intent, that for Carlyle this indispensable "Star" symbolizes God's first 'Son,' a finite Father Time from whom we descend, like Teufelsdröckh, as "Sons of Time" for the duration of our history, and 2) looking through Carlyle's revolutionary 'reflecting' telescope Newton should see that like Homer's Epos, his Principia was a Sun, and a divinely inspired heroic Poem. Again we have the implication, on the basis of accumulated evidence, that Carlyle views Newton as the most recent symbolic Son of God.

The "revolutionary" intent behind Sartor is clearly mentioned in Carlyle's poem called "Song," in which he writes: "Poor Thomas Cairel He wrote a Revolution, Book without its like Sartor called Resartus / This my published theme" (SCR: Prefatory page). This poem about Carlyle's "Revolution" reiterates his main point in Sartor Resartus including the title itself. While his story or "Song" essentially repeats every other man's story, "the old, old story that all men find it difficult to get on in the world," and to say all they want to in one lifetime, Carlyle's book is revolutionary and "without its like" because it is uniquely Carlyle's (IN: 42,45). The "published theme" of Sartor Resartus naturally assumes Carlyle's personal difference or 'trademark,' which has unfortunately become known as "Carlylese."¹² Carlyle is "poor" and the "foolishest of

¹² This generalization has taken on a pejorative connotation insofar as it implies inconsistency and vagueness on Carlyle's part, presumably a large part of his intention. Ultimately Carlyle has the last laugh about his "Carlylese" in the sense that it is we readers of English, with our "feeble-thinking English faculty," who provide the "laughing stock" for his parody on editing. Carlyle's ego is obviously not threatened over the subject as evidenced by his rebuttal to Sterling's criticism of his style: "If one has thoughts not hitherto uttered in English Books, I see nothing for it but that you must use words not found there, *must make* words, -- with

men" because he cannot understand the compulsion to write his story for an audience not likely to understand his philosophy, that man can only express what he knows through art, and because of his inspiration to do so this art continually repeats itself, however inadequately. In reference to Robert Burns, Carlyle notes that the true poet "speaks forth what is in him, not from any outward call of vanity or interest, but because his heart is too full to be silent." Here Carlyle observes, perhaps in self-reflection, that "He who has much to unfold, will sometimes unfold it imperfectly" ("Burns" 57,58).

For Carlyle the divinity of man, as distinguished from other biological species, is evidenced by his miraculous ability to describe his life through various forms of art in various forms -- in Carlyle's case through writing. This idea is reflected in the didactic "Resartus" dimension of Carlyle's title (Re>s>art>us) which in turn reflects Teufelsdröckh's dictum: "Be no longer a Chaos, but a World, or even Worldkin. Produce! Produce! Were it but the pitifullest infinitesimal fraction of a Product, produce it, in God's name!" (SR: "The Everlasting Yea" 197). Sartor Resartus is the narrator's message.-- he narrates from the name of his book. Through Sartor Resartus Carlyle dramatizes the idea that man's art or what he calls "doing" is in a constant state of revolution around an inspirational 'something' ('S') and can only be repeated endlessly as a testimony to "the Unseen Author" of us all. Thus I consider the title Sartor Resartus to be an unclosing, never-ending metaphor for man's existence and his art.¹³ Art,

moderation and discretion, of course. That I have not always done it so, proves only that I was not strong enough With unspeakable cheerfulness I give up "Talented" finally, do you reckon ... that Style (mere dictionary Style) has much to do with the worth or unworth of a Book? I do not" (SR: Appendix III, 316).

¹³ Tennyson notes "There is no convincing argument for allowing only one reading of the title" which has generally been translated as "the tailor patched," or "The Tailor Re-tailored" as Harrold translates the Latin (SCR: 161; SR: Intro V,a,xxxiii). My extended interpretation is not incompatible with the idea of the tailor patching or retailoring ad infinitum until the end of time. The Latin "sartor" and "resartus" (from verb "sarcare") can be interpreted figuratively, however, to mean "one who mends through sewing; having been mended or sewn again; one who makes hole and makes whole again," and so on -- Carlyle's thrust being undeniably an attempt to heal a wounded society through humour (Cassal's Latin Dictionary). If we adhere to Professor Teufelsdröckh's opinion that "the fair fabric of Society itself [is] the

coming from "know-not-where," darkness or chaos (symbolized by 'S' -- S>Art), represents man's mortal being or form (visualized knowledge and enlightenment). By inspired compulsion this art is repeated endlessly for the reflection of all mankind which is 'us' (S>art>or>Re>s>art>us>or>Re>s>art>us> and so on).¹⁴ Man continually has a choice of whether to be or not to be 'enlightened' by art. Professor Teufelsdröckh clearly advocates the continuation of light, having noted "the beginning of Creation is -- Light" (SR: "The Everlasting Yea" 197). We begin to see why the name of Carlyle's new book, "our Sartor Resartus, which is properly a 'Life and Opinions of Herr Teufelsdröckh,' hourly advancing," is such a fitting title for the inspired philosophy of an "almost unexampled personal character" (SR: "Editorial Difficulties" 12).

Struggling to describe the phenomenon of inspiration, Carlyle likens it to a flash of light or "light-gleam, which instantaneously *excites* the mind, and urges it to complete the picture, and evolve the meaning thereof for itself" -- in a word, 'Insight' ("Biography" 76). Although he did not understand how, or why, Carlyle *knew* once and for all that this force affected him directly. For Carlyle,

belief is, indeed, the beginning and first condition of all spiritual Force whatsoever: only in so far as Imagination, were it but momentary, is *believed*, can there be any use or meaning in it, any enjoyment of it ... a perennial belief were enjoyment perennially, and with the whole united soul" (EOCR: "Biography" 70).

The effect on Newton of watching the apple fall from the tree, and 'seeing' his theory of gravity evolve almost instantaneously, must be considered comparable to the effect on Carlyle of witnessing the unfolding of his "strange piece 'On Clothes,'" which "glances

creation ... of *the* Tailor alone," and that "all Poets and moral Teachers [are] but a species of Metaphorical Tailors," then Sartor Resartus can be seen as an experiment to prove what may be Carlyle's strongest point -- that a mortal artist can only *seem* to be original.

¹⁴ Carlyle was, and could only be, a Carlyle of the mind, and therefore we have Sartor Resartus, which re-marks upon Newton's Art. Newton was, and could only be, a Newton of the mind, and therefore (because of his reluctance to "Produce") we almost missed his enlightening Principia.

from Heaven and Earth and back again in a strange satirical frenzy" (TN: 177).¹⁵ But whereas Carlyle immediately associates his experience with divine interference, Newton deliberately keeps the metaphysical separate from his scientific insight. By dramatizing Newton at the poetico-philosophical task of reconstructing his life's work, then, Carlyle artistically revolutionizes Newton's scientific revolution. He emphasizes Newton's scientific struggle for all its "Natural Supernatural" worth.

The common view of Newton's garden at Woolsthorpe as an atypical Eden seems to provide the crux of Carlyle's satire. I quote verbatim one of various accounts of the "Apple Story," two of which were documented by Voltaire, an ardent admirer of Newton and among the first to introduce Newton's philosophy into France (NH: 30; IN: 467). One memorable day, Newton was sitting in the orchard by the old stone house:

an apple falls with a slight thud at his feet. It was a trifling incident which has been idly noticed thousands of times; but now, like the click of some small switch which starts a great machine in operation, it proved to be the jog which awoke his mind to action. As in a vision, he saw that if the mysterious pull of the earth can act through space as far as the top of a tree, of a mountain, and even to a bird soaring high in the air, or to the clouds, so it might even reach so far as the moon. If such were the case, then the moon would be like a stone thrown horizontally, always falling towards the earth, but never reaching the ground, because its swift motion carried it far beyond the horizon. Always falling towards the earth and always passing beyond it, the moon would follow in its elliptical path if these two motions were equally balanced ... Perhaps even more significant of Newton's genius, was the fact that he not only guessed the law of attraction, but he immediately set himself the task of calculating what would be the law of the force which could hold the moon in her orbit (IN: 288).

However different Adam's and Newton's stories might seem to be, their obvious point in common is that both account for laws of gravity associated with falling, albeit distinctly different concepts of gravity and falling. Biographers continue to argue whether or not Newton's apple is as mythical as Eve's, some going so far as to consider the story "a vulgar myth" (NH: 29,30). Voltaire's second account "spoke not of an apple but of 'fruit falling from a tree'" (NH: 30).

¹⁵ Letters of Thomas Carlyle, 1826-1836, ed. Charles Eliot Norton (London, 1888), I, pp. 236,37.

To all appearances Newton sublimated a quest for love into a passionate quest for knowledge, and Carlyle's satire flows through Teufelsdröckh's romantic memoirs accordingly. They inform us that "In every well-conditioned stripling, as I conjecture, there already blooms a certain prospective Paradise, cheered by some fairest Eve; nor, in the stately vistas, and flowerage and foliage of that garden, is a Tree of Knowledge, beautiful and awful in the midst thereof, wanting" (SR: "Romance" 132). On the strength of his artistry, Carlyle's apple story depicts Newton as the inclusive personification of his own laws of gravity, that opposite forces attract each other. Thus we have the Editor's "poetico-philosophico" account of Teufelsdröckh first falling in love:

If in youth ... the Universe is majestically unveiling, and everywhere Heaven revealing itself on earth, nowhere to the Young Man does this Heaven on Earth so immediately reveal itself as in the Young Maiden. Strangely enough, in this strange life of ours, it has been so appointed [that] a certain orthodox Anthropomorphism connects my *Me* with all *Thees* in bonds of Love: but it is in this approximation of the Like and Unlike, that such heavenly attraction, as between Negative and Positive, first burns-out into a flame....thus, in the conducting medium of Fantasy, flames-forth that *fire-development* of the universal Spiritual Electricity, which, as unfolded between man and woman, we first emphatically denominate LOVE (SR: "Romance" 132).

The "Like and Unlike" in the above passage might well refer to Newton and the Moon, and the "LOVE" or "fire-development of [their] Spiritual Electricity" be only analagous to the love which unfolds "between man and woman." This oblique description of Newton's attraction to, and love for, the moon (and/or vice versa) is Carlyle's imaginative way of anthropomorphizing a female object of Newton's affection. His unusual vision of falling in "LOVE" then encompasses the reciprocal attraction between opposites -- the moon (the most cosmic symbol of Newton's desire) and Newton himself.

In Sartor's revolutionary garden, the "certain orthodox Anthropomorphism" that connects "my *Me* with all *Thees* in bonds of Love" may be taken as a facetious reference to Newton's revolutionary reflecting telescope, what the Editor calls "*Aesthetic Teal*," the instrument that connects Newton with the Moon and places the youthful

Teufelsdröckh "at actual handgrips with Destiny herself" (SR: "Getting Under Way: 124). Newton's hand-built reflecting telescope led to his knowledge of the moon in a process of temptation which can be seen as metaphorically parallel to the traditional male rite of passage (to be detailed in Chapter V: "Cast-Metal King"). At the moment it is enough to know that for Teufelsdröckh "*Aesthetic Tea*" ('T' for Telescope) is the invitation that comes "epigrammatically enough" (like "a sort of *epistolary mummy*") in response to his "urgent need" for "solid pudding" (SR: "Getting Under Way" 124 - emphasis mine). A "sort of epistolary mummy" again implies the enigmatic role of a *letter* in getting an 'Idea' under way, and in this instance seems to reflect Carlyle's vision of an ancient spirit pulling Newton toward the Moon to continue and ultimately fulfill his romantic quest. The use of a telescope or "*Aesthetic Tea*" ('T') as transmitter of 'S' appears unique to Carlyle's work. Carlyle may also be the first to equate "Spiritual Electricity" with sexual energy, as Newton was the first to equate an "electric and elastic spirit" with gravitational force (Principia "General Scholium" 547).

Carlyle understands that Newton's discovery of the laws of gravity is comparable to, if not considerably more profound than the knowledge gained by Adam.¹⁶ What the true poet, who has heretofore comprehended gravity metaphorically, may now express to the world as a result of Newton's discovery, is that the 'law of gravity' is physically inherent within all men, as it is in all matter, which fact extends the concept of gravity. The point here, as Carlyle might have perceived it, is that until Newton the enigma surrounding Eve and man's 'gravest' step had only been poeticized, but with Newton the 'law of gravity' became scientifically measured, an advancement which must now be poetically accounted for. Barnes notes that Newton's discovery of the "inexorable action

¹⁶ As a point of interest I note that in his earliest boyhood experiments in optics, Newton explains the concept of "binocular vision" by using the fibres of bent apple trees" as examples of the fibrous nerves of the eyeball: evidently apple trees were a factor in more than his Theory of Gravity (IN: 209).

of matter and motion in gravity hinted at a necessitarianism inherent in all action, human and natural," which when *misconstrued* implied the "detriment of free will and man's independence" (Barnes 29). I note here that in keeping with Carlyle's artistic eye for detail, *Teufelsdröckh*, our exemplary poet-philosopher, scorns Voltaire (who ultimately turned against Newton, perhaps as a result of misconstruing his theory) as a sham Divinity, "a Sceptic, Mocker, and millinery Court-poet" though he "seemed the Wisest [and] Best" to all of Paris (SR: "Organic Filaments" 251,52).

Carlyle sees that as a scientist, Newton is trapped in his own set of 'observable' laws, an unenviable existence which the true poet can see, but ironically, Newton cannot. Carlyle knows that scientists, especially of Newton's calibre, have a poetic soul. He also knows that scientists in general do not see themselves as doing something poetic, or view their work as being poetic. But to the extent that they share a higher realm of insight than most into the nature of the Universe, the scientist and poet complement each other. That is, by acting upon inspiration and formulating their inspired views both scientist and poet create new forms of knowledge -- a higher art that expands the collective human consciousness. Newton's personal dilemma with the quixotic force of creation is poeticized succinctly by Byron, who also compares the apple in Eden with the apple at Woolsthorpe:

And [Newton] is the sole mortal who could grapple,
Since Adam, with a fall, or with an apple.¹⁷

Byron, like Carlyle, appreciates the level of knowledge to which Newton aspires, with the ultimate aim of comprehending a First Cause of creation. Although Byron compares

¹⁷ George Gordon Byron, Canto X, *Don Juan*, eds. Truman Guy Steffan and Willis W. Pratt (U of Texas, 1971), III, pp. 225,26, lines 7-8. Byron adds that "Man fell with apples, and with apples rose, / / [And] ever since immortal man hath glowed / With all kinds of mechanics, and full soon / Steam-engines will conduct him to the Moon" (9,14,15). We know, however, that Carlyle had little hope for Steam-engines and instead used Imagination to conduct at least Newton to the Moon. On the other hand, Byron's prophetic point must be taken since man has reached the Moon mechanically.

Adam's apple to Newton's, Newton's "grappling" is seen by Carlyle as spiritually superior since Newton's apple was real or 'scientific' while Adam's was only a poetic metaphor for lust.¹⁸ Based on Newton's assumed chastity, his successful grappling with 'the Fall' is an indication of the power of his mind over his body. This unprecedented attempt since Adam to reason the first cause of man objectively in the face of sexual temptation, what Carlyle calls "lawless desires," must be seen as one reason for Carlyle's hero-worship of Newton ("Biography" 75).¹⁹ Yet the more significant factor must remain Newton's apparently effortless grappling with the real fall of a real apple to discover a scientific Law of Gravity that transcends (in this instance) a lesser poetic law, yet ultimately allows a 'seer' like Carlyle to philosophize poetically on the most revolutionary scientific discovery.

Carlyle knows, however much he satirizes Newton's scientific vision of a First Cause, that Newton's love for the moon exemplifies, paradoxically, a true or higher love that transcends gender. In this sense Carlyle follows the Romantics' belief that in a sublime soul the highest passion can be equated with reason, that non-sexual love can be comparable in passion to sexual love. He knows that Newton's Principia, as it reflects Newton's knowledge of the moon, is as much a reflection of God-inspired 'S' as Newton's mortal existence, and in this sense can be considered his 'progeny.'²⁰ We now

¹⁸ This assertion seems contradictory in view of my argument that Carlyle wants Newton to recognize both the sensual and spiritual indispensability of woman to man. But when Carlyle condemns Byron as a sensualist "seeking after somewhat to eat," he distinguishes Byron from Newton insofar as he perceives Byron to love "Pleasure" instead of God, and Newton to love God while denying himself "Pleasure." Hence Carlyle's admonition to readers to "Close thy *Byron*; open thy *Goethe*," whose work offers readers a spiritual/sensual or "poetico-philosophico" balance (SR: "The Everlasting Yea" 192).

¹⁹ Shakespeare (Carlyle's Hero as Poet) has Hamlet say to Horatio (the philosopher): "Give me that man / That is not passion's slave, and I will wear him / In my heart's core, ay, in my heart of heart, / As I do thee" (*Hamlet* III;ii;76-79). I use this reference to reinforce the idea that Carlyle reveres Newton's self-control even as he queries his reason for exercising it.

understand that Carlyle became fascinated with Newton's fascination with the "moon's motions," to the extent that Carlyle sees the moon as a female substitute for Newton's passion. At the satirical level Carlyle is possibly most interested in Newton setting himself "the task of calculating what would be the law of the force which could hold the moon in her orbit," the crux of his Theory of Gravity (cf. "Apple Story" p.55). Imagining an analogous power struggle between man and woman, Carlyle is concerned with keeping a woman in her place, a problem Teufelsdröckh refers to most discretely as the Taming of the Shrew (SR: "Tailors" 288,89;f1). Newton confessed that "his head never ached but with his studies on the moon," and by his own account the most vexatious female seemed to be Philosophy per se, which he personified as an "impertinently litigious Lady" (NH: 571,249; IN: 301,310).²¹ Thus we see Carlyle establishing a counter-revolutionary Theory of Levity to 'lighten' Newton up as he studies Teufelsdröckh's Philosophy of Clothes.

By acquainting Newton with his "Poetico" dimension of Philosophy, which is intended to extend his view of the moon, Carlyle attempts to 'humanize' Newton at the same time as he corrects and re-humanizes the history of science. In this sense Carlyle reflects other English Romantics, whose distrust of scientific analysis or technological change characterizes so many of their statements. In particular Wordsworth suggests that science, unlike poetry, can never be a true friend to man so long as it lacks "a form of flesh and blood."²² In relation to Newton as the definitive scientist, the need for a "form of flesh and blood" implies the need for a human heart. The question of whether or

²⁰ More, for one, frequently refers to Newton's works as his progeny or "children of the mind" (IN: 105,317, 550).

²¹ This sort of information about Newton would be common knowledge to anybody interested in his life.

²² "Preface to Lyrical Ballads" (1850), The Prose Works of William Wordsworth (Oxford 1974), II, p. 141.

not Newton had a 'heart' or was only an intellectual and mechanical machine (what many called an "embodiment of thought"), is discussed in most biographical works (IN: 132). Although Newton's implied lack of heart may further imply to Carlyle an incapacity for "true friendship" or love, *Newton does acknowledge the distinctive nature of the heart.* Having established Nature as a "perpetual circulator²³ worker," Newton concluded that "the protean changes of [the sun] produce all the phenomena we perceive in the physical world," and that the "soul [causes] all the motions we see in animals." Newton then distinguishes the heart from all other bodily muscles by the fact that the heart generates its own "aethereal animal spirit," which as it is "generated" travels into the brain "to perform ... motions in other muscles by inspiration" (IN: 181). He concludes that the *heart* is Man's most direct source of physical inspiration, and refers to this "inspiration" variously as "aether" or a "subtle Spirit," the source of which he does not pretend to comprehend beyond speculating that it emanates from comets.²³ At this point we understand that Carlyle and Newton (as did most physiologists in Newton's time) basically agree that the heart is man's most direct source of physical inspiration. Newton's technical description of the mechanics of the heart, however, along with his casual reference to "the soul" and speculation as to the source of life-giving "inspiration," give the reader some idea of what prompted the Romantics' pejorative attitude toward science.

While I understand that Wordsworth is concerned with scientists' remoteness from human fellowship, I believe Carlyle is more concerned with their human experiments. Newton's experiments of the heart and brain, for example, appear to be particularly grievous to Professor Teufelsdröckh who asks his Editor: "what is that

²³ In a rare hypothesis Newton speculated that comets collect and emit an "aethereal spirit" as they spin around the sun which is responsible for all created matter as we know it. Pursuing Newton's speculations, modern scientists (Hoyle/1978; Wickramasinghe/1979) argue that "both life on earth and a number of terrestrial diseases originated in comets and have been subsequently brought to earth" (NH: 127).

Science, which the scientific head alone, were it screwed off, and ... set in a basin to keep it alive, could prosecute without shadow of a heart, -- but one other of the mechanical and menial handicrafts, for which the Scientific Head (having a Soul in it) is too noble an organ? I mean that Thought without reverence is barren - perhaps even poisonous" (SR: "Pure Reason" 68). This quotation, which in my view reflects Carlyle's general antipathy toward the vivisection so popular in his time, would seem to allude to a "remarkable experiment" that Newton performed at Cambridge on the heart of an eel: "he cut [it] into three pieces and observed every one of them beat at the same instant and interval: putting spittle upon any of the sections had no effect, but a drop of vinegar utterly extinguished its motion" (IN: 610). More cites the experiment as an example of Newton's pleasure in "satisfying his boundless curiosity," which is exactly the sort of complaint Wordsworth had against the scientist who "has no pleasure [where] he has no knowledge" ("Ballads" 141). Carlyle would see Newton's experiment as an insult to the heart of a living creature whether a serpent-like eel or a man, and an example of what I will call Newton's 'heartlessness,' for lack of a more appropriate word. For Carlyle the heart is a subject for reverence, and in spite of being a visible phenomenon should be beyond mere mechanical observation and classification. Teufelsdröckh's condemnation of the "Scientific Head" indirectly reflects his defence of the heart, and Carlyle's notion of what is and what is not scientifically explorable.

It is ironic, in view of Newton's discussion of the brain, the heart and the soul, that he refused to speculate on the workings of the mind. In Carlyle's view a "loving Heart is the beginning of all Knowledge" -- the singular tool, so to speak, "that opens the whole mind, quickens every faculty of the intellect to do its fit work, that of *knowing*; and therefrom, by sure consequence, of *vividly uttering-forth*" -- the "all sufficient" secret for being "graphic." In short, a "loving Heart" is the singular source of "Auto-biography or Biography" ("Biography" 76). Here we understand clearly the pre-eminence Carlyle places on a "heartfelt Truth," words reflected in Teufelsdröckh's

observation that "the Heart sees further than the Head" ("Biography" 76). Newton assumed man to have a "rational soul" as an entity apart from his brain. Although Carlyle appears uncertain as to its "rational" quality, for him man's soul constitutes instinct or intuition and is located *definitely* "somewhere in the heart." Insofar as Carlyle's "loving Heart," or soul, is represented in the Hofrath, I note that Teufelsdröckh regards the Hofrath as "some half-rational or altogether irrational friend" (SR: "Reminiscences" 26). Carlyle's point is that man's soul must remain at least half irrational in order for it to retain the chaotic, enigmatic dimension of a 'spiritual' mechanism.

Carlyle's skepticism of new scientific answers to unanswerable questions such as origins and ends of Man is articulated through Teufelsdröckh, who challenges "Works of Science" that profess "unalterable rules" for Nature. He makes the point that a man living during the scientific revolution, implicitly Newton, knows little more than man ever did about "a complete picture and Genetical History of the Man and his spiritual Endeavour."

Was Man with his Experience present at the creation, then, to see how it all went on? Have any deepest scientific individuals yet dived down to the foundations of the Universe, and gauged everything there? Did the Maker take them into His counsel; that they read His groundplan of the incomprehensible All; and can say, This stands marked therein, and no more than this? Alas, not in anywise! These scientific individuals have been nowhere but where we also are; have seen some handbreadths deeper than we see into the Deep that is infinite, without bottom as without shore (SR: "Natural Supernaturalism" 256,257).

While Newton is undoubtedly a scientist who has "seen some handbreadths deeper than we see," Carlyle makes the important point that the "Deep" is "without bottom as without shore" in mocking reference to Newton's delineations of Absolute Time and Space. An image of the "deepest" but ultimately naive "scientific individual" returns us to Carlyle's effort to re-educate Newton by raising him to "higher points of vision."

I wind down this chapter on Carlyle's Revolution by drawing parallels between Newton's life and Teufelsdröckh's that culminate in somewhat wild speculation on the Hofrath's resources, other than spiritual, for raising Newton to higher points of vision. At this point my essay takes the strangest twist of all, and I refer to the "six considerable PAPER-BAGS" that accompany the Hofrath's *"too long-winded Letter"* to Teufelsdröckh's Editor (SR: "Prospective" 75,77,78). These bags, which are "carefully sealed, and marked successively ... with the symbols of the Six southern Zodiacal Signs beginning at Libra," contain the story of Teufelsdröckh's life. Before drawing the parallels between Teufelsdröckh and Newton, I speculate that Carlyle was probably in possession of, or had access to or knowledge of, one of two of Newton's most personal note-books kept during his early youth and college days, and known to have gone missing during the time Carlyle was struggling to publish Sartor (c 1830) (IN: "Early Years" 17). In other words, just as the Hofrath has the power to furnish Teufelsdröckh's autobiographical documents, Carlyle may have had the power to furnish Newton's requisite autobiographical documents.

More, Newton's definitive biographer in 1934, informs us that "by one of the strange tricks of fate, the first little volume, after dropping out of sight for more than a century, has recently been found amongst the manuscripts of the Pierpont Morgan Library in New York" (IN: 17). As More's work was published in 1934, one can assume that Newton's note-book "dropped out of sight" during the years 1830-32. While More relates that "when, or how, the other was lost is unknown," the close critical reader of Sartor, "look[ing] fearlessly towards all the thirty-two points of the compass" (as Carlyle enjoins upon him), might speculate that this 'lost' notebook was 'found' by Carlyle and subsequently formed the basis of Professor Teufelsdröckh's Autobiography.²⁴ Carlyle's familiarity with this document may account for the

"extraordinary Doctrines" that the Editor is about to publish (SR: "Editorial Difficulties" 11) It could also help to explain why Teufelsdröckh's *Clothes Philosophy* contains "the essence of all Science" and why Sartor Resartus is such a completely revolutionary work. I ask readers to pay particularly close attention to the following quotations uttered by the Hofrath prior to delivering the documents. He asks rhetorically:

[are] the whole particulars of [Teufelsdröckh's] Route, his Weather-observations, the picturesque Sketches he took, though all regularly jotted down (in indelible sympathetic-ink by an invisible interior Penman), are these nowhere forthcoming? Perhaps quite lost: one other leaf of that mighty Volume (of human Memory) left to fly abroad, unprinted, unpublished, unbound up, as waste paper; and to rot, the sport of rainy winds?

No, ["Most esteemed Mr. Editor"], in no wise! I here, by the unexampled favour you stand in with our Sage [Professor Teufelsdröckh], send *not a Biography only, but an Autobiography*: at least the materials for such; wherefrom, if I misreckon not, your perspicacity will draw fullest insight: and so the whole Philosophy and Philosopher of Clothes will stand clear to the wondering eyes of England, nay thence, through America (SR: "Prospective" 77; emphasis mine).

Other details of these historic "leaves" notwithstanding, the reader of the above quotations is clearly informed that the Hofrath possesses "one other leaf" of Teufelsdröckh's "mighty Volume."

Apart from Carlyle's possible access to Newton's autobiographia, I suggest that the "PAPER-BAGS" appear to represent the "lanterns of paper" that constituted Newton's childhood experiments with comets (IN: "Early Years" 13).²⁵ This speculation is

²⁴ Sartor's omniscient narrator observes "How often have we seen some ... adventurous, and perhaps much-censured wanderer light on some outlying, neglected, yet vitally momentous province; the hidden treasures of which he first discovered, and kept proclaiming till the general eye and effort were directed thither, and the conquest was completed; [concluding] Wise man was he who counselled that Speculation should have free course, and look fearlessly towards all the thirty-two points of the compass, whithersoever and howsoever it listed" (SR: "Preliminary" 7).

²⁵ As a boy Newton simulated comets by making paper lanterns with candles and tying them to the tails of kites at night, "which at first affrighted the country people exceedingly"(IN: 13). In Newton's time comets were still considered mysterious portents although Newton's account of their phenomena was, as in all other matters, unambiguously realistic.

significant since Newton's work on comets was left uncompleted but included, as mentioned, a rare speculation on his part that "it is chiefly from the comets that spirit comes" (NH: "Comets" 127).²⁶ We now see that in one way or another Carlyle is 'furthering' Newton's cosmic work on the source of "spirit." When the Editor (Newton) receives this autobiographical material and begins to investigate it, he discovers that it is

written in Professor Teufelsdröckh's scarce legible *cursiv-schrift*, and treating of all imaginable things under the Zodiac and above it, but of his own personal history only at rare intervals, and then in the most enigmatic manner. Then again, amidst what seems to be [metaphysical speculation] we shall meet with some quite private, not unimportant Biographical fact (SR: "Prospective" 77,78).

Carlyle knows that zodiacal scraps convey the cosmic nature of an original Chaos and the infinite nature of man's spiritual quest (SR: "Pure Reason" 65). And a heroic entity like Diogenes Teufelsdröckh, who is equally transcendental and descendental, comprehends the cosmic design of man so clearly that he 're-sembles,' as it were, the parts of any Genesis on the cosmic level. Due to Carlyle's craftsmanship Sartor gradually unfolds the relationship of these parts to reveal the "transcendental" autobiography of Teufelsdröckh, the "descendental" biography of Newton, and the enigmatic spirit behind both men's odysseys.

There are several striking similarities between Teufelsdröckh's autobiographical scraps and Newton's life, facts which were *publicly* known biographia. These

²⁶ Newton's work on comets is still considered to be his most brilliant. Sir Edmond Halley (of Halley's Comet fame) was the first to confirm the "dazzling prediction made from [Newton's] cosmic theory" (how comets travel, not that they contain spirit). Significantly, in view of Carlyle's vision of Newton as a modern symbol of Christianity, Halley's confirmation occurred with the return of his comet on Christmas Day 1758 -- a particularly appropriate commemoration of Newton's birth. The fact that Halley was earlier commissioned by the Royal Society in 1676 (due to his successful work with Newton) to be the first man to map telescopically "the stars of the southern hemisphere," may account for the as yet unexplained reason that Teufelsdröckh's autobiographical scraps represent only the "Six southern Zodiacal Signs" (SR: "Prospective" 78). The reference may be Carlyle's subtle way of acknowledging Halley, who as indicated earlier was directly responsible for publishing Principia.

similarities are not of equal weight or merit, but together they suggest strongly that Carlyle is 'documenting' Newton's life through Teufelsdröckh's. To begin with:

a) Although Teufelsdröckh was 'born' at the "celestial Balance (*Libra*)," the first of the "Six southern Zodiacal Signs," Newton was born under the sign Capricorn (December 25), and the Editor notes that of all the paper bags, the embroglio in "*Bag Capricorn*" has "confusion a little worse confounded," which may refer to the enigmatic beginning of Newton's life (SR: "Prospective" 78). As a point of interest Newton was born a posthumous child.

b) As a boy, Newton was known for "his strange inventions and extraordinary inclination for mechanics" and was always determined to make his own tools (eventually the revolutionary reflecting telescope, now the Royal Society's most precious possession)(IN: 12). Teufelsdröckh repeatedly emphasizes the importance of tools to Man: "on the whole ... 'Man is a Tool-using Animal without Tools he is nothing, with Tools he is all'" (SR: "The World in Clothes" 41). While Newton's telescope was undoubtedly Man's most scientifically used Tool in Carlyle's time, Teufelsdröckh clearly indicates that "a Brain, furnished [or] furnishable with some glimmerings of Light; and three fingers to hold a Pen" is the ideal Tool (SR: "Pause" 199).

c) Newton "jealously and persistently guarded the sanctuary of his mind" (IN: 14). In Sartor we learn that Teufelsdröckh "kept his mind much to himself" (SR: "Genesis" 89; IN: 13).

d) Newton was fascinated by time and maintained a lifelong interest in making sundials and waterclocks and diligently observed

the motion of the sun, especially in the yard of the house where he lived, against the walls and roofs, wherein he would drive pegs, to mark the hours and half hours made by the shade, which by degrees from some years observations he had made very exact, and anybody knew what o'clock it was by Isaac's dial (IN: 13).

In Sartor we are informed that Teufelsdröckh, even as an infant "felt that *time* was precious" (SR: "Genesis" 89). He relates what sounds like his habitual study, as a child,

of the sun's motion, with the subtle hint of an interest in nocturnal bodies. He describes himself climbing

the Orchard-wall [where] many a sunset, have I, looking at the distant western Mountains, consumed ... my evening meal. Those hues of gold and azure, that hush of World's expectation as day died, were still a Hebrew Speech for me; nevertheless I was looking at the fair illuminated Letters, and had an eye for their gilding" (SR: "Idyllic" 93).

e) Newton, "always a sober, silent, thinking lad," rather than indulge in "silly amusements" with the boys, preferred the society of "the young ladies at home, and often made little tables, cupboards, and other utensils for Miss Storey [his little girlfriend] to set their dolls and their trinkets upon" (Brewster I, 13; IN: 16). Teufelsdröckh philosophizes that

In all the sports of Children, were it only in their wanton breakages and defacements, you shall discern a creative instinct ... the Mankin feels that he is a born Man, that his vocation is to work. The choicest present you can make him is a Tool; be it knife or pen-gun, for construction or for destruction; either way it is for Work, for Change ... the little Maid again, provident of her domestic destiny, takes with preference to Dolls (SR: "Idyllic" 92).

Teufelsdröckh's philosophy suggests Carlyle's view of Newton as an androgynous child, the model of a perfectly balanced human being, insofar as Teufelsdröckh describes the masculine "Mankin" working side-by-side with "the little Maid." As an undeveloped "Marikin" Teufelsdröckh might be seen in an undivided Hermaphroditic state that represents essential Nature, similar perhaps to Blake's inclusive "unreconciled and warring states of unadjusted sex" (BD: "Hermaphrodite" 182).

f) Newton's schoolmaster, "who had a great value for him, often strongly solicited his mother to return him [from the farm] to his learning, [telling her] it was a great loss to the world as well as a vain attempt to bury so promising a genius in rustic employment ... that ... he ... must be [fitted] for the University" (IN: 8). In Teufelsdröckh's words: "My Schoolmaster ... did little for me, except discover that he could do little: he, good soul, pronounced me a genius, fit for the learned professions; and that I must be sent to ... the University" (SR: "Pedagogy" 101).

Here I speculate that Carlyle, who was born a Sagitarian (December 4), is responsible for Teufelsdröckh's emergence as a "University man," since in the "*Bag Sagitarius*"

Teufelsdröckh begins to show himself even more than usually Sibylline [in "sympathetic ink"- SR: 108f1;77f3]: fragments of all sorts; scraps of regular Memoir, College-Exercises, Programs, Professional Testimoniums, Milk-scores, torn Billets, sometimes to appearance of an amatory cast; all blown together as if by merest chance, henceforth bewilder the sane Historian. To combine any picture of these University, and the subsequent, years; much more to decipher therein any illustrative primordial elements of the Clothes-Philosophy, becomes such a problem as the reader may imagine (SR: "Pedagogy" 108).²⁷

Clearly my speculation on Newton's note-book cannot be proved conclusively, but several correspondences between it and Sartor warrant documentation, beginning with the fact that Newton's lost but now recovered note-book, described as "a curious collection of odds and ends," is divided into three sections:

1) the first contains "Rules for drawing and making colours," and reveals what More calls "the most interesting, perhaps, of the items," the art of "drawing and the making of pigments" (IN: 18; NH: 371). Particularly relevant to Sartor is one of Newton's recipes for the above art: "A sea colour. Take privet berries when ye sun entreth into

²⁷ This may be the most appropriate place to interject the fact that in preparation for his 1855 biography of Newton, Brewster was privileged to view Newton's private papers (deliberately suppressed by his family as not "proper to be printed" - NH: 448,49). These came to be known as the "Portsmouth Collection," and Gjertsen notes that although "Brewster searched for [the note-book] in the PC he failed to find any trace of it" (NH: 370). However, the mystery of the missing note-book becomes 'confusion worse confounded' when we realize that *nobody* was apparently supposed to have gained access to the book at the time of Brewster's 1835 biography, The Life of Sir Isaac Newton, nor obviously Sartor Resartus. One must wonder how Carlyle could have seen it though based on cumulative evidence I argue that he did. Possibly suspecting Carlyle's possession of the book, Brewster applied in 1837 to the PC trustees "for permission to inspect the Manuscripts and Correspondence of Sir Isaac." Memoirs of the Life, Writings, and Discoveries of Sir Isaac Newton (Edinburgh, 1855), "Preface," I, p. vii. In Harrold's edition of Sartor he footnotes a single reference to Brewster as being one established man "aware of [Teufelsdröckh's] existence." Given Harrold's observation we may imply more from the sentence following, that Brewster is also one man who "if stretching out no helpful hand, [had] at least his eyes on [Teufelsdröckh]" (SR: "Pedagogy" 115, f1).

Libra [and so on]."²⁸ Coincidentally Professor Teufelsdröckh's autobiography indicates this to be the time of his birth: "one meek yellow evening ... when the Sun hidden indeed from terrestrial Entepfuhl, did nevertheless journey visible and radiant along the celestial Balance (*Libra*)" (SR: "Genesis" 83). The fact that the six zodiacal signs begin with Libra, together with idea that the Moon is 'born,' so to speak, under Libra, strengthens my claim that Teufelsdröckh was born a 'Mankin-in-the-Moon.'

2) The second section is derived from a work called Nomenclatura brevis and is a catalogue which reveals Newton's interest in establishing a universal language (NH: 371). By More's account Newton "dabbled in languages and invented a scheme of phonetic spelling."²⁸ On one page Newton documents his "key of phonetic spelling and on the next page he gives a sample letter spelled in both ways" -- in 'proper' English and phonetically. This section would surely interest Carlyle because of Newton's imaginative play with language, especially the epistolary style of this revealing sample *letter* to an imaginary friend, possibly an alter ego. The 'conventional' version is as follows:

Loving Friend.

It is commonly reported that you are sick. Truly I am sorry for that. But I am much more sorry that you got your sickness (for that they say too) by drinking too much. I earnestly desire you first to repent of your having been drunk and you to seek to recover your health. And if it please God that you ever be well again, you have a care to live healthfully and soberly for time to come. This will be very well pleasing to all your friends and especially to

Your very loving friend

I. N.

Whether or not Newton had a "bibulous friend" is irrelevant as More points out, and he considers the note worth preserving since it "probably is expressive of [Newton's] own

²⁸ In his own Notebooks, Carlyle refers to "Champollion's system of Phonetic characters [as having] been well received in Italy: ... "savans les plus recommandables" do justice to him" (IN: 111). It seems likely that a phonetic system of language was in Carlyle's mind during the writing of Sartor. What may be more relevant, given that Carlyle begins with 'C' and Sartor Resartus opens with the 'C' of "Considering," is the fact that the letter 'C' is the Third, and often silent, letter of the alphabet, borrowed from the Phoenicians by the Greeks; the "first note of natural major scale;" in an argument the "third hypothetical person or thing; algebraically, the "third known quantity" (OED; Webster).

character," that of a somber but highly imaginative man who thought in terms of opposites (IN: 18). Gjertsen, who updated and consolidated Newton biographia (The Newton Handbook 1986), offers more concise examples than More of Newton's interest in orthography and phonetics (Appendices C & D).²⁹ These are taken from the same "found" notebook and have the same epistolary style:

Loving ffreind

It iz commonly reportd yt you are sick. Truely I am sorry for yt.
Yor very loving freind I.N.

Newton transposes this note to:

Luviv ffreind

It iz ripwrted ~at yw ar sik. Triuli Oy am sori for ~at
Yor veri luviv ffreind I.N. (NH: 38).

Linguists are of course most interested in discussing Newton's pronunciations, but the above discourse is interesting for other reasons. First, it relates to Sartor in that it suggests an untapped loving dimension to Newton's nature, and may account for the "torn Billets" of an "amatory cast" that the Editor finds in Teufelsdröckh's "Bag Sagitarius" (see above). Secondly, Newton's idiosyncratic letter to himself transposes plausibly into a correspondence or 'Conversation' between Teufelsdröckh and his English Editor as two opposite but "loving friends." Thirdly, Newton's eccentric use of language, particularly phonetics, is reflected in Carlyle's own "Carlylese." The example of "*Bleibt doch ein echter Spass-und Galgen-vogel!*" is only one of many examples relevant to my argument and, as I have already proposed, Sartor Resartus itself must be considered phonetically.

Apart from phonetics, the second section of Newton's note-book includes Newton's "scheme for reformed spelling" -- a scheme which indicates Newton's familiarity with

²⁹ Appendix C offers a xeroxed complete transliteration of the above letter from The Correspondence of Isaac Newton 1661-1675, ed. H. W. Turnbull, (Cambridge, England, 1959), I, p. 1. For me the letter is too difficult to type as it contains Hebrew and Greek characters not available on my keyboard.

the Hebrew alphabet. In Sartor, Hebraism and Judaism are repeatedly identifiable characteristics of Teufelsdröckh: "Wits spoke of him secretly as if he were a kind of Melchizedek, without father or mother of any kind; [the] Everlasting ... Wandering Jew" (IN: 17,18; NH: 371; SR: "Reminiscences" 17). We are informed also that Teufelsdröckh's "Greek and Latin were 'mechanically' taught; Hebrew scarce even mechanically" with the possible implication that his knowledge of Hebrew was more inspired than learned (SR: "Pedagogy" 104).

3) The third section, in More's view, is undoubtedly what renders Newton's note-book "a most precious document", as it includes two pages of casual notes on the Copernican system, notes which are clearly "the germ from which developed his discovery of the law of universal gravitation" (IN: 19). In the above paragraph from Sartor on the subject of Hebrew, we are further told that Teufelsdröckh "lighted on some small store of curious reading, in *Hans Wachtel the Cooper's house*" (SR: "Pedagogy" 104; emphasis mine). Out of context this reference seems unrelated to any particular person or place but I believe Cooper is a subtle reference to Copernicus, and "Hans Wachtel" a reference to Newton's lifelong preoccupation with making sundials (popularly known as "Isaac's Dial") on the side of his house (IN: 13). In context we have merely another of Sartor's seemingly endless references to Newton.

Newton is described as a boy "with an unusually acquisitive mind who is planning to do large things but without any settled purpose" (IN: 18). Carlyle, though an adult, describes a similar ambitious restlessness in his Notebooks (1825): "O that I *could* 'go out of the body to philosophize!' That I could even feel as of old the glory and magnificence of things till my own little *me* ... were swallowed up and lost in them! ... But I cannot, I cannot! Shall I ever more?" (IN: 65). In 1830 he writes to Goethe: "When I look at the wonderful Chaos within me, full of natural Supernaturalism, and all manner of Antediluvian fragments; and how the Universe is daily growing more mysterious as well as more august ... I see not well what is to come of it all, and only

conjecture from the violence of the fermentation that something strange may come."³⁰ Newton the scientist and Carlyle the poet are comparable in their desires to document complete pictures of Man's history. The pictures they eventually create (Principia and Sartor) are dissimilar largely to the degree that Carlyle re-presents Newton's philosophical picture poetically.

Ultimately the most mysterious aspect of the foregoing set of 'circumstantial' evidence against Carlyle remains the fact that nobody was supposed to have accessed Newton's private papers as source material for anything at the time of Sartor, and yet Carlyle seems to have. Carlyle's awareness of the importance of privileged information, however, and the fact that only the privileged gain access to it, is revealed in at least two of his essays (on Burns & Boswell): ..1) Carlyle observes that an "educated man [as opposed to Burns] stands ... in the midst of a boundless arsenal and magazine, filled with all the weapons and engines which man's skill has been able to devise from the earliest time; and he works, accordingly, with a strength borrowed from all past ages ... How different is *his* state who stands on the outside of that storehouse, and feels that its gates must be stormed, or remain forever shut against him!" ("Essay on Burns" 49), ..2) Describing yet another "Edition of Boswell," Carlyle notes that the Editor (Croker) has "various qualifications: his own voluntary resolution to do it, his high place in society, unlocking all manner of archives to him" and so on ("Boswell's Life" 2). My point here is that IF Carlyle had wanted to write a biography of Newton (and I find no evidence that he did, at least in the traditional sense of the term) then he would not have expected to receive access to privileged information about him. As promised, I will argue in my conclusion that Brewster's first biography on Newton provides Carlyle with a strong sense of purpose in Sartor. But moving into Chapter IV on the role of "the *Isis*" in

³⁰ Correspondence between Goethe and Carlyle, ed. C. E. Norton (London and New York, 1887), pp. 210-211.

Carlyle's work and Newton's, I propose that whatever Carlyle's secondary resources for Sartor, his book 'proves' scientifically the existence of an enigmatic primary source of inspiration, as symbolized by Herr Hofrath Heuschrecke, behind all man's art.

IV THE GRAND MOTHER-IDEA OF WOMAN IN THE GROUND-SCHEME OF THE UNIVERSE:
Implications of "the *Isis*" in Carlyle's and Newton's Work

The following chapter discusses the vital but understated role of woman in Sartor's "ground-scheme of the Universe," especially as the role relates to man and his art (SR: "Incident in Modern History" 209). According to Carlyle's view that literature reveals a divine truth, I suggest that the myth of Isis, the Egyptian goddess of fertility whom Carlyle refers to in various guises throughout Sartor, is timeless and tells as divine a truth in the context of ancient history as any stories of creation do for subsequent eras. Joseph Campbell points out that in one way or another Isis's theme illustrates the classical birth, death and spiritual re-birth cycle, and that the "death and resurrection of the god is everywhere associated with the moon, which dies and is resurrected every month."¹ I will briefly relate the myth and discuss how "the *Isis*" relates to Carlyle and Sartor, and to Newton and his work. I will conclude by discussing Carlyle's intention to update and complement the myth of Isis by writing his own myth about the Man-in-the-Moon.

The spirit of Isis was originally conveyed by the hieroglyphic image of a throne followed by the feminine sign which meant "throne-woman" or "Queen." A man became king only by right of marriage to Isis. In her aspect as wife, Isis is "the chief actor" in the partnership (SR: 304).² Based on her talent for trickery Isis was once considered the "Clown Goddess," or female fool. This "grand unparalleled peculiarity" to deceive was evidenced when she schematically usurped the Sun's power by tricking him into

¹ Joseph Campbell, The Power of Myth (Doubleday, 1988), p. 179

² Isis is described as "the chief actor" in her marriage to Osiris in Encycopaedia Britannica (1965). Since Carlyle was writing for the Edinburgh Encyclopaedia at the time of writing Sartor, we might assume he took encyclopaedic information as he needed it.

uttering his name "Ra" which concealed his divine power. When Ra was an old and ineffectual Ruler, Isis placed a sacred "invisible" serpent, which she concocted from Ra's spittle mixed with earth, on the path to Ra's "heart's desire." Unable to avoid the path, and Isis' sacred serpent on it, Ra was stung with its poison, "hotter than the flame of fire," and subsequently cried out his name as he was born into the cosmos.³ Isis eventually transcended her irreverent past as a "clown Goddess" with the advent of Greek power. Their gods designated her to be *Sirius* in the constellation Canis Major. Here Isis became more commonly known as the "Dogstar" (GB: 261). As the brightest star in the Universe and the guiding light of storm-tossed sailors, the role of Isis, though altered, remained important. With the advent of Roman (Latin) Christianity, the Greek myth of Isis was replaced by the Christ myth and the story of Jesus. Isis retained her maternal image, however, as Christ's mother, the Virgin Mary, whose name Frazer suggests may be owed to Isis's more beautiful epithet *Stella Maris* or "Star of the Sea" (GB: 383,84). According to Apuleius, Queen Isis is the "Moon-goddess" and "sole sovereign of mankind."⁴ In her own words:

I am Nature, the universal Mother, mistress of all the elements, primordial child of time, sovereign of all things spiritual, queen of the dead, queen also of the immortals, the single manifestation of all gods and goddesses that are ... I am worshipped in many aspects, known by countless names ... Artemis ... Aphrodite ... Dictynna ... Proserpine ... Juno ... but both races of Aethiopians, whose lands the morning sun first shines upon, and the Egyptians who excel in ancient learning ... call me by my true name, namely, Queen Isis (Golden Ass: 226-28).

Just as she was able, however deceptively, to 'inspire' Ra to reveal his name or 'shine' his art, Isis now inspires all subsequent life into art. As one of the earliest symbols of

³ James Frazer, The Golden Bough: A Study in Magic and Religion (London 1959), p. 261.

⁴ Apuleius, Lucius, The Golden Ass. Trans. Robert Graves (New York 1984), pp. 226-28. In view of Sartor's text and his note to himself early in 1827: "To read the Golden Ass of Apuleius" (TN 113), and because Harrold footnotes an allusion to The Golden Ass in reference to "Psyche," the Greek personification of the human soul (SR: 204,f1), I assume that Carlyle read this work. I confess that not until Sartor did I comprehend the Golden Ass to symbolize the Sun.

man's life "the *Isis*" remains symbolically responsible for Carlyle's imaginative writing, and his incorporation of her into Sartor symbolizes his respect and gratitude.

Readers notice that long before Blumine, Sartor's most obvious heroine, enters the work through Teufelsdröckh's autobiographical scraps, they are introduced to "the *Isis*" as a subject for speculation during a philosophical "Argument that cannot but exasperate and divide" (SR: "Reminiscences" 15). We return to the "angry noisy Forum" where I have suggested we hear overtones of Socrates and Plato (SR: "Reminiscences" 15). The fact that *Isis* is the first female reference in Sartor, that her name is highlighted and referred to only once, and that the Teufelsdröckh's "special contributions to the *Isis* could never be more than surmised at," suggests a curious relationship between Teufelsdröckh and his "universal Mother" as described above. In retrospect we see that Carlyle's early reference to "the *Isis*" anticipates the birth of Teufelsdröckh, the Father of Philosophy and the first Philosophy of Clothes. Teufelsdröckh's primordial and undivided state of innocence within the universal Mother is suggested in two ways: first, at the time of the "Argument" he "seemed to lead a quite still and self-contained life," and secondly, "the Philosophy of Clothes [was not] once touched upon" although it was recognized that Teufelsdröckh "hadst *in petto* [his] remarkable Volume on Clothes" (SR: "Reminiscences" 16, f4> "From the Latin *pectus* (breast); in secret, in reserve").⁵ In "Reminiscences" we are told that Teufelsdröckh's

⁵ Here we have a fair indication that Carlyle had some sort of access to Newton's personal papers. Newton's religious notations clearly relate that "God has the prophecy originally in his own breast and Christ received it from God" -- that in a sequence of subordinations Christ delivers God's "message to his messenger, and by his messenger to John, and by John to the Churches in a continual subordination" and so on, with the intention of testifying to the spirit of the prophecy or "Word of God" (JN: 643). More concludes that this is one of Newton's most significant views on religion and "can mean only that he did not believe in the divinity of Jesus." One understands that Carlyle, who believed in the divinity of Jesus just as he believed in the divinity of Newton, would share Newton's view in terms of formal 'entitlement,' but not subordination. That is, Carlyle considered God's prophetic message to be the "remarkable" Philosophy of Clothes inherent in every God-inspired man, formally passed from one man to another through true works of Art, notably "Biography or Autobiography" (S>Art). In other words, Carlyle did not believe in a hierarchy of divinity but rather believed that men realize

"Life, Fortunes, and Bodily Presence, are as yet hidden from us" and therefore remain only "faint conjecture" (SR: "Reminiscences" 27). Because the Mankin is not yet born, or "dropped from the Moon," the Philosophy of Clothes, which naturally accompanies life, is a moot subject to argue at this point (SR: "Reminiscences" 15). We are reminded, however, that Diogenes Teufelsdröckh's "Soul" lies enclosed in this "remarkable Volume" of opinions on the "Origin and Influence of Clothes," which gradually evolves into "our Sartor Resartus" (SR: "Reminiscences" 27). Technically, through the process of reminiscing, Carlyle invites each reader to consider the miraculous fact of his or her own creation.

In Carlyle's revolution, Isis is the dividing force that perpetuates life or art, the cause of man's pain as well as his ultimate regeneration. As woman, Isis is the primary factor in Carlyle's philosophy of division which corrects Plato's. As she bears or drops man "thither from the Moon" into the world, she subjects him to an identity of his own, separate from any other. The power that Isis uses to make the Sun reveal his name symbolizes the enigmatic female force that compels man to be born, to "utter forth" in the most fundamental sense. By publicly uttering forth his name, the Sun God announces his birth and hence the existence of his "Divine ME" to the world. It is Ra's first gesture toward "Producing" in God's name. The announcement itself (the name) represents payment for the process of being born. Ra's name is now that aspect of himself which signifies his division from the matrix, the usable part of his enigmatic self. Just as Hofrath's enigmatic quality or 'Spirit' remains hidden behind his "letter," so Ra's enigmatic quality was divulged by the 'publishing' of his name. However useless his name may now seem to Ra, its decipherability is its social function. From a "practically influential" point of view his "Ra's," or what we coincidentally call the Sun's 'rays,' are

their spiritual Inheritance to varying degrees on earth, and ultimately, like Professor Teufelsdröckh, in death.

eternally vital to the rest of mankind.⁶ Ra's golden rays symbolize payment of the debt he owes Isis for being born, and allowed to 'shine.' Figuratively speaking, Ra now has the power to shine on Isis and 'melt her heart.' As Ra's "living oracle," Isis in turn expresses her silver moonbeams to inspire man's poetic soul. As romantic as it sounds, this can be seen as the process of surreptitiously forcing more statements (i.e. divisions or lives), and on man's most immediate level represents the feminine flux between birth and death. Man's debt for living is ultimately paid on 'pain of death' when his earthly time-cycle is fulfilled.⁷ In other words man is debt free only when his life story is completed and Mother Nature removes his "Time-Hat." Discussing the enigmatic nature of this female power, and Man's naivete in the face of it, Professor Teufelsdröckh speculates that "such perhaps was the aim of Nature, who does nothing without aim, in furnishing her favourite, Man, with this his so omnipotent or rather omnipotent Talent of being Gulled" (SR: "Pedagogy" 111).

Clearly with the story of Isis in mind, Teufelsdröckh discusses the "potency of Names" and observes that both "Nature" and "Art" are "Masters of deception" as far as names are concerned, and that names are indeed but "one kind of such custom-woven, wonder-hiding Garments."⁸ Because Teufelsdröckh also attributes the female gender to "Custom," Carlyle admits that it is "She" who weaves the wonder into the Garments (SR:

⁶ The Hofrath is described as imagining himself to be "far more practically influential" than Professor Teufelsdröckh (SR: "Reminiscences" 26).

⁷ In terms of Man's history in the cosmos the myth of Ra and Isis explains why the Sun, as publicly declared finished, can be considered a stationary "fixed Star."

⁸ Insofar as names and sabotage are concerned, Carlyle took precaution in protecting his own, as evidenced in a letter to his brother regarding Sartor Resartus and professional secrecy: "you are to correct the Proofs, if there be any printing: [they are] to be FORTHWITH returned to you, if found unsuitable; and the NAME in any case kept STRICTLY secret" (SCR: 131). Carlyle's concern is that the divine power, or Spirit, behind his name be protected before the work is considered publishable art. At the time Carlyle noted to himself that "[t]he thing is not right, not Art; yet perhaps a nearer approach to Art than I have yet made" (IN: 183).

"Natural Supernaturalism" 259,60). Carlyle both fears and respects the power of Isis as he is known to be in awe of Nature. We also see that he is aware of her public demise when we read that Teufelsdröckh questions the value to man of a "Mechanism of the Heavens" and "Laplace's Book on the Stars" wherein *Sirius*, for example, is left out. Clearly Carlyle is more than implicitly concerned with the omission of Isis (SR: "Natural Supernaturalism" 257 - emphasis mine). In other words, Carlyle's "correct Philosophic Biography of a Man" would not ignore this Star. With the myth of Ra and Isis in mind, Carlyle develops his poetic satire on science as the myth of Carlyle and Newton, but under the pseudonyms of Herr Hofrath Heuschrecke and Professor Diogenes Teufelsdröckh.

The ancient image of the Sun God Ra corresponds with Carlyle's depiction of the Hofrath as the Sun, Teufelsdröckh's "God-source" and a wrathful Counsellor, but with the important distinction that Carlyle is not concerned with the birth of Ra, but rather with the subsequent birth of mankind and his world. I clarify this point since the comparison between Ra and the Hofrath may seem to complicate the role of the Hofrath in the previous chapter. The Hofrath has already revealed himself in Sartor and is therefore as fixed in literary history as the Sun is fixed in cosmic history. The principle of Ra's self 'revelation,' however, is in no way different than any other 'birth' of one's name. What constitutes the anguish or wrath of both these counsellors is their knowledge that life involves death. As far as man is concerned the Sun's life-cycle is complete and he remains the 'fixed' Star of our solar system and as such symbolizes absolute Time. For Carlyle the myth explains facetiously why the Sun spends all day pouring out his revenge against life in 'rays' of wrath which, as a message of mortality, man innocently misconstrues as benevolent sunbeams. Man tends to forget, from the moment of his birth, the ultimately sacrificial nature of his life, which appears to evolve from the "Spirit of Love."

As the entity foremost responsible for life, hence death, the Sun is Sartor's mysterious "Stranger of reverend aspect" who "deposited" Teufelsdröckh as a baby Sun and "gracefully withdrew" (SR: "Genesis" 83,84).⁹ Along with "a *Taufschein* [tough shine] (baptismal certificate), wherein unfortunately nothing but the Name was decipherable," Teufelsdröckh's entry into the world was accompanied by a "roll of gold Friedrichs" ("fried riches") (SR: "Genesis" 84).¹⁰ The cosmic magnitude of this "red-coloured Infant" is hinted at when we are told that Teufelsdröckh's "outline" was probably the best embodiment of the Hofrath's Counsel as it survived "the burin like few in these cases" (SR: "Reminiscences" 25,26).¹¹ Although he knew little else about himself Teufelsdröckh seemed to understand from the moment of birth that his life represented "an invaluable Loan" (SR: "Genesis" 84). Otherwise he questions the mystery behind the obvious fact of his existence. He asks, "Who am I; what is this ME?"

⁹ Diogenes Teufelsdröckh was born at "twilight" as "the Sun" journeyed "visible and radiant along the celestial Balance. He is described "amid down and rich white wrappings, as no Pitt Diamond ... but a little red-coloured Infant!" He was gradually nursed "with spoon-meat, into whiteness, and if possible into manhood" ("Genesis" 83-85). Although Harrold notes the historical analogy between "Pitt Diamond" and Thomas Pitt's "Regent Diamond," the more profound thematic analogy is surely Carlyle's imaginative and artistic depiction of a baby Mankin-in-the-Moon as a "diamond in the rough" (as Newton seemed to be) being polished into the "whiteness" or brightness of a full-fledged Man-in-the-Moon.

¹⁰ This 'nonsense' seems to coincide with the fact that Newton was baptized, fortuitously perhaps, on New Year's Day (January 31, 1642). He was born in poverty, eventually became Master of the British Mint and died a wealthy man, a fact which may be implicit here. Carlyle's familiarity with Newton's linguistic limitations in German seems evident: says Newton to the national treasury in 1726, "I am told that the word Reichs or Rycks Thaler signifies Imperial Dollar. But I am not skilled in German language" (NH: 296). Since "Reichs" was the only German word Newton was familiar with, and because for a large part of his life Newton was responsible for minting coins (see following chapter on "a Cast-metal King"), I suggest that Carlyle's reference to "gold Friedrichs" is not ~~random~~ coincidence.

¹¹ Harrold footnotes "burin" to be a "pointed, steel cutting-tool, used by an engraver" (SR: 25; f4). In addition "burin" offers another example of Carlyle's clever word play insofar as Teufelsdröckh (as the Man-in-the-Moon) like Isis, can withstand the burning quality of the Hofrath's (as the Sun's) counsel. I note here that resistance to the Sun's intense heat distinguishes Newton's comets from all other cosmic bodies, and that this quality allows them to collect 'spirit' from the Sun as they pass by in their orbits (NH: 127).

A Voice, a Motion, an Appearance; -- some embodied, visualised Idea in the Eternal Mind? *Cogito, ergo sum* ... Sure enough, I am; and lately was not: but Whence? How? Where to?" (SR: "The World out of Clothes" 53).¹² We are told that the spiritually inclined Teufelsdröckh represents "an idea that has been promoted to a Name" -- "some embodied, visualised Idea in the Eternal Mind" that he refers to as "ME" the "all-consuming ego" (SR: "The World out of Clothes" 53).

The Name is the earliest Garment you wrap round the earth-visiting ME; to which it thenceforth cleaves, more tenaciously ... than the very skin. And now from without, what mystic influences does it not send inwards, even to the centre; especially in those plastic first-times, when the whole soul is yet infantine, soft, and the invisible seedgrain will grow to be an all overshadowing tree! Names? Not only all common Speech, but Science, Poetry itself is no other, if thou consider it, than a right *Naming*. Adam's first task was giving names to natural Appearances: what is ours still but a continuation of the same; be the Appearances ... organic, mechanic, stars or starry movements (as in Science); or (as in Poetry) passions, virtues, calamities, God-attributes, Gods? may we not perhaps say, *Call one Diogenes Teufelsdröckh, and he will open the Philosophy of Clothes?* (SR: "Genesis" 87,88).

The moment Man is born he becomes 'enclothed' in his name which, like the Time-Hat he assumes, he cannot undo or 'open' until death. The final question, as rhetorically presented, is ambiguous: will, or will not, Diogenes Teufelsdröckh open the Philosophy of Clothes? The point I emphasize is that Teufelsdröckh, as man's exemplary poetic soul, is born a 'Seer' and is knowledgeable about Spirits.

Although man is witness to the ritual between Ra and Isis with the Sun's rebirth every morning, and the monthly rising of the full Moon, to Carlyle he does not seem to appreciate the miraculous quality of the event. Even understood on an elementary scientific level, this phenomenon should seem no less wonderful. It should in fact be less taken for granted since Ra and Isis explain the combination of sun and water and gravitational force that is responsible for the life of man as we know it, and a state of

¹² *Cogito, ergo sum* ("I think, therefore I am") is Descartes' philosophical proof of his own existence, but in the context of Sartor such a statement simply reinforces the notion that Descartes, like every other man, feels compelled to declare himself a human being in society (SR: 53; f2).

Nature which distinguishes the planet Earth from any other in our solar system. Implicitly to scientist Newton, Teufelsdröckh remarks in horror: "let but a Rising of the Sun, let but a creation of the World happen twice, and it ceases to be marvellous, to be noteworthy, or noticeable" (SR: "The World out of Clothes" 57). I reiterate my point that Carlyle feels Newton must come to appreciate the miraculous fact that he was a God-inspired man born of woman.

We now turn to the relationship between Teufelsdröckh and his English Editor, and the imagined 'Conversation' between the Man-in-the-Moon and Newton. Carlyle informs us that "To the Editor of these sheets, as to a young enthusiastic Englishman, however unworthy, Teufelsdröckh opened himself perhaps more than to the most" (SR: "Reminiscences" 20). Teufelsdröckh is concerned that "some sceptical individual" has not yet "pictured-out the grand mother-idea" as "*Society in a state of nakedness*" (SR: "Pure Reason" 64).¹³ I suggest here that Carlyle's depiction of the "grand mother-idea" alludes to Newton's indifferent but conclusive vision of woman in the ground-scheme of the Universe, notably Venus and Isis, as indicated by his last major work, Chronology Amended. This work, as mentioned, "telescoped more than two millenia of Egyptian history" into one generation and concluded that the Egyptian Osiris, the Greek Dionysus, and the biblical Sesac all "loved a woman named Venus" (IN: 619). To compound the confusion Newton has Sesac merge with the Greeks to become "the grandson of Io, who turns out to be ... the Egyptian goddess Isis [who] was *certainly* the wife of Osiris and so must be also his grandmother" and so on (IN: 619 - emphasis mine).¹⁴

¹³ Barnes argues that "Pure Reason" is where Carlyle most obviously parts company from Newton's refusal to reason "without empirical data and demonstrable facts," and notes Carlyle's view that Newton "must mount to still higher points of vision" (Barnes 60).

¹⁴ I remind readers that Newton was a compulsive biblical exegete, and the Chronology was the culmination of his painstaking and ultimately useless research into the Old Testament (IN: "Chronology and Theology" 609,662,615). Newton considered his work to be accurate within "five or ten years, and sometimes twenty, and not much above" (IN: 616,17). His

We see Carlyle's revisionist view of Newton's assumption when he clearly states in "Reminiscences" that Teufelsdröckh's "special contributions to the *Isis* could *never be more than surmised at*" (SR: "Reminiscences" 15 emphasis mine). In my opinion Carlyle clearly but subtly acknowledges the incongruity between Newton's high level of reasoning the universal Laws of Nature (Gravity) and his irrational search for a key to man's history in a book rather than in real life (IN: 619). Considering Newton's scientific eye for detail, Carlyle ridicules the fact that in spite of mechanically demythologizing the system of the world, Newton appears oblivious to the "naked Facts" of life (SR: "The World in Clothes" 36).

Newton's sexual naïvete is made more ironic because he was raised on a farm.

Accordingly, the Editor is chastized by Professor Teufelsdröckh:

Thou wilt have no Mystery and Mysticism; wilt walk through thy world by the sunshine of what thou callest Truth, or even by the hand-lamp of what I call Attorney-logic; and "explain" all, "account" for all, or believe nothing of it? Doth not thy cow calve, doth not thy bull gender? Thou thyself, wert thou not born, wilt thou not die? "Explain" me all this, or do one of two things: Retire into private places with thy foolish cackle; or, what were better, give it up, and weep, not that the reign of wonder is done, and God's world all disembellished and prosaic, but that thou hitherto art a Dilletante and sandblind Pedant' (SR: "Pure Reason" 69,70).

Implicitly Teufelsdröckh views Newton as an 'ostrich with his head in the sand' in spite of comprehending the universe in a grain of sand. In fairness to Newton, he was shy to the point of being almost pathologically opposed to women,¹⁵ as was Teufelsdröckh in his youth according to his memoirs. His self-conscious complexes and earthly frustrations

misestimation needs no comment, and the Chronology itself remains the single exception to Newton's otherwise brilliantly rational career.

¹⁵ Newton's antipathy toward women was notorious and is supported here by the well-known story that Newton broke off a friendship with John Locke on the grounds that Locke was, in Newton's words, endeavouring "to embroil me with woemen [sic]" (NH: 89). Newton later apologized to Locke in a letter: "Being of opinion that you endeavoured to embroil me with women ... I was so much affected with it, as that when one told me you were sickly and would not live, I answered, 'twere better if you were dead. I desire you to forgive me this uncharitableness ... I beg your pardon for my having hard thoughts of you for it, and for representing that you struck at the root of morality " (IN: 385).

correspond with the unfulfilled passions that are evidenced in Newton's diary, the strangest part of which is a compilation of sins, prudently written in shorthand. In general this list reveals "the strange obsessions tormenting the twenty-year old Newton," his "unclean thoughts words and actions and dreames [sic]," and his desire to be dead: "Wishing death & hoping it to some" (NH: 208). These obsessions seem to correspond discretely to Teufelsdröckh's autobiographical scraps which reveal "Dreams, authentic or not, while the circumjacent waking Actions are omitted" (SR: "Prospective" 78).¹⁶

Newton's untoward thoughts are reflected variously in the "Romance" chapter of Teufelsdröckh's autobiography:

'As for our young Forlorn,' continues Teufelsdröckh, evidently meaning himself, 'in his secluded way of life, and with his glowing Fantasy, the more fiery that it burnt under cover, as in a reverberating furnace, his feeling towards the Queens of this Earth was, and indeed is, altogether unspeakable;

Thus was the young man, if all-sceptical of Demons and Angels such as the vulgar had once believed in, nevertheless not unvisited by hosts of true Sky-born, who visibly and audibly hovered round him whereso he went;

he had a "nature, which, in his own figurative style, we might say, had now not a little carbonised tinder, of Irritability; with so much nitre of latent Passion, and sulphurous Humour enough; the whole lying in such hot neighbourhood, close by 'a reverberating furnace of Fantasy'" [and so on] (SR: "Romance" 132-34).

These passages reveal the argument between Teufelsdröckh's mind and his body, and confirm the struggle of the enigmatic spiritual force between opposing powers. By exaggerating the issue of Newton's celibacy (and his ability or inability to love), Carlyle satirizes the notion of sin per se and the Puritanical times in which Newton was unfortunately forced to 'live,' times which were, ironically, the most scientifically enlightened due to Newton. Otherwise, the 'cosmic' tenor of the "Romance" chapter

¹⁶ On the basis of Sartor, I believe this diary refers to Newton's lost note-book, but I cannot be sure. Part of the problem is that neither More nor Gjertsen make much of finding the book, and except for the imaginary letter to and from "a loving friend," they discuss different aspects of it.

provides a degree of 'reality' to the romantic life of the Man-in-the-Moon, or an Isaac Newton whose passions, like all else about him, could presumably be out of proportion to the average man.

Teufelsdröckh's memoirs illuminate the picture of woman for Newton with a description of falling in love which Newton might have been able to relate to. Envisioning Blumine, the youthful Teufelsdröckh experienced "vague feelings of a whole Past and a whole Future ... heaving in unquiet eddies within him." Moreover "the attraction, the agitation" between himself and Blumine (who had "naphtha -fire" in her veins) was mutual -- like "heart swelling in presence of the Queen of Hearts; like the Sea swelling when once near its Moon!" (SR: "Romance" 139). Teufelsdröckh describes his agitation as a "painful ... blissful" experience in which "his whole soul [was] roused from its deepest recesses" by "the touch of a Seraph's wand"(SR: "Romance"139). His passionate experience with Blumine sounds comparable to Ra's ritual encounter with Isis's serpent, whose poison was "hotter than the flame of fire." Significantly, however, in Teufelsdröckh's case, as apparently in Newton's, this merely physical suffering was transcended by the inspirational power of a "guiding genius (Damon)" leading him toward "his Destiny" (SR: "Romance" 139). Carlyle thus accounts for the traditional view of Nature's power over man, as well as the implication that Teufelsdröckh transcended her power. With Teufelsdröckh teaching Newton, Carlyle's romantic view of cosmic interplay allows us to imagine Newton discovering the cause of Nature, namely the force of gravity which in turn Newton thought might be caused by the supernatural power of comets.

Carlyle's faith in the spirit of Isis is comparable to Newton's belief in the spirit of comets. Carlyle, like Apuleius, comprehends Isis as "the shining deity by whose divine influence not only all beasts, wild and tame, but all inanimate things as well, are invigorated; whose ebbs and flows control the rhythm of all bodies whatsoever, whether in the air, on earth, or below the sea" (GA: 226). Newton's "final suspicion" about

comets is that "it is chiefly from the comets that spirit comes ... the smallest but the most subtle and useful part of our air, and so much required to sustain the life of all things with us" (NH: 127; Principia:530). He goes on to explain that the tail of the comet is "nothing else but a very fine vapour, which the head or nucleus of the comet emits by its heat," and "scattered through the heavens, would little by little be attracted to the planets and, mixing with the atmosphere, would eventually drop down as rain [to provide] for the 'conservation of the sea, and fluids of the plants'; for if the seas were not replenished they must be 'in continual decrease, and quite fail at last'" (NH: 127). Although Newton's literal description of spirit sounds less poetic than Isis's, his general theory on what might be called the mechanics of inspiration closely resembles her mandate (NH: 240). I recall Newton's scientific theory that relegates Nature to a "lesser power" than "the Creator," to "Increase and multiply" according to his command, and in imitation of the "copies set her by the Protoplast." Newton further depersonalizes Nature into "nothing ... but various contextures of ... certain aethereal spirits," and implicitly reduces man to a protoplasmic 'thing-in-general.' Here we understand Carlyle's contrary compulsion to poeticize Newton's view of Nature by elevating Nature to the "living Garment of God," and man to "light sparkles floating in the aether of Deity!" (SR: "The World out of Clothes" 55).

I mention Newton's speculation on the source of spirit partly because it exemplifies one of his rare public hypotheses. But it also provides another example of Carlyle's ingenuous wordplay, and here I suggest he invites various interpretations of the name "Herr Oken of Gena," apart from Harrold's footnote.¹⁷ Once again we turn to "the angry, noisy Forum" where the Editor is observing the confusion. We are informed

¹⁷ Harrold informs us that "Lorenz Oken (1779-1851) [is a] German naturalist and philosopher [who] founded the *Isis* in 1817 and edited it until 1848" (SR: 15, f3). This note strikes the reader as adding little critical value to the overall textual interpretation of Sartor other than providing a small historical analogy.

that "some correspondence, on [Teufelsdröckh's] part, with Herr Oken of Jena was now and then suspected" of contributing to "any practical tendency whatsoever" of "our Friend" Teufelsdröckh as well as to his "high, silent, meditative Transcendentalism" (SR: "Reminiscences" 15). On the premise that these philosophers are drunk (Newton's Fellows and classmates at Cambridge were notorious for their "sloth and drunkenness" IN: 27), I argue that Carlyle seems to play with the concept of 'spirit' in an effort to supernaturalize a typical student gathering into a Dionysian dreamworld, to elevate Newton to an unscientific spirit of place where he will first encounter woman. Such playfulness is significant in relation to Newton since the dour Newton was not known to drink except for the occasional beer, and I remind readers that his world view did not allow for a God-inspired woman nor a "God-inspired Man." Newton certainly would not have seen himself as the "God-intoxicated man" that Teufelsdröckh represents (SR: "Introduction" xv). On this basis, I offer four arguable interpretations of the role of Herr Oken of Jena:

- 1) In Teufelsdröckh's primordial state *Herr Oken's* "practical tendency" could anticipate Teufelsdröckh's elemental need to breathe '*air*' in order to live. By extension, both biological and verbal, this life implies the need to produce an 'heir,' perhaps even a work of art according to Carlyle's sense of duty to "Produce! in God's Name."
- 2) The narrator pronounces Herr Oken of Jena as though he were inebriated (on either 'gin' or *moonshine* one suspects, although Carlyle claims in his own footnote that these men are drinking "unhappily only ... beer"¹⁸). Textually, therefore, readers are allowed to assume a certain 'spirited' atmosphere during this debate in *Weissnichtwo*, which could be called metaphysically a 'twilight' zone. Coincidentally, according to his memoirs, Professor Teufelsdröckh was born at twilight whether by "a trick of

¹⁸ My argument here is that both literally and figuratively speaking, 'moonshine' happily connotes as much of Carlyle's "nonsense" as one can imagine 'under the Sun.'

Imagination or some visit from an authentic Spirit" (SR: "Reminiscences" 15, f4; "Genesis" 84).

3) The scientific word for air is *Oxygen* (Okse Jen = possibly a mockery of Newton's poor spelling in English). This stretching is logical inasmuch as Oxygen contributes to Water>water to Ice>ice to "Ices." Moreover, Oxygen is symbolized by "O," possibly the most simple denotation of Carlyle's theory of revolution, certainly a symbolic "ring of Necessity" to Man.

4) Above all is the chance that readers (including myself) will 'err' in their assumption that Herr Oken of Jena means anything at all. But in self-defense I argue that this word play is another specific intertwining of 'aetherial' speculation with visible phenomena, that "some correspondence" between Teufelsdröckh and Herr Oken of Jena is Carlyle's subtle indication that he doubts Newton's ability to determine more conclusively than any other man the first cause of "spirit," especially through mechanical means. In any event we are told that Herr Oken's contribution to Teufelsdröckh is as enigmatic and "surmisable" as Teufelsdröckh's contribution is to the *Isis*.

In addition to the enigmatic role of "the *Isis*," Carlyle makes another early and subtle reference to the power of woman in the production of man's art. This time he turns to Greek mythology and Circe's lesson to Odysseus. We find "misdirected industry" strategically inserted into Sartor's "Preliminary" chapter as a euphemism for a political foray into temptation (SR: "Preliminary" 7). Recollecting Odysseus's misadventure, a skeptical Carlyle warns readers against "devious courses," "political slaughter of fat oxen," "goose-hunting" and in short, against the "unwise science ... of that altogether misdirected industry, which ... there can nothing defensive be said" (SR: "Preliminary" 7).¹⁹ We recall Odysseus's ill-fated excursion onto the Island of the

Sun-god after ignoring Circe's warning not to follow any temptation to go there. Circe warned Odysseus to fix his mind "on getting home" and to leave the Sun-god's cattle (his divine children) untouched, which Odysseus did not.²⁰ Carlyle is aware that Newton (unlike Odysseus) heroically followed Circe's law and avoided the temptation that the Sun-god's children represent, i.e. carnal knowledge.

I have already suggested that Carlyle sees Newton's useless searching for a First Cause of creation in books as misdirected industry, but by punning on 'miss' Carlyle may be further implying that Newton is skeptical of "miss" directed industry even as he struggles, in terms of his death wish, to return to his mother's womb. "Misdirected industry" then becomes another of Carlyle's self-contained paradoxes insofar as all industry has been simultaneously "miss" directed from the birth of Mankind (as the myth of Isis tells), and "misdirected" against itself through man's death -- in Circe's story a figurative spiritual death. Carlyle's metaphor of the Man-in-the-Moon is meant to epitomize, I believe, the completed circle, including a spiritual 'life' in death. What is particularly brilliant about Carlyle's 'transcendental Absolute,' in view of his desire to pay a backhanded tribute to Newton's scientific genius, is the fact that the Man-in-the-Moon also incorporates Newton's Theory of Gravity which is based on his concept of Inertia, itself one of science's great paradoxes. Newton professed that: "*Every body continues in its state of rest, or of uniform motion in a right line, unless it is compelled*

¹⁹ Anne Mellor observes that in contrast to Teufelsdröckh, his Editor is "British, conservative, speculative, discursive, and skeptical of German abstract thought and "misdirected industry" (ERI: 126). Although her description fits a skeptical scientist like Newton, who 'edits' only visible phenomena, Mellor misses the fine linguistic point that he is English as opposed to British, and that Carlyle is a Scottish Editor. However, by equating "misdirected industry" with "German abstract thought," as two things the Editor is skeptical of, Mellor highlights a satirically extravagant play on words, as we will see, that points to Newton's determination not to discuss metaphysics and not to become "embroiled" with words. I deliberately twist and stretch Mellor's observation, including the oversight, in order to draw attention to what may be Carlyle's most "didactic" lesson to editors in general about 'misreading.'

²⁰ Homer, The Odyssey, Trans. E. V. Rieu, (Baltimore 1961), p. 192.

to change that state by forces impressed upon it" (Principia: "Axioms, or Laws of Motion" 13,14). For Newton the Moon constitutes gravitational stasis, and therefore when Carlyle's Man is put into the Moon metaphorically, the Man-in-the-Moon symbolizes an oxymoronic dynamic unity, as 'he' and 'she' revolve visibly and eternally before us in divine unrest. Professor Teufelsdröckh's existence is so described:

In thy eyes too, deep under their shaggy brows, and looking out so still and dreamy, have we not noticed gleams of an ethereal or else a diabolic fire, and half-fancied that their stillness was but the rest of infinite motion, the *sleep* of a spinning-top? (SR: "Reminiscences" 16).

This imaginative description of our Man-in-the-Moon supports my idea that Teufelsdröckh's Philosophy of Clothes, our Sartor Resartus, is Carlyle's metaphor for the neverending revolution of life. As a 'transcendental Absolute,' the image conveys Teufelsdröckh's idea of a "Divine Life" wherein "inmost ME is, as it were, brought into contact with inmost MEI" (SR: "Church-Clothes" 215).

While we can imagine and perhaps envy this womb-like existence without a "Time-Hat" over our heads, for Teufelsdröckh the position means the never-ending responsibility of keeping the earth within the Solar System. In Carlyle's vision of the Man-in-the-Moon, "Miss" directed industry has the Moon as the driving force behind Teufelsdröckh's life work, i.e. his "perambulation and circumambulation of the terraqueous Globe!" according to Newton's Theory of Gravity (SR: "Sorrows of Teufelsdröckh" 148). The practical application of this theory involves the neverending pushing and pulling of the ocean -- what the Man-in-the-Moon calls the "Towgood-and-Blumine business" that "hisses over in a deluge of foam" (SR: "The Everlasting No" 158). Although Newton says it is irrelevant to him whether the force of gravity is occult²¹ or otherwise, Teufelsdröckh notes that whatever "Witchcraft" is now called, it remains a "mysterious-terrific, altogether *infernal* boiling-up of the Nether Chaotic

²¹ In Newton's time "occult" described metaphysics, or "magic." Here we have a good example of Carlyle deliberately 'misreading' Newton to make his own point.

Deep, through this fair-painted Vision of Creation, which swims thereon, which we name the Real" (SR: "Natural Supernaturalism" 260). In Sartor Resartus Carlyle creatively reduces "the Real" to the one primary truth that apparently escaped Newton's notice in life, that the "froth" of the ocean comes from woman. Given Carlyle's view of literature is an "immeasurable froth-ocean," I note that Professor Teufelsdröckh's own Philosophy of Clothes may have originated "at the bottom of our own English 'ink-sea' ... and shot forth its salient point in his soul -- as in Chaos did the Egg of Eros, one day to be hatched into a Universe!" (SR: "Old Clothes" 243).

Although Teufelsdröckh's profession is apparently a timeless occupation without reward, he may be dramatizing the point that industriousness has its own invisible reward such as *literally keeping the World in cosmic order*. Given Carlyle's otherwise critical view of Newton's over-industriousness, and his role as Newton's mentor, it seems contradictory that Teufelsdröckh takes such an extreme attitude toward work -- "Produce! Produce!" he commands (SR: "The Everlasting Yea" 197). But the extravagance of Carlyle's satire, which can never be ignored, 'lightens' any didactic message he intends to convey about producing as the "infinite nature of Man's Duty." Although he advocates work Carlyle understands the human desire to escape from the responsibility of it (even creating Art can be sometimes be seen as a Duty). This idea seems to counteract my argument about Carlyle's revolution but actually does not, and in fact explains why Teufelsdröckh's life is so perfectly 'mis-directed.' Teufelsdröckh exemplifies a celestial balance of work and play. Since playing with words is one of Carlyle's favourite forms of working, as well as Newton's, I see the infinite nature of Teufelsdröckh's duty as the "Werden und Wirken" of his Philosophy of Clothes (phonetically). From Teufelsdröckh's point of view we might see life as a pleasant combination of skyriding and skywriting

In terms of editing, the literary point in "misdirected industry" is that a simple prefix such as "mis" has the power to lead an editor astray. Because Carlyle desires to

be particular he considers the editor's sin, however innocently committed, to be inaccurate statements or half-truths and therefore the false representation of the author's intention. By deliberately inviting readers to misread his text, Carlyle challenges them not to miss the finest print, specifically the invisible aspects of a *Whole* work of art such as Sartor Resartus. -- the distinction between "miss" and "mis" is literally the absence of the enigmatic 'S.' In repeatedly ingenious ways Carlyle informs readers that the "close of the Book" is "symbolical myth all." I would like to suggest here that Carlyle plays on the word "myth" from the point of view of a speech impediment, especially a lisp which conceals the enigmatic 'S.'²² Myth then becomes "miss," a word which is important as either "miss" or "Miss." As the error compounds, and myth becomes mythus, the change becomes more profound as "Miss" becomes "Mrs." and woman becomes wife. In relation to Carlyle, his students know that it was "Mrs." Carlyle who knowingly or not was the driving force behind her husband's work, a personal example of "miss" directed industry. The close reader, following as many Sartorial threads as possible, sees that "misdirected industry" inevitably leads to what Teufelsdröckh calls "Mis-education" (SR: "Pedagogy" 115; Dent Edition 89).²³ Depending on how one translates "Mis," such education leads to missed Knowledge or perhaps 'true' Knowledge of Woman, given the implication that Education can be found in "Books."

The following relates what is perhaps the most pathetic aspect of Newton's life: that Newton appears to have deliberately misdirected his imagination with his endless

²² This idea is plausible when we consider the significance of Sleary's lisp in Dickens' Hard Times, his novel about meaningless work and miseducation, and a book dedicated to Carlyle. My point is that Dickens might well have borrowed the idea for Sleary's speech impediment from Sartor.

²³ I note that Harrold does not hyphenate "Miseducation." In this case I choose to interpret the Dent edition's "Mis-education."

chronicling. According to a "transparently autobiographical piece," Newton condemns the habit of celibacy for monks, who avoid temptation by dropping from society and going into the wilderness. He argues that it is "not isolation but industry" that leads to chastity:

The way to chastity ... is not to struggle with incontinent thoughts but to avert the thoughts by some employment, or by reading, or by meditating on other things, or by converse.' Monks who fasted in isolation, he remarked, 'arrived to a state of seeing apparitions of women ... and of hearing their voices in such a lively manner as made them often think the visions true apparitions of the Devil tempting them to lust'. Far from avoiding temptation, he concluded, 'these men ran themselves headlong into it' (NH: 105,06).

Through Teufelsdröckh's "psychologic eye," the "devotional and even sacrificial character" of Manicheistic Sects "plainly enough reveals itself" (SR: "The Dandiacal Body" 275). He clearly comprehends the ridiculousness of both monastic and scientific points of view:

A certain touch of Manicheism ... is discernible enough: also (for human Error walks in a cycle, and reappears at intervals) a not-inconsiderable resemblance to that Superstition of the Athos Monks, who by fasting from all nourishment, and looking intensely for a length of time into their own navels, came to discern therein the true Apocalypse of Nature, and Heaven Unveiled. To my own surmise, it appears as if this Dandiacal Sect [to which Newton became attached as Master of the Mint] were but a new modification, adapted to the new time, of that primeval Superstition, *Self-worship*" (SR: "The Dandiacal Body" 275).

Although this quotation reveals an opinion that seems far removed from Carlyle's hero-worship of Newton, the fact of Newton's "*Self-worship*" gives Carlyle all the more motivation for directing Newton's Apollonian Self toward its Dionysian Other, so that his *whole* self will be worshipful -- so that Newton can literally become '*self-centred*,' can self-consciously move outward into society into a fuller life of living and loving. Here we return to Newton's "misdirected industry" and his study of the Moon.

Beyond Newton's love for his mother, which has been well-documented and is crucial to Carlyle's drama, only one particular woman seems to have captured his interest -- a Miss Storey who is mentioned in most Newton biographia. The couple was apparently engaged when Newton left home for Cambridge, but both parties were too poor

to consider marriage. Subsequently Newton's "genius for natural philosophy" and the "vision ...of that universal force which directs the cosmos" took hold of him. He "drifted unerringly into the scholarly and celibate life," and his and Miss Storey's intimacy "faded into [a] mutual esteem" which lasted as long as Miss Storey lived (IN:19,28,29). The nominal coincidence of history's most determined "demystifier" being engaged to a woman named Miss Storey is almost beyond belief, and would not likely escape Carlyle's profound sensitivity to puns, particularly 'nominal' puns, as it were, or facts which sound more contrived than fiction. Given Carlyle's art for concealment, Miss Storey is never mentioned in Sartor. We have instead the mysterious story of the Time-hat which explains to man that miracles such as life and love still exist.

Substantial biographia being almost nonexistent, anecdotes about Newton continue to replace it. One story in particular, while intending to ridicule Newton's absentmindedness, almost reverses the theme of Isis and Ra. Newton was apparently conversing with a lady, with a view to proposing marriage:

while tenderly holding her hand, the philosopher's mind wandered into other fields of thought; instead of raising her hand to his lips, he absentmindedly used her little finger as a tamp for his pipe. Aroused by her sudden exclamation of pain from the heat of the embers in place of the pleasure which should have come from the warmth of love, Newton exclaimed, "Ah, my dear Madam, I beg your pardon! I see it will not do! I see, I see that I am doomed to remain a bachelor" (IN: 131,132).

There is no suggestion that this scene mocks Newton's separation from Miss Storey, but in my opinion Carlyle imitates it in Teufelsdröckh's sudden and climactic departure from Blumine, when she announces "in a tremulous voice, They were to meet no more." The scene is anticipated by Teufelsdröckh's Editor (Newton) who recognizes Teufelsdröckh as "a man not only who would never wed, but who would never even flirt" (SR: "Romance" 135). Sounding anxious to correct history, the Editor fleshes out the anecdote in Sartor. Hastening to describe Teufelsdröckh's "catastrophe," the Editor omits "passionate expostulations, entreaties, indignations, since all was vain ... not even an explanation

was conceded [Teufelsdröckh]." The Editor simply relates the Professor's last words: "Farewell, then, Madam!" said he, not without sternness, for his stung pride helped him."(SR: "Romance" 145). While Carlyle gently mocks the male ego, he may be giving Newton the edge in common sense for staying away from "woemen."

Newton's primary or "First Love" was his mother, Hannah Smith, and was suggestively Oedipal. He is known to have loved his mother almost "singularly," a love that biographers note was the most "intimate" and "strongest tie in his life" (IN: 4,130,31). Newton's mother "greatly favoured her son Isaac, and their relationship was extraordinarily affectionate and tender," to the extent that Newton "left no word, or letter, about their tender relationship" (IN: 4,130). (This bond parallels the love and respect Carlyle shared with his mother except that Carlyle openly declared his). John Conduitt, legislator of Newton's estate, describes Newton's mother as being "a woman of so extraordinary an understanding, virtue, and goodness, that those who think that a soul like Sir Isaac Newton's could be formed by anything less than the immediate operation of a Divine Creator might be apt to ascribe it to her" (IN: 4). More suggests that Newton's mother was the source of his "greatest powers," and that he attended her unceasingly during her particularly unpleasant death, which "made a profound break in [Newton's] life" (IN: 351).

Knowledge of Newton's grievous separation from his mother is precisely what compels Carlyle to place the forlorn Newton back into the Moon and so reunite mother and son, albeit metaphorically. Carlyle has evidently pictured out the "grand mother-idea" that Professor Teufelsdröckh describes as existential insight into the oneness of Mother Nature and the unspeakable power of sensual-spiritual harmony:

He gazed over those stupendous masses with wonder, almost with longing desire; never till this hour had he known nature, that she was One, that she was his Mother and divine. And as the ruddy glow was fading into clearness in the sky, and the Sun had now departed, a murmur of eternity and Immensity, of death and of Life, stole through his soul; and he felt as if death and Life were one, as if the Earth were not dead, as if the Spirit of the Earth had its throne in that splendour,

and his own spirit were therewith holding communion (SR: "Sorrows of Teufelsdröckh" 151).

It is the resolution of spiritual life with mortal death that constitutes Carlyle's "correct philosophic Biography of a Man (meaning by philosophic all that the name can include)" and allows him to celebrate man in general, and Newton in particular. Teufelsdröckh comprehends life's most important lesson, that man must never forget 'Her' -- that 'She' transmits the signs and symbols.

Discussing the transience of religious symbols, and arguing against the sham value of a "Daub of Artifice" as compared to a "true Work of Art," Teufelsdröckh claims that only in a true work of art such as the life and death of an "heroic god-inspired" Man "wilt thou discern Eternity looking through Time; the Godlike rendered visible" (SR: "Symbols" 224). Teufelsdröckh asks the reader to

look on our divinest Symbol: on Jesus of Nazareth, and his Life, and his Biography, and what followed therefrom. Higher has the human Thought not yet reached: this is christianity and Christendom; a Symbol of quite perennial, infinite character: whose significance will ever demand to be anew inquired into, and anew made manifest.

But on the whole, as time adds much to the sacredness of Symbols, so likewise in his progress he at length defaces or even desecrates them; and Symbols, like all terrestrial garments, wax old (SR: "Symbols" 225).

Noting that Jesus's birth coincides with the birth of the Sun God, Campbell explains that December 25th follows winter solstice, and traditionally marks the rebirth of light which in the Christ myth symbolizes a spiritual light (PM: 179). Carlyle sees the inevitability that in the course of Time even Jesus Christ must be updated by another religious symbol, but one which necessarily includes those that came before it. Thus we eventually have Carlyle's re-creation of the story of man's birth, and the birth of light, based on the original myth of Ra and Isis, but incorporating the life of Jesus and adding the life of Newton. We can see that for Carlyle Newton's birth symbolizes the rebirth of light, scientifically speaking, since he is the first to reveal its sensory components.²⁴

But perhaps more significant is the fact that Newton's Theory of Gravity, as possibly the most enlightening human achievement to date, comes the closest to revealing the secret of Nature in general. The additional facts that Newton lived a chaste existence and was born on December 25th might have helped to justify Carlyle's vision of Newton as a newer Christ figure.

In terms of Christianity, Carlyle's re-formed trinity includes Herr Hofrath Heuschrecke as the Sun, "the *Isis*" as the Moon, and Professor Diogenes Teufelsdröckh as the symbolic "Man-dropped thither from the Moon." By portraying the Hofrath as the miraculous God-like spirit behind Teufelsdröckh's history, Carlyle conveys the idea of a Holy Ghost behind all mankind, life's shadowy inheritance that represents man's soul. As a mythical but religious metaphor, the Man-in-the-Moon symbolizes sexual unity -- a state wherein male and female have reached what Campbell calls the "classical stage of interaction" where self-containment is restored to omniscience (PM: 172). Campbell's depiction of classical unity corresponds with my view that through Teufelsdröckh (God-born Devil's Dung) Carlyle dramatizes an ideal marriage of the spiritual with the sensual. Teufelsdröckh notes: "even for the basest Sensualist, what is Sense but the implement of Fantasy; the vessel it drinks out of" (SR: "Symbols" 222). Insofar as this union symbolizes a marriage between poetry and science, as represented by Carlyle and Newton, Teufelsdröckh's style of writing manifests "all the graces and terrors of a wild Imagination wedded to the clearest Intellect" (SR: "Characteristics" 31). What Teufelsdröckh represents artistically is the perfected and resurrected life of Newton. By writing himself into the role of the Hofrath, Carlyle asserts and celebrates his male power once spirited away by Isis. On this note we return to Carlyle's extravagant sense of levity and his divine idea of man in the "ground-scheme of the Universe."

²⁴ Lamenting the lack of a "Poet and inspired Maker; who, Prometheus-like, can shape new Symbols, and bring new Fire from Heaven to fix it there," Teufelsdröckh settles for "the average of matters" and accounts him: "Legislator and wise who can so much as tell when a Symbol has grown old, and gently remove it" (SR: "Symbols" 225).

V THE DIVINE IDEA OF MAN IN THE GROUND-SCHEME OF THE UNIVERSE
 Implications of "a Cast-metal King" in Carlyle's Work and Newton's

This chapter will discuss the vital role of Man in Carlyle's "ground-scheme of the Universe." His primeval "Man" in the Moon represents the eternally male "Cast-metal King," counterpart to Queen Isis, the eternally female Moon of their metaphoric union. Although critics generally observe that Carlyle plays with text in the same style as Richter, they do not deal directly with the ribald aspect of Richter's humour, even as Carlyle's "nonsense on Clothes" culminates in, and is dramatized by, Jean Paul's "Proposal for a *Cast-metal King*" (SR: "Characteristics" 33). Without elaborating, Tennyson, for example, sees that the inference of a "Cast-metal King" mocks "kingship as it is commonly and falsely understood, and mechanism as it is commonly revered" (SCR: 276).¹ Carlyle says "The only Title wherein I, with confidence, trace eternity, is that of King. *Konig* (King), anciently *Konning*, means Ken-ning (Cunning), or which is the same thing, Can-ning. Ever must the Sovereign of Mankind be fitly entitled King (SR: "Organic Filaments" 248,49). It is largely Carlyle's mockery of "kingship" as a male bastion that concerns this chapter since 'He' symbolizes social order and character (PM: 182). I want to give some idea, then, of the extent to which Carlyle exaggerates the male principle by conceiving of Newton as a Cast-metal King. In contrast to the esoteric "Man-in-the-Moon," who in fact is not mentioned as such in Sartor, the proposal for a Cast-metal King marks the height of Carlyle's metaphoric appeal to

¹ Brian Rosenberg notes that the "word whose etymology is of most polemical significance to Carlyle, and not surprisingly the word with which he errs most thoroughly, is undoubtedly 'king,' the word fundamental to Carlyle's philosophy of heroes and hero-worshipping. "Etymology as Propaganda" in English Language Notes (1987), 24 (3), p. 31. In the context of Sartor Carlyle is arguing that "Titles of Honour" which have "come hitherto from Fighting" now need to be upgraded (like Symbols) and re-defined, made "new and higher." Here he may be referring to Newton's "Knighthood," and so far as this status implies the possibility of political patronage I note that to England and the world at large Newton was more important as an office-holder and the friend of statesmen than as a philosopher (IN: 359).

Newton's vision-oriented science. After briefly discussing the male principle, and Carlyle's and Newton's senses of humour, I will relate Carlyle's unusual depiction of "bodying forth" the Idea of Man, the actual "Producing" of human Art in God's Name. I will then discuss Newton in various roles as: 1) Abraham's son Isaac, 2) a new symbolic Christ figure, 3) "Uncle Isaac" in Carlyle's earliest known fiction, 4) Mastermind behind his revolutionary cast-metal Telescope for which he was knighted, and 5) Master of the British Mint. I stress the point that Newton is the common denominator in these disparate interpretations of what constitutes "a Cast-metal King."

Having just discussed the male principle (through Ra) as responsible for being fooled into declaring life or art to society, I now stress the idea that the written Word is considered male in nature. We understand that life always involves two principals, Ra and Isis or the Sun and the Moon -- that which documents the life (symbolically male logos) and the life itself contained within the documentation (symbolically female mythos). This explains why in principle the voice behind all language is eternally female but is reflected in the male construct of the autobiographical word "I." In these terms woman may be seen as the writer while man can be seen as the written. In short, man is responsible for the "*graphic*" dimension of "Autobiography or Biography." My point in relation to Carlyle is that just as Isis was once the "Clown Goddess" who teased man with her spirit, Carlyle now assumes the prerogative of "Clown" and plays with language with a vengeance, confident of the female spirit within himself. Carlyle's revolutionary point 'of' Sartor is to demonstrate that male form or structure has a visible metaphorical surface value that can be 'deconstructed' upon reading to reveal a female spirit.² As a form, or metaphor, Carlyle's Man-in-the-Moon is poetically

² Christopher Norris notes the "disruptive influence of woman" in Nietzsche's "proliferating chains of metaphor" as I note 'her' influence in Carlyle's. Norris argues that "erotic suggestion and teasing *differance*" in words wrenches the reader from his "quest for truth" and cancels language's claim to "interpretative mastery." "Nietzsche: philosophy and deconstruction" in Deconstruction: Theory and Practice (New York, 1982), pp. 72,73. Norris's critical point,

adequate to delineate Man's logocentricity, his total expression, what Dale calls a "historical dialectic" (Dale 299).³ Professor Teufelsdröckh metaphorically illustrates this historicity by accommodating death within life, or a finite infinitude. In finite form Man comes from Woman. In his infinite form Man comes from "Weissnichtwo" and returns to "Weissnichtwo." In the grandest of metaphors Carlyle drops Man "thither from the Moon" to return him again as the Man "in" the Moon, visible and believable only to the imaginative viewer.

The most telling feature of Jean Paul's "Proposal for a *Cast-metal King*" is the fact that it initiates the only time the narrator saw Professor Teufelsdröckh "laugh" -- a "loud, long-continuing, uncontrollable" laugh at a joke over which the Editor "laughed indeed, yet with measure, [beginning] to fear all was not right." Believing that our "Logical, Mensurative faculty ... is King over us," Newton the scientist measures and documents everything he sees, and in the case of Jean Paul's Proposal 'measures' even his laughter at a joke which can only be imagined. (SR: "Symbols" 222). From this provocative incident we will see how fully Carlyle appreciates a sense of humour and

which Carlyle demonstrates, is that there is nothing self-evident about "this curious equation between woman, sexuality and the swerve from logic into figurative language" except the possibility of a "perverse" reading that intersects the conventional, which I attempt to give Sartor. For Carlyle there is only one unarguable Truth and that, as argued, is that Man is born of Woman. Taking Norris's point that Nietzsche's "multiplicity of styles" implies "his intimate knowledge of women," I want to add that Carlyle's writing, which Norris elsewhere describes as "obfuscating rant," also reflects Carlyle's understanding of women (DTP: 98). Carlyle's chains of metaphors proliferate directly from his title Sartor Resartus (S>Art>or>Re>S>Art>Us), which for his own reason cleverly conceals his idea of eternal recurrence based on what I argue is the eternally feminine principle. My argument may indicate that Carlyle preceded Nietzsche as the "first knowingly to unwrite or deconstruct the history of metaphysics." In any event I take issue with Nietzsche's view of himself as "perhaps ... the first psychologist of the eternally feminine" since I view Carlyle as just such a psychologist some years earlier (DTP: 73).

³ Dale suggests that Sartor is an exercise in structure drawing attention to itself, the point of which is to emphasize ... the historicity of all form" (Dale 295). Dale explains clearly that the express purpose of Sartor Resartus is to "re-form the confusion of another book, which itself is attempting to re-form the confusion of reality." This incidentally aids my argument that Carlyle is reforming Newton's Principia in the full sense of reform.

why he seems to have Newton in mind at either end of Jean Paul's joke. "How much lies in Laughter," claims our narrator, "the cipher-key, wherewith we decipher the whole man!" (SR: "Characteristics" 33). For Carlyle "real Humour [ranks] among the very highest qualities of genius." His use of humour is an appeal to 'higher minds,' the 'light of lights' we might say, and in this respect Carlyle can mock as much as he reveres the creative power of man. Carlyle's own laugh was famous among his contemporaries and by his own account he would have been "the merriest of men" if not the saddest. His determined effort to 'outshine' Newton poetico-philosophically reveals the merriest and saddest sides of both men. As a tribute to modern science we might assume that the Man-in-the-Moon's laughter, "tears streaming down his cheeks ... loud, long-continuing, uncontrollable; a laugh not of the face and diaphragm only, but of the whole man from head to heel," provides the earth's rain, a poetic theory which indirectly absorbs Newton's scientific theory that rain conserves "the seas, and fluids of the plants" (SR: "Characteristics" 33; NH: 127).

Newton, like Teufelsdröckh, is known to have laughed once or at least been amused. The occasion is referred to in any number of works on Newton. Apparently he loaned his friend a copy of Euclid's geometry, and later asked the friend what progress he had made, and how he enjoyed it. When the friend replied by asking Newton what use and benefit in life such a study would be to him, "Sir Isaac was very merry" (Andrade 135; NH: 263,64; IN:252). As with Jean Paul's Proposal for a Cast-metal King, Newton's joke is left for reader inference. The fellow who borrowed the book obviously does not share Newton's understanding of it, and is perhaps a more 'normal' man who would question Newton's interest in the book. This would be consistent with Carlyle's point that Newton evades the normal 'earthliness' of life, which on one level I believe is reflected in his measured laughter at Jean Paul's suggestion for a "Cast-metal King." Given Newton's low opinion of man it would be inconceivable to him that such a worthless creature would consider immortalizing itself. On this level Sartor acknowledges

Newton's bemusement over the Euclid incident, and the fact that his sense of humour functions in a higher mathematical realm than that of his friend. In general, however, Newton's "laughing with measure" corresponds with the testimony of another friend who claimed that Newton "was 'easily made to smile, if not to laugh'" (NH: 264). Given both Newton's and Carlyle's intellectual integrity, the comprehension of either joke seems intended to separate the transcendental from the descendent.⁴

Carlyle understands Newton's contempt for earthly life, but attributes it largely to Newton's need to be 'spiritualized.' Carlyle's empathy is first conveyed early in Sartor through the bleak world view of an aethereal Professor Teufelsdröckh. From "the pinnacle of Weissnichtwo" Teufelsdröckh sits in "a true Sublimity," "above it all ... alone with the Stars" (SR: "Reminiscences" 20,23). Most apparently like Carlyle watching over the Industrial Revolution in England, Teufelsdröckh looks down at Midnight on a "Fermenting-vat" of "sick Life," hidden under that "hideous coverlet of vapours, and putrefactions and unimaginable gases" (SR: "Reminiscences" 22).⁵ Why not evade earthliness if one can, a rationalist asks? The realistic point is that by some miraculous and apparently irrational force man *is* compelled to be born and therefrom compelled to produce. But the problem here for Carlyle is largely that men are not "Producing in God's Name!" -- they are not producing inspired art but rather self-defeating and by extension socially defeating works, ironically in the name of the people. In a word, man's industry is being "misdirected." Here Carlyle's notion of Newton's misdirected industry expands to include Newton's job as Master of the British Mint, a point to be discussed further on in this chapter, but my point at the moment is that in the beginning of Sartor men are figuratively reduced to "Condemned Cells" from which

⁴ Tennyson points out that Carlyle's juxtaposition of "what is below" with "what is above" constitutes what Carlyle calls the "inverse sublimity" of "true humour" and is his substitution for Jean Paul's "finite" and "infinite" (SCR: 276,77).

⁵ This scenario also recalls Goethe watching the French Revolution from his tower in France.

the "pulse of life beats tremulous and faint, and bloodshot eyes look-out through the darkness, which is around and within, for the light of a stern last morning" when they will be executed (SR: "Reminiscences" 23).

What I find most remarkable in this wartorn scenario in artistic terms is Carlyle's imaginative depiction of humanity in Newton's terms -- that is, he views men as miserable serpents: people are "heaped and huddled together like an Egyptian pitcher of tamed vipers, each struggling to get its *head above* the others: *such* work goes on under that smoke counterpane!" (SR: "Reminiscences" 23).⁶ In scientific terms Carlyle gives a graphic dramatization of the earliest stages of human Production, of an idea being "bodied forth" into some Body -- that is, with the slightest stretching of the imagination the close reader sees an ancient pitcher full of spermatozoa ("Condemned Cells, the pulse of life" - SR: 23) struggling to reach an egg and ultimately a life, which from the point of view of a skeptic such as Newton spells death.⁷ Ironically, given his distaste for life, Newton's head did get far beyond the others as did Professor Teufelsdröckh's, albeit through Carlyle's. A true poet like Carlyle reasons that man needs to read an exemplary Philosophy of Clothes in these despirited times of so-called enlightenment. Thus he 'casts' an enlightened Teufelsdröckh into man's earliest possible scenario, "Reminiscences," as an experienced Soul who speaks from a position of earthly sanctification, and now holds the remarkable Clothes Philosophy "in petto." His job in Sartor is to have his Philosophy, his miraculous Story of the Time-Hat, which contains the essence of all knowledge, "rightly understood" and publicly 'disclosed.' We see that as the book evolves so does Carlyle's more positive view of the life of man. The point that

⁶ In keeping with his subtle references to the Romantics, here Carlyle seems to give a twisted interpretation to Keats's "Ode to a Grecian Urn."

⁷ These "Condemned Cells" are acting according to the earliest possible *visible* dramatization of Freud's Pleasure Principle, that Man desires to die and return to the womb because he had no desire to leave the womb and be born in the first place.

will emerge in this chapter is that his chosen discloser, Editor Newton, like Professor Teufelsdröckh before him, must realize a spiritual rebirth through woman before he can "rightly understand" the Philosophy. In lieu of woman, Newton must take an inverse route to the sublime by poetically transcribing Teufelsdröckh's "new Book," ostensibly Newton's own autobiography.

Discussing the idiosyncratic style in Sartor, Brian John compares Carlyle to an "Old Testament Jehovah [who] seeks to refashion the world after his own image."⁸ Coincidentally, I note that Newton had a messianic view of himself, according to an anagram he once made of his name spelled "Isaacus Neutonus" and arranged into "Ieova Sanctus Unus," a sacred Jehovah (NH: 17). With John's view in mind, and Newton's self-imagery as a sacred deity, I suggest that Carlyle cannot resist satirizing Newton as the first Son of Abraham, whose birthdate Newton's Chronology calculated to be in 2058 B.C. with little evidence of man's existence before that, implicitly before the Hebrew race (IN: 617).⁹ Abraham, like Professor Teufelsdröckh and Newton, is known to have laughed at least once. Abraham's laugh was obviously instigated by God's proposal that he beget a son (Isaac) at the age of one hundred years ("Genesis" 17:17):

God said to Abraham, "I will make you exceedingly fruitful; and I will make nations of you, and kings shall come from you"; "As for ... your wife she shall be a *mother* of nations; kings of peoples shall be from her." Then Abraham fell on his face and laughed, and said in his heart, "Shall a *child* be born to a man who is one hundred years old? And shall Sarah, who is ninety years old, bear a *child*?" ("Genesis" 17: 6,16,17).

This Old Testament story is as sexually suggestive in its creative possibilities as Jean Paul's "Proposal." Based on Newton's knowledge of Genesis we can assume his awareness

⁸ Brian John, "The Fictive World of Thomas Carlyle" in Supreme Fictions (Montreal 1974), p. 131.

⁹ Newton's Chronology is based on his assumption that the Old Testament account of Genesis is historically accurate, a point that only adds to Carlyle's satire of Newton's "misdirected industry."

that God specifically promised Abraham: "in Isaac shall thy seed be called [and] I will ... multiply thy seed as the stars of the heaven, and as the sand which is upon the sea shore; and in thy seed shall all the nations of the earth be blessed" ("Genesis" 21:12-18). In effect God is promising Abraham, whose Hebrew name means Father of the People, the position of a "Cast-metal King" -- an eternal line of Kings in the name of Isaac. Although Abraham laughs, he ultimately accepts his own immortal role in begetting sons. Ironically, while Isaac Newton, the most recent in a long line of Isaacs, may not have multiplied himself in the way God and Abraham intended, all the nations of the earth have been blessed by the 'sowing forth,' as it were, of his revolutionary works. Like "seed-grains that will never die," they were cast into the "ever-living, ever-working Universe" to multiply infinitely, each one affecting the history of Mankind (SR: "The World in Clothes" 40). Teufelsdröckh assures us that "a Thought did never yet die; that as thou, the originator thereof, hast gathered it and created it from the whole Past, so thou wilt transmit it to the whole Future" (SR: "Organic Filaments" 247). Echoing Newton's first principles, Teufelsdröckh declares that it is "a mathematical fact that the casting of this pebble [the Clothes Philosophy] from my hand alters the centre of gravity of the Universe" (SR: "Organic Filaments" 246, f2). Worth noting here is the comparison between Teufelsdröckh's "Sea of Thought" which his Editor must confront, and Newton's proverbial last words as the world's leading scientist. He said that he had always felt "like a boy, playing on the sea-shore, and ... now and then finding a smoother pebble or a prettier shell than ordinary [amidst] the great ocean of truth" (SR: "Editorial Difficulties" 10; IN: 664).

I now ask readers to consider Carlyle's vision of Newton as Abraham's most recent child of Promise and History's most recent symbol of Christ. I indicated earlier that as political powers changed, Isis was eventually replaced by Jesus as Mankind's symbolic Saviour. Given Carlyle's respect for Isis, I suggest that this transition is not beyond his biting satire and may constitute the most blasphemous element of Jean Paul's

Proposal for "a Cast-metal King."¹⁰ Because Jean Paul's Proposal is accompanied by "heaven-kissing coruscations" I suggest that in terms of Carlyle's "inverse sublime," Jean Paul, who most obviously represents Jean Paul Richter, may also refer to St. John and St. Paul, two of Jesus's divinely appointed Apostles (SR: "Characteristics" 33).¹¹ In this case I see the following scenario: St. John and St. Paul petitioning higher powers for a permanent "Cast-metal King" or 'King of Kings' on earth, the "Celestial Luminaries" Hofrath and Teufelsdröckh laughing uncontrollably at the thought of a mere mortal assuming such a position, and Editor Newton laughing "with measure" as he was known to respond to all religious questions with "caution and modesty" (LN: 611,650).¹² In the simplest reduction of the most complicated orthodox exegesis, I note that when Paul led the Pauline Christians against the Jewish Christians as his mission to convert Jews to his sect for Jesus, he warned the Jewish Christians among other things that "Isaac, the child of promise, was not of the flesh," another reason for Newton, who only argued from phenomena, to laugh skeptically and begin to fear "all was not right" (LGB: "The Pauline Epistles" 497,489; Romans 9:7-9).¹³

¹⁰ While the above is speculative, we do know that the myth of Isis was being buried during the advent of Jesus Christ, and that the New Testament Gospels are considered by some to be "disguised versions of cult myths of Isis." Helen Elsom, "The New Testament and Greco-Roman Writing" in The Literary Guide to the Bible, Eds. Robert Alter and Frank Kermode, (Cambridge, Mass., 1987), p. 568.

¹¹ Tennyson's observation that Jean Paul "is the only historical figure to appear as any kind of 'character' in Sartor" indirectly supports my claim that this "character" can allude to somebody else, or as I argue, two other people (SCR: 276,336). My reasoning is based on Carlyle's desire to conceal his historical figures -- i.e. as a "character" in this particular scene Jean Paul is too apparently Jean Paul Richter.

¹² In relation to John, the question of who would be Christ, Jesus or John, was at the heart of a very real political turmoil. Elsom, explaining the integration of their stories, suggests that Genesis establishes John the Baptist's credentials as the last of the Old Testament prophets [whereas] Jesus' conception ... is like that of a Greek sage," based on the exemplary model of Socrates who chose to die rather than give up his quest for truth (LGB: 564,66). My point here is simply to reinforce the idea of a politically historic moment that involved St. John and St. Paul as principals in a proposal for an earthly Christ figure.

The theological extension of the above Proposal was of course the Roman Christians' proposal for an infallible papacy, a line of Cast-metal Kings in the name of Pope or Holy See.¹⁴ Teufelsdröckh clearly states that apart from *the* King, who "rules by divine right," there is only one Sovereign over Mankind "fitly entitled" to be called King, and that is the unconquerable power of Man's "Imaginative" faculty (SR: "Organic Filaments" 249; "Symbols" 222).¹⁵ What Teufelsdröckh is laughing uncontrollably about in this scenario is that as the Man-in-the-Moon, Teufelsdröckh *is* the Cast-metal King of Jean Paul's Proposal, and is currently attempting to pass the Clothes Philosophy on to Isaac Newton. Newton laughs nervously, fearing "all was not right," because he is receiving and must measure a metaphysical message to become the next Cast-metal King.¹⁶ He will be Carlyle's 'Holy See,' the symbolic 'eye' that watches the World "from

¹³ In this battle Michael Goulder emphasizes Paul's tactical misrepresentation of Scripture "to confuse his opponents' clear picture," and adds that while "we may be grateful to [Paul] for his outrageous logic [that Christians, as brethren of Isaac, are "the children of promise" and Jews are not] and for so enabling Christianity to become a world religion; ... we should concede that theology deserves a bad name if an acceptable universalism has to be bought at such a price" (LGB: 490). Based on his Calvinist background and his study for the ministry, I am assuming Carlyle's knowledge of these matters, that Goulder is not saying anything revolutionary but rather is putting the 'facts' of the New Testament into a modern political scenario, as Carlyle was capable of doing. In Newton's interpretation of Paul's views he explains the transition from Jewish culture to Christian culture as objectively as he explains everything else, but notably does not believe Jesus is divine (Brewster II, 321,22).

¹⁴ Teufelsdröckh states plainly that "the Upholsterer is no Pontiff" (SR: "Characteristics" 29). Newton, too, disapproved of the papacy and was in fact "one of the chief actors in the acute conflict in England between Protestantism and Romanism" (IN: 611,650). As a Protestant Newton had nothing but disdain for King James and the Catholic church and his great endeavour was "to announce the downfall of Papal authority" (IN: 628). His views, if published would have endangered Newton's "position and liberty." My speculation that Carlyle was familiar with Newton's views is based only on textual evidence in Sartor. Newton's confrontations with King James over his attempts to "overturn the Protestant character" of Cambridge, however, are well documented and would have been common knowledge.

¹⁵ In Carlyle's view Shakespeare is the one man worthy to be King of England. He says: "Here is an English King, whom no time or chance, Parliament or combination of Parliament, can dethrone." Carlyle finds a unique strength in Shakespeare's sense of humour or "laughter," an area in which Shakespeare "*exaggerates*" as compared to his precise use of "words" which are "always in measure" (HHW: "The Hero as Poet" 146,147,113).

Eternity, onwards to Eternity" (SR: "Reminiscences" 21). On the strength of Carlyle's Imagination, then, we have two Associates in Weissnichtwo, the Sun and the Moon, who, in a series of "entitlements" as opposed to Newton's series of "subordinations," have rendered Professor Teufelsdröckh a "Cast-metal King" -- the Hofrath's "little Sage," his "radiant Apollo" or "living oracle," who holds God's prophetic Philosophy of Clothes "in petto" as did Christ, according to Newton. In effect Sartor Resartus can be seen in Carlyle's time as the 'newest' testament to the Word of God.¹⁷ As part of his effort to upgrade and poeticize science Carlyle has attempted to reinstate God's image of "the *Isis*" which the Christian fathers took away (PM: 179).

The following brief digression presents what I see as Carlyle's earliest attempt to capture Newton in a piece of fiction, and perhaps as more of a "Queen," figuratively speaking, than as a "Cast-metal King." Even before Wotton Reinfred, Teufelsdröckh's heroic predecessor who "gloried to track the footsteps of the mighty Newton," Carlyle wrote another satirical fragment of fiction called "Illudo Chartis" ("I disport on paper" 1825-26). In this piece the hero is "Uncle Isaac:"

¹⁶ Newton was commonly known as an "excellent divine" based on his theological erudition (Brewster II, 318). By establishing Newton as a "Cast-metal King," Carlyle mocks divinity *per se* while playing with Newton's 'divine' powers which he paradoxically reveres. Newton's refusal to recognize the divine quality of Jesus is Newton's same refusal to recognize the divine within himself, which Carlyle sees in both men.

¹⁷ Discussing the general problem of writers appropriating the achievements of their predecessors, and the difficulty in escaping the original Word, Bloom wittily refers to the New Testament as "the Christian triumph over the Hebrew Bible, a triumph which produced that captive work, the Old Testament." Harold Bloom, "Before Moses Was, I Am': The Original and the Belated Testaments" in Notebooks in Cultural Analysis (North Carolina, 1984), p. 3. Carlyle also notes succinctly that "[e]very man that writes is writing a new Bible" (TN: 264). So Teufelsdröckh understands that symbols of "Christianity and Christendom," which imply the written symbolism of the New Testament, "will ever demand to be anew inquired into, and anew made manifest" (SR: "Symbols" 224). Although Carlyle could only have imagined such an event, man's recent discovery of the Dead Sea Scrolls has altered the 'facts' of the New Testament considerably and many 'new' beliefs have been abandoned (LGB: 12,440).

But the flower of that eloq race was Isaac the uncle of Elshender, a man who had been at the College of Edinburgh, ... he taught for many years the parish school of Croudieburn; could decipher all manner of Latin inscriptions; wrote a *Glossary of Corderius* ... and in his old days, a Prophetic Poem on Napoleon Bonaparte" (SCR: 52,53).

On first reading, this passage might not seem to refer to Isaac Newton, but the subtle references are cumulative and become more apparent to a reader of his biographies. For example, Newton's pedantry and celibacy can be implied by Uncle Isaac's teaching at the parish school. And as a boy ("in his old days") Newton wrote a "Prophetic Poem" (not on Napoleon but on King Charles II) (IN: 15). Tennyson suggests that *Corderius* was a "Jesuit and exegete" in the style of Sterne's and Jean Paul's character-authors. I remind readers that Newton, though not a Jesuit, was *the* biblical exegete of his time.(IN: 608).¹⁸ According to Marjorie King "Illudo" is full of intentional misspellings and word play in the style of Sterne and Richter.¹⁹ Discussing King's work, Tennyson suggests that "eloq" is not a word and "may be an abbreviation for eloquent" (SCR: 53; f38). Given both Carlyle's and Newton's penchant for playing with language this is not surprising. On this point I suggest that "Sesac," Newton's biblical amalgam of Sesac, Osiris and Dionysius, translated phonetically is not far removed from "Isaac."²⁰

¹⁸ Newton's uncle, who inherited Newton's estate, relates that "Archbishop Tenison offered [Newton], if he would take orders, the Mastership of Trinity College ... and importuned [Newton] to accept any preferment in the church; saying to him: 'Why will you not? You know more divinity than all of us put together.' Why then, said Newton, 'I shall be able to do you more service than if I was in orders.'" In the minds of contemporaries Newton's work "was looked upon as important in trying to replace the authority of the Roman Church by the authority of the Bible, and to counteract the sceptics who were beginning to question its miracles and prophecies. (IN: 339,40). King James eventually acquired a 'new' King James Version of the Bible which restored its Roman Catholic bent (IN: 608,09. While Newton may have been the most logical person to perform the task he would not have considered it.

¹⁹ Marjorie P. King, "Illudo Chartis': An Initial Study in Carlyle's Mode of Composition" in Modern Language Review, XLIX (1954), p. 165. King's article contains the only printing of "Illudo Chartis" itself.

²⁰ I note that Newton identifies King Sesac with King Sesostris for apparently "no other reason than that the first syllables of their names are spelled the same" (IN: 618). I note also that Newton's mother wrote to him as "Isack" (see Appendix D).

My main suggestion, however, is that the above passage from "Illudo" refers to Newton, and that "Uncle Isaac" is Carlyle's subtle reference to Isaac Newton as the "flower of [Abraham's] eloq[uent] race." Insofar as "Uncle Isaac" is the "flower of that eloq race" it must be safe to say that the flower of anything is evidence of a successfully sown "seed-grain," whether plant, book, or child, and for Carlyle Newton may represent all three -- the Apple, Principia, and a Knight reincarnated as a shining Man-in-the-Moon. Although the "flower" that Carlyle has in mind here cannot be determined, I speculate that it refers to the "Flower of Kent," *the* Apple in Newton's garden at Woolsthorpe, which inspired his theory of gravity that led to Principia. This apple was eventually identified as a variety of cooking apple, a fact which now seems an allusion to the "cooking of a dumpling" in Sartor (NH: 31; SR: "Romance" 135). I refer to the "Preliminary" Chapter where Carlyle expresses his concern that to some "the Creation of a World is little more mysterious than the cooking of a dumpling," and his implication (in retrospect) that Newton's may have been a mind "to [which] the question, *How the apples were got in*, presented difficulties" (SR: "Preliminary" 4).²¹ 2) The "flower of that eloq race" could also be a veiled reference to Newton's particular "fondness for flowers," mentioned in most works about Newton's personal life, perhaps as being out of character in a man so bookishly inclined (NH: 127).²² In itself Newton's "fondness for flowers" may explain Teufelsdröckh's initial attraction to Blumine, whose name meant

²¹ Here Newton's biographia accommodates Carlyle's satire as we are told that "scions" from the Woolsthorpe tree were grafted onto other trees and subsequently transplanted as far away as North America" (NH: 30,31). Even this detail is accounted for in Teufelsdröckh's "Romantic" memoirs: "In every well-conditioned stripling, as I conjecture, there already blooms a certain prospective Paradise, cheered by some fairest Eve; nor, in the ... flowerage and foliage of that garden, is a Tree of Knowledge, beautiful and awful in the midst thereof, wanting" (SR: "Romance" 132). The fact of Newton's apple tree being transplanted "as far away as North America" may also be a factor in Teufelsdröckh and his Philosophy of Clothes "[standing] clear to the wondering eyes of England, nay thence, through America" (SR: "Prospective" 77).

²² E. N. da C. Andrade, Sir Isaac Newton: His Life and Work (New York, 1954), p. 28.

simply "Goddess of Flowers," and whose real name may have been "Flora" (SR: "Romance" 135). Like Newton, Blumine was "in her modesty, like a star among earthly lights" (SR: 104,06). Although critics continue to question Newton's apparent modesty, we see that Carlyle "disports" with him as a God-like character with human frailties. And although Carlyle's earliest designation of Newton as a "flower" may imply an effeminate side to his nature, I find none of the above interpretations incompatible with Carlyle's vision of Newton as a man who lived in a world of his own, and was especially distanced from the opposite sex.

We turn now to Carlyle's satirization of Newton's proposal to the Royal Society for a "Cast-metal King" personally tailored to his scientific pursuits (NH: 105). Writing to a colleague, Newton communicates "a fancy of [his] own about discovering the earth's diurnal motion" (IN: 224). This letter was subsequently forwarded to the December 4th meeting of the Royal Society whose members "were particularly enthusiastic about the experiment proposed to demonstrate the rotation of the earth."²³ The mechanics of this proposal were described in a post-script, and involved a new tool in the form of a cast metal telescope -- the revolutionary "Aesthetic T:"

P.S. Mr. Cock has cast two pieces of metal for me in order to a further attempt about the reflecting tube which I was the last year inclined to by the instigation of some of our Fellows. If I do anything you may expect to hear from me. But I doubt the tool on which they were to be ground, being in the keeping of one lately deceased who was to have wrought the metals, is lost (IN: 226).

²³ I note December 4th is Carlyle's birthday. A small detail but one which Carlyle would not overlook to judge from the emphasis he places on Newton's birthday, beginnings, endings and milestones in general. As an indication of his awareness of birthdays (conscious or otherwise), Carlyle first documented his vision of a Literary Annual Register (in which he would "say something about *Science*") the day following his birthday (December 5, 1826). This 'vision' was anticipated by his notation of the day BEFORE his birthday (December 3) that now "I am for business." On December 3rd Carlyle is implicitly over the ecstasy of his honeymoon "Married! Married! -- ["But of that no words"] -- and of a thousand other things. I am for business" (IN: 67-78). The suggestion I make is that Carlyle's explosion, if you will, of "a thousand other things" eventually took the inspired form of a satire on Newton in Sartor Resartus, recognized by his wife as "the work of a genius."

Newton's factual proposal for Mr. Cock's new cast-metal Telescope for demonstrating "the rotation of the earth" gives another example of Carlyle weaving facts into fiction. In the context of sexual innuendo, which this passage clearly allows, the "reflecting tube" that Newton was "inclined to" can be seen to symbolize intellectual potency. That is, by creating and using his telescope Newton was pursuing Man's underlying desire for knowledge. As discussed, Newton's anthropomorphic tool, what Carlyle calls "*Aesthetic Tea*" is what connects Teufelsdröckh's "*Me with all Thees in bonds of Love.*" In a different rite of passage, Newton's telescope, only analogous to the male appendage, leads to scientific revelation (SR: "Romance" 132). As a male principle and the manifestation of his desire, his singular quest allows Newton a unique knowledge of the "Ground-scheme of the Universe," and us an appreciation of the "higher walks" of science. Newton's personal satisfaction in acquiring scientific Knowledge might be seen as a metaphysical Product of "S" (S>Art), something Carlyle appears to understand and appreciate. In relation to the Moon, Newton's intellectual consummation with 'Her' transcends the base sensuality of a common man. More speculates that if we were to "personify Nature (as the Egyptians assuredly did) and give to her the attribute of choice," we may then conclude that "out of all the human race she granted to Newton the unique destiny of disclosing her profoundest secret" (IN: 285). We now see that long before More, Carlyle felt the same way, that at the heart of Sartor Carlyle envisions Newton as the one man entitled to consummate a love affair with the Moon Goddess. At least fictionally Carlyle understands why no earth-bound woman would interest Newton when he could indulge himself in the study of a celestial luminary like the Moon.

A more sobering analogy between Newton and a "Cast-metal King" is Carlyle's reference to Newton's position as Master of the Royal Mint. This era marked a revolutionary period in his personal history as well as the British nation's. When the union between Scotland and England was legalized, Newton was appointed the task of standardizing the coinage (Scotland's currency to be Anglocized's) -- an obvious area of

resentment on the part of Scotland.²⁴ While this subject is beyond my theme, examples of Carlyle's Scottish pride insofar as Newton is concerned are not. It appears that in Newton's insistence on "identity of process to the last particular," he needed special tools for minting -- "cast iron rollers [which] were not to be bought." These rollers were patented to an Edinburgh man who "kept the secret to himself" and only rented them out on a daily basis ("Recoinage" 71). The recoinage was a highly newsworthy historic event and Carlyle would know that Newton, against his wish to have the Scots come to London to learn the trade, was forced to send an overseer from London up to the Edinburgh Mint to train the goldsmiths -- a Scottish victory of sorts over English domination, and some small poetic justice over mechanical science. This is a small incident to be sure, but it supports the idea that in Sartor the "roll of gold Friedrichs" that accompany Teufelsdröckh's birth symbolizes natural sunlight which is infinitely more valuable to Carlyle than money. The scene is a subtle dramatization of Carlyle's philosophy that material greed is at the root of all evil. Newton's position as Master of the British Mint may also explain his editorial difficulties in Sartor with the relative values of "new-got gold" and "new truth," and the "new question" of how to bring the "new truth" of the "philosophy of Clothes" and its Author, "in any measure, to the business and bosoms of our own English nation" (SR: "Editorial Difficulties" 10).

Another aspect of the above story is that Newton's position at the Mint was a patronage appointment from a young friend at Cambridge, Charles Montague, who More claims may have been as responsible as Halley for the publication of Principia - (IN: 219). Carlyle's satire accommodates many ironies and coincidences in the Newton-Montague relationship. First of all, with a nineteen-year disparity in ages it was the "wit, the buoyancy of spirits, and the social manners of this brilliant youth [that] attracted and fascinated" Newton (the elder and then a Cambridge don). In a word,

²⁴ Sir John Craig, "Recoinage at Edinburgh" in Newton at the Mint (London, 1946), p. 1.

Montague acquainted Newton with "worldliness" (IN: 217). When Montague rose politically he entrusted the recoinage to Newton who handled the job with unprecedented skill and dedication under "the King's service." More concludes that it "is difficult to understand what drew two such unlike men as Newton and Montague together".²⁵ However Carlyle understands the scientific principle that opposites attract (eg. worldly/unworldly), especially when that opposition is diffused by humour, most selectively by sophisticated wit (IN: 216,15).²⁶ Carlyle's main concern with Newton's interest in the Mint is that he gave up science altogether for it, that "his creative work stopped so abruptly in the flower of his age," as More puts it (IN: 437). Not until Newton retired thirty years later (1725) did he express his desire to "have another stroke at the Moon," a desire which Carlyle fulfills posthumously (IN: 417,659).²⁷

In his effort to give Newton a 'lighter' and 'higher' view of Life, Carlyle gives Teufelsdröckh certain distinguishing characteristics. Teufelsdröckh speaks with "strange plainness [and] calls many things by their mere dictionary names" (SR: "Characteristics" 29). From his cosmic perspective as the Man-in-the-Moon, he looks at men with "a strange impartiality, a strange scientific freedom." He reduces mankind, even the "highest Duchess" or "the star of a Lord," to "little less and little more than the broad button ... in a Clown's smock" (SR: "Characteristics" 29). As a

²⁵ Newton was undoubtedly attracted to Montague's "talent for fluent verse-making," noted for its wit. This is indeed ironic as Newton is represented as "singularly indifferent to, and even contemptuous of, all forms of art" except the "pictorial" (IN: 15,217). Asked why he gave Newton the patronage appointment to the Mint, Montague answered poetically "that he would not suffer the lamp which gave so much light to want oil" (Brewster II, 192).

²⁶ Montague may be incorporated into Jane Montague's character in Wotton Reinfred, in which case Carlyle again incorporates the male and female principle into a single 'hero-heroine' (as Teufelsdröckh is). However, Harrold points out that Carlyle's wife, Jane, "appears to be the original of 'Jane Montagu' ... owing to her sharp wit and vivacity" (SR: "Romance" 137,38, f3).

²⁷ Letter from Newton to Conduitt (Brewster II, 158).

Clothes Philosopher he sees this "broad button" as merely an "implement ... for *hooking-together*," a metaphorical "Tool" for reproducing or 'sewing on.' Given Isis' original reputation as the "Clown Goddess," her subsequent roles as primordial Mother Nature, and ultimately the guiding star "Sirius," Teufelsdröckh sees each man "in its kind" as merely a "button in a Clown's smock" (SR: "Characteristics" 33,29 Cross Ref. "Organic Filaments" 258,59). With a slight linguistic alteration we have a button in a "Clown's mock," the end result or Final Cause, philosophically speaking, of Isis's joke. This seems the right moment to reintroduce the idea that Teufelsdröckh's Clothes Philosophy was Carlyle's attempt to write as good a biography of Newton as Boswell did of Johnson, but for his own reasons was compelled to disguise the fact. Discussing Boswell's Biography as a work of art, Carlyle notes:

how indelible and magically bright does many a little *Reality* dwell in our remembrance! There is no need that the personages on the scene be a King and Clown [but rather] need only that the scene lie on this old firm Earth of ours, where we have so surprisingly arrived; that the personages be *men*, and *seen* with the eyes of a man. ("Biography" 75).

However difficult it must have been for Carlyle to write Sartor Resartus, we see that in his deliberately convoluted way he "pictured out the grand mother-idea" with an image of man and woman as inseparable links in the continuing "Great Chain of Being" which, as Tennyson points out, had lost its "illustrative force" in Carlyle's time (SCR: 19).

Finally, when we consider the view of all history through the eyes of the metaphorical Man-in-the-Moon, of both man and woman in the "ground-scheme of the Universe," we have an objective vantage that Newton could only dream of. Teufelsdröckh's "strange impartiality [and] scientific freedom" seem correlated to the "Centre of Indifference" he acquired through his "Spiritual new-birth, or Baphometric Fire-Baptism" (SR: "The Everlasting No" 168). This centre of indifference is not 'indifferent' as it sounds, but the condition of emotional stasis which can temporarily obliterate subjectivity. As a result of his intellectual/spiritual consummation Teufelsdröckh can now exclude himself from 'worldliness.' Simply put, Teufelsdröckh's

'self' is now 'centred' and he can thereupon become a man. He now observes the role of mankind as one of "hooking-together" to make history. Teufelsdröckh also observes that man's history can be "preserved in Tradition only," ideally in "Books" and in particular "a true Book" (SR: "Centre of Indifference" 171,72). My whole theme of Carlyle's poetico-philosophico revolution, his idea of S>Art>or>Re>S>Art>Us, can almost be summarized in his "Centre of Indifference." Teufelsdröckh observes that

Of Man's Activity and Attainment the chief results are aeriform, mystic, and preserved in Tradition only: such are his Forms of Government, with the Authority they rest on; his Customs, or Fashions both of Cloth-habits and of Soul-habits; much more his collective stock of Handicrafts, the whole faculty he has acquired of manipulating nature: all these things, as indispensable and priceless as they are, cannot in any way be fixed under lock and key, but must flit, spirit-like, on impalpable vehicles, from Father to Son; if you demand sight of them, they are nowhere to be met with. Visible Ploughmen and Hammermen there have been ... but where does your ... Manufacturing SKILL lie warehoused? It transmits itself on the atmospheric air, on the sun's rays (by Hearing and by Vision); it is a thing aeriform, impalpable, of quite spiritual sort. So spiritual ... is our whole daily Life: all that we do springs out of Mystery, Spirit, invisible Force; only like a little Cloud-image ... does the Actual body itself forth from the great mystic Deep.

Visible and tangible products of the Past [are] Cities, ... tilled Fields [and] Books. In which third truly, the last invented, lies a worth far surpassing that of the two others. Wondrous indeed is the virtue of a true Book (SR: "Centre of Indifference" 171,72).

Teufelsdröckh leads us back to his vision of an "immeasurable Froth-ocean named LITERATURE," which conveys for him "fragments of a genuine Church-Homiletic," or Carlyle's concept of History as the Art of *Conversation* called "Biography or Autobiography" (SR: "Organic Filaments" 253; "Prospective" 75,76). As a literary man, Carlyle can be seen as one of his own heroes "uttreing-forth [sic], in such way as he has, the inspired soul of him; all that a man, in any case, can do" (PHW: 208). Sartor is his "seed-grain that cannot die" -- the casting forth of his Act, his Word, "into the ever-living, ever-working Universe" (SR: "The World in Clothes" 40; Intro. lxii). As an inspired soul, Carlyle is the 'Seer' who unfolds for us the "Godlike ... enfolded in the Life of every Man" ("Biography" 72). For Carlyle, man's ability to use "Tools" is the significant factor in "the victory of Art over Nature" (SR: "Adamitism" 59). As a Tool-

using Animal, "without Tools he is nothing, with Tools he is all" (SR: "The World in Clothes" 41). In the sense of documenting history the pen is *almost* man's most significant tool.²⁸ We might see his ability to document history, or create art, as man's only compensation for an otherwise unrewarding existence.

²⁸ In a provocative play on the word "pens," Carlyle demonstrates his instinct for phonetics, signing a fictitious letter about Sartor's author, (from "Bookseller to Editor:"): "MS. (penes nos)" (SR: Appendix V: I; 320). Carlyle sees that the pen, as an indispensable tool for documenting man's history, follows the hand which follows the mind which follows the heart as the seat of man's instinct, and we come full circle to the written Word of God.

VI LAST WORDS

One cannot help but wonder what David Brewster thought of Sartor Resartus -- whether he could possibly recognize such a satirically extravagant work as a biography of Newton, and more to the point as an alternate to his own. Would Brewster have detected in Carlyle's parody of editing, a personal rebuke directed at him? We must understand here that just as the role of Teufelsdröckh could represent a true poet, so the role of an unenlightened English Editor could represent Brewster insofar as Brewster could not distinguish between levels of Godliness, or as Carlyle notes, "this Chancellor [and] the Chancellor" (which, to be fair, Newton could) (TN: 256).¹ Brewster was Carlyle's first journalistic employer and possible professional nemesis, as Tennyson suggests, arguing that because Carlyle was forced to adopt Brewster's style as Brewster's translator-editor, he suppressed his own artistic impulses (SCR: 26,28,43). It now appears that in their own peculiar ways both Brewster and Carlyle declared their devotion to a common hero -- the "High Priest of Science" as Brewster refers to Newton (Brewster II, 118).

While Tennyson does not mention Brewster's interest in Newton, he emphasizes the Brewster-Carlyle working relationship, and makes clear the antagonism Carlyle was entitled to feel under Brewster's patronage.² Significantly, Brewster was considered by

¹ Brewster is mentioned only once in Carlyle's Notebooks and this is near the end of the diary. He refers to having seen "Sir David Brewster! B. is still full of projects and purveyor-activity: for the rest, has become a Whig and Reformer, and speaks about *this* Chancellor [Lord Brougham] exactly as about *the* Chancellor; whose sublime mind (he took pains to say) had included even *me* in its contemplations. A tough, vivacious man! Not without kindness, at least great sociality, of disposition; and for his practical opinions:

O wonder, O wonder! enter and see:

A weathercock's head where his tail sh[oul]d be" (TN: 256).

This singular reference to Brewster conveys Carlyle's generally unflattering opinion of the man.

critics to be a poor if not unprofessional biographer at a time when Carlyle, as mentioned, was considered to be a master of the genre on the basis of his Life of Schiller. Brewster's hagiographic Life of Newton, essentially a reworking of information from Biographia Britannica, was declared by himself to be "the only life on any considerable scale that has yet appeared" (NH: "Brewster" 78). More points out in his definitive biography of Newton (1934) that because "a historical background to Newton is almost totally missing" in Brewster's work it is "singularly unreliable," and that although Brewster was a physicist distinguished in the field of optics (the biography is overweighted in this area), he "was not competent to discuss ... the philosophy of the seventeenth and eighteenth centuries" (IN: - Intro vi,vii; 410,411,448).³ More concludes, in short, that Brewster's work on Newton casts "no lights and shadows," whereas we may conclude Carlyle's Sartor does (IN: 410,11). While Carlyle's appreciation of Newton was not widely known, it is reasonable to speculate that Brewster was aware of it. Carlisle Moore pointedly refers to the fact that of the twenty odd subjects given Carlyle to write about for the Encyclopaedia (from M-P), only two were mathematicians or scientists, and "Brewster did not give him Newton" (CMM: 76).⁴

The team of Brewster/Carlyle parallels the team of Isaac Barrows and Isaac Newton insofar as both represent classic master/apprentice situations in which the apprentice sees further than his superior. Brewster's lack of vision, however, is

² Tennyson points out that Carlyle was the unacknowledged editor-translator of Legendre's Geometry, a commission from Brewster. Adding insult to injury Brewster took full credit for the work competently done by Carlyle, "cagily subtitled it: 'Translated from the French of A. M. Legendre: Edited by Sir David Brewster'" (SCR: 33,34).

³ Brewster remains famous for inventing the kaleidoscope, but is most remembered for Newton's Biography -- not for the same reasons Boswell's Johnson remains famous, however, but rather because Brewster's other professional work has not withstood the test of time, and because until More's biography a century later, Brewster's work on Newton remained the most comprehensive.

⁴ Carlyle did write the article on Pascal, whom Moore notes as paralleling Newton more closely than any other scientist in "religious fervour and scientific caution" (IN: 611).

implicated in both situations and here the interrelatedness of the Newton/Brewster/Carlyle triumvirate takes an extraordinary twist. Briefly: when Newton published his New Theory on Light, his first article which I remind readers was considered perfect in form and content, he was the protege of Isaac Barrows. Although Newton's teacher, Barrows was apparently unaware of Newton's independent work on light which "contradicted and made much of [Barrows'] work false" (IN: 81). Barrows' "published lectures do not contain a single reference" to Newton's private work on light, chromatic aberration, the reflecting telescope, refrangibility of colours, or the composition of white light, but rather, Barrows "gives the accepted and erroneous explanation of all of those subjects" (IN: 81). Newton's repudiation of Barrows' work, which put Barrows in an embarrassing position, is criticized by More who notes that when Barrows published his book, Optical Lectures, he generously acknowledged his indebtedness to Newton as "a young man of excellent character and of great genius who had criticized the manuscript and corrected the proofs." More argues the inconceivability of Barrows publishing his book had he known about Newton's work (IN: 81). The question of Newton's behaviour is a puzzle yet to be solved. More rules out Newton's "excessive modesty" on the grounds that Newton himself acknowledged his discovery on the nature of light to be "the oddest, if not the most considerable detection, which hath hitherto been made in the operations of nature." Such a statement, as More points out, "does not express any failure on Newton's part to recognise his own worth" (IN: 81). More criticizes Brewster for explaining away the incident with a simple denial of the facts. In Brewster's words: "It does not appear from any of the documents which I have seen, at what time Newton made his first optical discoveries" (IN: 81). Given his obsession with optics, Brewster's logic is ironic when he uses obscurity to state his case, which is exactly how Carlyle presents evidence in Sartor that his work is about Newton.

We appreciate the intensity of Carlyle's testament to Newton and his revenge against Brewster when we realize how clearly and sardonically his "Carlylese" parodies Brewster's fawning style (NH: 44). For example, Brewster suggests that:

If we look for instruction from the opinions of ordinary men, and watch their conduct as an exemplar for our own, *how interesting must it be to follow the most exalted genius through the labyrinth of common life*, -- to mark the steps by which he performs the functions of the social and the domestic compact; -- how he wields his powers of invention and discovery; -- how he comports himself in the arena of intellectual strife; and in what sentiments, and with what aspiration, he leaves the world which he adorned.

In each and all of these phases, the writings and the life of Sir Isaac Newton abound with the richest counsel (Brewster 1:3 - emphasis mine).

Carlyle's Hofrath clearly mocks Brewster's style. In reference to Professor Teufelsdröckh's *Philosophy of Clothes* (having informed readers that "Biography is by nature the most universally profitable, universally pleasant of all things: especially Biography of distinguished individuals"), the Hofrath outlines the general content of the work:

Such portions and passages as you have already mastered, and brought to paper, could not but awaken a strange curiosity touching the mind they issued from; the perhaps unparalleled psychical mechanism, which manufactured such matter, and emitted it to the light of day. Had Teufelsdröckh also a father and mother; did he, at one time, wear drivel-bibs, and live on spoon-meat? Did he ever, in rapture and tears, clasp a friend's bosom to his; looks he also wistfully into the long burial aisle of the Past, where only winds, and their low harsh moan, give inarticulate answer? Has he fought duels; -- good Heaven! how did he comport himself when in Love? By what singular stair-steps, in short, and subterranean passages, and sloughs of Despair, and steep Pisgah hills, has he reached this wonderful prophetic Hebron ... where he now dwells?

To all these natural questions the voice of public History is as yet silent (SR: "Prospective" 76,77).

A brief analysis of the above passages reveals that Brewster's invitation to readers "to follow the most exalted genius [Newton] through the labyrinth of common life, -- to mark the steps by which he performs the functions of the social and the domestic compact," parallels the way in which Carlyle 'stimulates' reader interest in the "singular stair-steps ... and subterranean passages, and sloughs of Despair, and steep Pisgah hills" that

Teufelsdröckh took to reach his final dwelling place.⁵ Carlyle's sarcastic tone in Sartor may have been provoked by Brewster's apparently blatant copying of Carlyle's style in Wotton Reinfred, Carlyle's first obvious attempt to honour Newton. We recall that Wotton Reinfred "gloried to track the footsteps of the mighty Newton," the sentiment echoed in Brewster's desire "to follow" and "to mark the steps" of Newton, "the most exalted genius."⁶

While Brewster invites readers to wonder how Newton performed "the functions of the social and the domestic compact," Carlyle's Hofrath invites speculation about specific functions of this compact such as: "did [Teufelsdröckh] wear drivel-bibs, and live on spoon-meat?" Although the Hofrath's questions may sound rhetorically inane, in sum they are more personally relevant to Newton and his lifestyle if Newton's "likeness" is before his biographer as Carlyle suggests it should be. A reader who attempts to understand Newton's ideas, as Carlyle does, necessarily tries to imagine "the mind they issued from -- the *perhaps* unparalleled psychical mechanism, which manufactured such matter, and emitted it to the light of day." In other words, how human was Newton? -- "Did he ever, in rapture and tears, clasp a friend's bosom to his? ... Has he fought duels? ... how did he comport himself when in Love? By what *singular* stair-steps ... has he reached this wonderful prophetic Hebron ... where he now dwells?" Even the suggestion that Teufelsdröckh looked "wistfully into the long burial-aisle of the Past"

⁵ Carlyle's format for "perfection in Biography" is clearly outlined in his essay on Burns (1828): "How did the world and man's life, from his particular position, represent themselves to his mind? How did coexisting circumstances modify him from without; how did he modify these from within? With what endeavours and what efficacy rule over them; with what resistance and what suffering sink under them? In one word, what and how produced was the effect of society on him; what and how produced was his effect on society?" ("Burns" 47,48).

⁶ As an added point of interest here I note that in Newton's time there was a William Wotton, the most authenticated juvenile protege on record (Brewster I:463, f2). As an adult, Wotton corresponded indirectly through a friend with a Professor Bentley, who aspired to study Principia with the ultimate aspiration of editing the second edition of the work. My point is that William Wotton may be Wotton Reinfred's historical namesake.

toward "inarticulate" response dramatizes Newton's fruitless study of the Old Testament. The Hofrath's final question is posed satirically, and conforms to Carlyle's belief that biography is a variety of "gossip," by implicitly asking what is uppermost in every reader's mind about Teufelsdröckh or any "distinguished individual" -- that is, 'how did he become so distinguished?' While the Hofrath, being older and wiser than Teufelsdröckh, refrains from promising conclusive answers to "all these questions," to which "the voice of public History is as yet silent," we note that Brewster's Biography abounds "with the richest counsel" (SR: "Prospective" 76 - emphasis mine; Brewster 1;3). Here I make a final reference to the inaccessibility of Newton's private papers at the time Carlyle and Brewster were writing their respective books on him. I note that as Sartor concludes, and Teufelsdröckh seems to disappear from view, Teufelsdröckh's Editor has reason to believe "the Lost still living," and that "his archives must, one day, be opened by Authority; where much, perhaps the *Palingenesie* itself, is thought to be repositied" (SR: "Farewell" 297). We know that Newton's archives were opened by authority and auctioned at Sotheby's as recently as 1936, but the Editor's beliefs, as expressed in Sartor, may reflect Carlyle's last words on the subject of Newton's lost note-book about a century earlier.

I return for a moment to Boswell, who wrote England's singular "genuinely good" biography without, apparently, the Man-of-Letters' particular problem of "copy-rights, and copy-wrongs" ("Biography" 79). Carlyle's bitterness over editorial interference in later editions of Boswell's Life of Johnson conveys, I believe, his skepticism about editors in general, and perhaps another subtle insult to Brewster:

our Editor [claims Carlyle] has fatally, and almost surprisingly, mistaken the limits of an Editor's function; and so, instead of working on the margin with his Pen, to elucidate as best might be, strikes boldly into the body of the page with his scissors, and there clips at discretion! It is truly said also, There is much between the cup and the lip; but here the case is still sadder: for not till after consideration can you ascertain, now when the cup is at the lip, what liquor it is you are imbibing; whether Boswell's French wine which you began with, or some Piozzi's ginger-beer ... *or perhaps some other great Brewer's*

[Brewster's?] penny-swipes or even alegar, which has been surreptitiously substituted instead thereof ("Boswell's Life" 5,6 emphasis mine).

This is only a small sample of Carlyle's polemic on the presumption of editors, but the point is that in Carlyle's view an original God-inspired work, art which represents truth or a life, does not need editing, indeed is not worth editing since it cannot be improved upon. Each work of art is, however, worth repeating in a new and original way.

Here I relate a curious parallel between Carlyle's work and Wordsworth's that illustrates how well Carlyle concealed his "dramatic epic" about Newton. Comparing Carlyle's and Wordsworth's styles, M. H. Abrams describes Sartor as "so blatantly eccentric that it is readily misestimated as a freak in the history of prose narrative."⁷ While he is contrasting Carlyle's revolutionary style with Wordsworth's subtle innovations in The Prelude, Abrams fails to discover the important fact that *both* Wordsworth and Carlyle pay homage to Newton, and that Carlyle's "blatantly eccentric" style in this case is more subtle than Wordsworth's. Wordsworth clearly dedicates a quatrain to the scientific hero:

The antechapel where the statue stood
Of Newton with his prism and silent face,
The marble index of a mind for ever
Voyaging through strange seas of Thought, alone.
(The Prelude: Book II, 60-64).

Carlyle's dedication, on the other hand, is convoluted and ultimately private. He informs us of an anonymous English Editor facing a "poetico-philosophico" Professor's "extensive Volume," which although "a very Sea of Thought," "the toughest pearl-diver may dive to his utmost depth, and return not only with sea-wreck but with true orients" (SR: "Editorial Difficulties" 10). This description of Teufelsdröckh's extensive Volume on Clothes is clearly an echo of Wordsworth's "sea of Thought," and perhaps an allusion

⁷ M. H. Abrams, "The New Mythos: Wordsworth, Keats, Carlyle" in Natural Supernaturalism (New York, 1971), p. 129.

to his Prelude. I repeat, also, Newton's own last words as they mention the metaphoric sea of thought to which Carlyle and Wordsworth both refer:

I do not know what I may appear to the world; but to myself I seem to have been only like a boy, playing on the sea-shore, and diverting myself, in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me (IN: "The Last Years" 664).

Elsewhere, Abrams clearly appreciates what he calls Carlyle's "radical experiment in artistic form," but the above is an example of Carlyle's consistent and playful permutation of ideas that confuse readers and invite them to misestimate Sartor "as a freak in the history of prose narrative" (NS: 129). Coincidentally, Abrams compares Teufelsdröckh's Editor to "a demented Editor who ostensibly recounts the life of a poet in the process of editing the poet's autobiographical poem [in] an indefinite regress of mutually reflective and fantastically distorting mirrors" (NS: 130).⁸ Ironically, this is the most succinct description I have come across of Carlyle's attempt to have Newton "mirror" his untapped poetic essence.

We return to this attempt, and Carlyle's argument with Brewster. Carlyle's revolutionary 'spiritualization' of Newton culminates in Sartor's "Romance" chapter. Carlyle knows that every reader is curious about an author's love life, and that Blumine will be a source of curiosity about himself as critics review Sartor. (I note that every book I have read about Newton includes speculation about Miss Storey⁹). Carlyle therefore blatantly imparts a gossipy tone to the Editor's 'questionnaire' about Blumine and, typically, the English Editor wonders about a lack of reference to "the title

⁸ Here Abrams is suggesting that Sartor is the "bizarre revelation of [Carlyle's] own life" in the same way that Pale Fire is Vladimir Nabokov's.

⁹ These books usually also include a line or two about Newton's benighted housekeeper and bedmaker, Betty, who I believe is also captured in Sartor as Teufelsdröckh's housekeeper and bedmaker, old "Liza" (SR: "Reminiscences" 24).

Blumine" that he finds in Teufelsdröckh's autobiographical scraps. Again Carlyle mimics Brewster's style:

Was her real name Flora, then? But what was her surname, or had she none? Of what station in Life was she; of what parentage, fortune, aspect? Specially, by what Pre-established Harmony of occurrences did the Lover and Loved meet one another in so wide a world; how did they behave in such meeting? To all which questions, not unessential in a Biographic work, mere Conjecture must for the most part return answer (SR: 135,36).

Through exaggeration, Carlyle paradoxically illustrates his subtle understanding of the purposes and limitations of biographical writing. He again makes the point that "mere Conjecture" or "seeming to be" constitutes a major problem in critical analysis. Ultimately Carlyle views an individual's existence as being infinitely more rich, complex, and sacred than a pedantic biography such as Brewster's of Newton can indicate. Brewster describes Miss Storey as

sister to Dr. Storey, a physician at Buckminster, near Colsterworth, and the daughter of Mr. Clark's Second wife, was two or three years younger than Newton, and seems to have added to great personal attractions more than the usual allotment of female talent [and so on] (Brewster I;13).

In contrast to Brewster's few lines on Miss Storey, Carlyle devotes an entire chapter to Newton's "Romance," which imaginatively incorporates fact with fiction on a cosmic scale.

Returning to the above quotation from Sartor, we note that Editor Newton, who pursues his romantic quest through Teufelsdröckh on the basis of what he reads of Teufelsdröckh's life, concludes that Teufelsdröckh's and Blumine's encounter was to "all *appearance*" caused "by Accident, and the grace of Nature" (SR: "Romance" 136 emphasis mine). In terms of my argument the point is that however these two coincided and whatever the reason, Carlyle depicts their coming together as the result of an enigmatic "Something." And as Teufelsdröckh and Blumine meet for the first and the last time:

she put her hand in his, she looked in his face, tears started to her eyes; in wild audacity he clasped her to his bosom; their lips were joined, their two souls, like

two dewdrops, rushed into one, -- for the first time, and for the last! Thus was Teufelsdröckh made immortal by a kiss (SR: "Romance" 145).¹⁰

As a symbolic consummation in Sartor, the lovers' kiss symbolizes a state of pure love in which hearts are united, and baser instincts no longer wield sensual power over the spiritual. On one level Carlyle seems to consecrate Newton's first romance, which we recall he forfeited in the name of Science -- namely Miss Storey. But more significantly, I believe the couple's kiss sanctifies the re-union between Newton and his mother, or his "First Love which is infinite," which by implication includes his eternal Mother (SR: "Romance" 135). In either case, Sartor's textual marriage between science and poetry immortalizes Newton by placing him poetically in the bosom of the Moon, or what Carlyle less romantically refers to as the "bosom of History," where we can be "almost" certain that "safe-moored in some stillest obscurity, not to lie always still, Teufelsdröckh is actually in London!" (SR: "Farewell" 297).¹¹

Winding down this thesis I offer a final Newtonian story which would be familiar to Carlyle and might have contributed to his satire on Brewster. Newton describes an unexplainable vision he once had while looking at the sun: "I looked a very little while upon the sun in the looking-glass with my *right eye*, and then turned my eyes into a dark corner of my chamber, and winked, to observe the impression made." Newton adds that "the cause of this phantasm involves another about the power of fancy, which I must

¹⁰ The idea for this particular scene may have been taken from Johnson's Book of Devotion, in which Johnson relates the parting scene between himself and an especially close family friend: "We kissed and parted; I humbly hope, to meet again, and to part no more" ("Boswell's Life" 58).

¹¹ Dale considers Teufelsdröckh an "outlandish failure as a poetic mythmaker, as a maker of form and language," but he fails to see that Teufelsdröckh *is* a poetic mythmaker which is why he has such a difficult time conveying his spiritual credibility to the skeptical Editor (AMS: 302). Although Dale argues otherwise, Carlyle's "comic inversion" of his "sublime romantic mission" can be seen as successful in the sense that his artistic quest to marry poetry with science results in a "spiritual-cum-literary ideal" attained (S>Art) (AMS: 303). We now see that Newton, not Carlyle himself, is Dale's "romanticist manque" who is offered a "spiritual rebirth" in Sartor (AMS: 312).

confess is too hard a knot for me to untie" (Brewster I, 236). Here we recall the Hofrath as Carlyle's symbolic Sun and visualized God-source ('S'). Carlyle clearly comprehends the "phantasm" and has Professor Teufelsdröckh attempt to undo the "knot."

He explains to Newton that

our Imaginative [faculty] is King over us The Understanding is indeed thy window ... But *Fantasy is thy eye* ... It is in and through *Symbols* that man ... lives, works, and has his being ... is not a Symbol ever, to him who has eyes for it, some dimmer or clearer revelation of the Godlike? (SR: "Symbols" 222 - emphasis mine).

Newton's lack of understanding about the phantasm created by the Sun allows Carlyle to play with Newton's belief that the Sun, though a 'fixed Star,' is the source of all spirit. I suggest that as Spirits addressing each other through Carlyle's imagination, Carlyle and Newton parallel the Hofrath and Teufelsdröckh in Sartor, and might be seen as "chief friends and associates" in disclosing Newton's 'autobiography.' We can then imagine Carlyle, as Newton's 'real' story-teller, responding to Newton's wink at the Sun (with what Brewster emphasizes is Newton's *right eye*), by winking back at Newton as the all-seeing Man-in-the-Moon.¹² Ultimately Carlyle believes that he and Newton are "poetico-philosophico" soulmates in the eyes of God.

Carlyle's spirited approach to writing biography, which provides British readers with a "correct philosophic Biography" of Newton, obviously honours Newton's mythical side, a side that More points out has been "quite overlooked" (IN: 158). Carlyle's narrative style, that conceals Newton's biography as it reveals Teufelsdröckh's autobiography, supports Newton's belief that "Nature loves to accomplish different ends by the same means" -- that by combining the explainable with the unexplainable she retains her power of enigma (IN: 210). We see that in a revolutionary way Carlyle used

¹² When asked why he refused "to publish his conjectures" about the spiritual interaction between the sun and comets when he had made "a similar statement about the fixed stars" in Principia, Newton replied that the statement about the fixed stars "concerned us more; and laughing, added that he had said enough for people to know his meaning" (IN: 663). Again Carlyle is one who appears to understand Newton's meaning.

his poetic imagination as Newton used science, to reach the same conclusion that Nature's ultimate mystery will be found in death, or perhaps a "divinely transfigured Sleep, as of Victory" (SR: "Symbols" 224). We now understand that Carlyle's Story of the Time-Hat is meant to reveal the miraculous *fact* that man is allotted one earthly life, and a God-given "talent" for living it (IN: 165). What seems especially miraculous about Carlyle's and Newton's stories, however, is that on the strength of Carlyle's talent Newton is given a second 'life.' In this transfigured state Newton is named "Artist; not earthly Craftsman only, but inspired Thinker, who with heavenmade Implement conquers Heaven for us!" (SR: "Helotage" 228). That Carlyle resurrected Newton seems documented toward the end of Two Notebooks which Carlyle ended in 1832, the year after completing Sartor: "Thus does a Time pass, and with the time its man. The man [such as Newton I argue] who can live and work thro' two Times, and welcome a Palingenesia after mourning for a Death, is rarely to be met with --T[ie]k" (IN: 266).

In testament to Carlyle's view of Newton as an inspired but frustrated poet at heart, I conclude my own work with a poem Newton wrote in his youth. This verse is cited in most works on Newton as evidence of his early interest in, and potential talent for, becoming a poet -- in his own words he "excelled particularly in making verses" (Brewster I;12). Perhaps as a romantic touch biographers note that Miss Storey, whom Newton kept in touch with all his life, could repeat this poem from memory even in her old age. Although the poem was found under a portrait of King Charles II it clearly reflects Newton's personal philosophy, at least insofar as it reflects his abstemious life:

A secret art my soul requires to try,
 If prayers can give me, what the wars deny.
 Three crowns distinguish'd here in order do
 Present their objects to my knowing view.
 Earth's crown, thus at my feet, I can disdain,
 Which heavy is, and, at the best, but vain.
 But now a crown of thorns I gladly greet,
 Sharp is this crown, but not so sharp as sweet.
 The crown of glory that I yonder see
 Is full of bliss and of eternity (IN: 15, Brewster I;12,13).

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and impossible one. His outward Biography, therefore, which, at the Blumine Lover's-Leap, we saw churned utterly into spray-vapour, may hover in that condition, for aught that concerns us here. Enough that by survey of certain 'pools and plashes,' we have ascertained its general direction; do we not already know that, by one way and other, it has long since rained down again into a stream; and even now, at Weissenichtwo, flows deep and still, fraught with the *Philosophy of Clothes*, and visible to whoso will cast eye thereon? Over much invaluable matter, that lies scattered, like jewels among quarry-rubbish, in those Paper-catacombs we may have occasion to glance back, and somewhat will demand insertion at the right place: meanwhile be our tiresome diggings therein suspended.

If now, before reopening the great *Clothes-Volume*, we ask what our degree of progress, during these Ten Chapters, has been, towards right understanding of the *Clothes-Philosophy*, let not our discouragement become total. To speak in that old figure of the Hell-gate Bridge over Chaos, a few flying pontoons have perhaps been added, though as yet they drift straggling on the Flood; how far they will reach, when once the chains are straightened and fastened, can, at present, only be matter of conjecture.

So much we already calculate: Through many a little loop-hole, we have had glimpses into the internal world of Teufelsdröckh; his strange mystic, almost magic Diagram of the Universe, and how it was gradually drawn, is not henceforth altogether dark to us. Those mysterious ideas on Time, which merit consideration, and are not wholly unintelligible with such, may by and by prove significant. Still more may his somewhat peculiar view of Nature, the decisive Oneness he ascribes to Nature. How all Nature and Life are but one *Garment*, a 'Living Garment,' woven and ever-a-weaving in the 'Loom of Time;' is not here, indeed, the outline of a whole *Clothes-Philosophy*; at least the arena it is to work in? Remark, too, that the Character of the Man, nowise without meaning in such a matter, becomes less enigmatic; amid so much tumultuous obscurity, almost like diluted madness, do not a certain

Pause 155

indomitable Defiance and yet a boundless Reverence seem to loom-forth, as the two mountain-summits, on whose rock-strata all the rest were based and built?

Nay further, may we not say that Teufelsdröckh's Biography, allowing it even, as suspected, only a hieroglyphical truth, exhibits a man, as it were preappointed for *Clothes-Philosophy*? To look through the Shows of things into Things themselves he is led and compelled. The 'Passivity' given him by birth is fostered by all turns of his fortune. Everywhere cast out, like oil out of water, from mingling in any Employment, in any public Communion, he has no portion but Solitude, and a life of Meditation. The whole energy of his existence is directed, through long years, on one task: that of enduring pain, if he cannot cure it. Thus everywhere do the Shows of things oppress him, withstand him, threaten him with fearfullest destruction: only by victoriously penetrating into Things themselves can he find peace and a stronghold. But is not this same looking through the Shows, or Vestures, into the Things, even the first preliminary to a *Philosophy of Clothes*? Do we not, in all this, discern some beckonings towards the true higher purport of such a *Philosophy*; and what shape it must assume with such a man, in such an era? Perhaps in entering on Book Third, the courteous Reader is not utterly without guess whither he is bound: nor, let us hope, for all the fantastic Dream-Grottoes through which, as is our lot with Teufelsdröckh, he must wander, will there be wanting between whiles some twinkling of a steady Polar Star.

Barnes also includes these late few paragraphs in Book II as being "Neutonian" (Barnes 235, 36)

the death-blow of the Cartesian hypothesis; for, in a scholium he remarks: "I have endeavoured in this proposition to investigate the properties of vortices, that I might find whether the celestial phenomena can be explained by them; for the phenomenon is this, that the periodic times of the planets revolving about Jupiter are in the sesquiquilate ratio of their distances from Jupiter's centre,"³⁴ and the same rule obtains also among the planets that revolve about the sun.

In addition to the principal thesis of the second book, Newton shows his marvellous power as a geometrician. There is a wealth of material on the motions of pendulums, efflux of fluids, and wave motion. Besides the mathematical demonstration of the laws of fluids, he supported his argument with elaborate series of experiments. In accuracy of measurement and ingenuity of invention, I think, Faraday alone was equal to him; and when we remember that, to this experimental power, there was also an unrivalled mathematical genius, which Faraday totally lacked, the combination justifies the awe with which his contemporaries regarded him, and still makes us regard him as the supreme natural philosopher.

Newton concludes the second book with the statement that he had accomplished the task he had set out to do: "The hypothesis of vortices is utterly irreconcilable with astronomical phenomena, and rather serves to perplex than explain the heavenly motions. How these motions are performed in free space without vortices, may be understood by the first book; and I shall now more fully treat of it in the following book." And in the prefatory opening of the third book he explains what his purpose had been. He had not tried a descriptive narrative of phenomena, but to outline a science of mechanics, founded on a few laws of motion and force known to be true from experience, and developed by mathematics. While he illustrated his conclusions by a few phenomena, he felt he could leave the applications of the theory, which he had advanced, to the work of succeeding natural philosophers. He evidently thought it would have distracted his readers from following his main argument if he had included descriptive matter. He had, of course, meditated on the vast number of cosmic phenomena which his proof of the universal attraction of matter explained. It will be remembered that he had prepared a third book in which he had set forth the applications of

³⁴ This is the statement of Kepler's law that the cubes of the distances of planets are proportional to the squares of their periods; thus the law of vortices which requires the squares of their distances to be proportional to their periods is erroneous.

his theory of gravity and then, at the last moment, would have suppressed it except for the earnest entreaty of Halley.

The introduction to this third book is curiously indicative of Newton's character, a strange mixture of modesty and pride. "It remains that," he wrote, "from the same principles, I now demonstrate the frame of the System of the World. Upon this subject I had, indeed, composed the third book in a popular method, that it might be read by many; but afterwards, considering that such as had not sufficiently entered into the principles could not easily discern the strength of the consequences, nor lay aside the prejudices to which they had been many years accustomed, therefore, to prevent the disputes which might be raised upon such accounts, I chose to reduce the substance of this book into the form of propositions (in the mathematical way), which should be read by those only who had first made themselves masters of the principles established in the preceding books: not that I would advise any one to the previous study of every proposition of those books; for they abound with such as might cost too much time, even to readers of good mathematical learning."

On the rare occasions when Newton discusses his own work, he does it with the calm assurance of its high value. A man of his penetrating mind could not have failed to know that he had accomplished a colossal piece of work and that he had placed science on a new and firm foundation. He knew that only a very few could understand it, and even they would probably fail to see the unlimited consequences which he had laid before them. For years, he had lived in a sort of ecstasy of meditation as the laws of the cosmos developed in his mind, and now that he had reluctantly published his thoughts, he would ward off the criticisms of those who would not exercise the same labour to understand him. And with this haughty pride there was an equal modesty when he contemplated what little he could do to solve the inexplicable mysteries of the physical universe, and there was true humility in his submission to the belief that "this most beautiful system of the sun, planets, and comets, could only proceed from the counsel and dominion of an intelligent and powerful Being."³⁵

Newton's true modesty is shown most clearly in his recognition that mere activity of a vigorous mind, not only cannot arrive at useful scientific conclusions by any mathematical or verbal logic unless

³⁵ Gen. Schol. Book III, *Principia*.

NEWTON TO A FRIEND

c. 1661

I NEWTON TO A FRIEND

c. 1661

From Newton's autograph in his note-book (1659-61)⁽¹⁾ in the Pierpont Morgan Library, New York

Loving Freind

It is commonly reported yt you are sick. Truely I am sorry for yt. But I am much more sorry yt you got your⁽²⁾ sicknesse (for yt they say too) by drinking too much. I earnestly desire you first to repent of your haveing beene drunk & yn to seeke to recover your health. And if it please God yt you ever bee well againe yn have a care to live healthfully & soberly for time to come. This will bee very well pleasing to all your freinds & especially to

Your very loving freind

I. N.

NOTES

(1) This booklet (2 $\frac{3}{4}$ by 4 $\frac{1}{2}$ in.) which is one of three extant early note-books of Newton, was begun in 1659 when Newton was at home at Woolsthorpe helping his mother to manage the farm, and was continued during his first year at Trinity College, Cambridge (1661). The contents are partly described by D. Eugene Smith in *Isaac Newton 1642-1727*, edited by W. J. Greenstreet, 1927 (G. Bell and Sons, London), pp. 16-31. Six of the later pages contain a short but systematic study of phonetics, including a key to shorthand and to longhand phonetic spelling, in terms of an alphabet extended by the use of a few Greek and Hebrew letters and the signs ω (or γ) and ω for the soft *th* and *zh* respectively. See R. W. V. Elliott, 'Isaac Newton as Phonetician', *Mod. Lang. Rev.* XLIX (1954), 5-12.

One page contains the above letter followed by its transliteration:

Luvin ffriend

It iz komonloy ripworted wat yw ar sik. Triuli Oy am sori for wat. But Oy am mutw mwor sori wat yw got yur siknes (for y^t yee see tu) boy drivkin tu mutw. Oy earnestloy dizoir yw furst tw ripent of yur heviy byn druvk and wen tw syk tw rikover yur helθ. And if it plijz God y^t yw iver by wel egeen yen heev ee kazz tw liv helθfuli & swwberli for toim tw kum. yis wil by veri wel pliiziy tw ool yur frendz & ispewali tw

Yo^r veri luviy freind

I. N.

A slight penmark on the MS. shows that Newton hesitated after writing the *n* of the initial word 'Luvin': it is transliterated differently at the conclusion of the letter.

Newton justifies his re-ordering of the alphabet as follows: 'Soe ye greatest cavity in ye mouth being first made in ye throate & thence by degrees moved towards ye lips further from ye larinx (like ye stopping ye holes of a pipe to sound ye notes in order from G sol re ut, to Gamut) causes ye pronunciation of ye vowells in this order *y i e a o u w*.

'The filling of a very deepe flaggon wth a constant streame of beere, or water sounds ye vowells in this order *w, u, ω, o, a, e, i, y*.'

Here *w*=the vowel sound 'oo' in 'wood', *y*=that in 'see' and *ω*=that in 'dog'.

6 MAY 1665

NEWTON'S MOTHER TO NEWTON

y and *o* are used by Newton as equivalent signs.

There exists a Newtonian manuscript 'Of an Universall Language' in English, unfinished and transcribed in a minute hand on eight pages, preceded by an autograph of the earlier part of the work on seven pages (cf. Sotheby (1936), *Catalogue of the Newton Papers*, no. 313). It contains a section upon phonetics similar to that in the note-book, and to judge from the handwriting it is a very early work. See Elliott, *op. cit.* LII (1957), 1-18.

Among the earlier seventeenth-century grammarians, who were following the Baconian tradition, it was a common practice to experiment with phonetic spellings, including the use of special symbols: cf. for example, Charles Butler, *English Grammar* (1634). John Wallis, who published his famous *Grammatica linguae Anglicanae* with its chapter 'De Loquela' (1653) may be called the first modern phonetician: but although Newton certainly studied Wallis's mathematical writings a few years later it is uncertain whether he had access to the *Grammatica* in or before 1661. There does not appear to be any direct borrowing or copying from Wallis's treatise, though it is possible that Newton's grouping of the vowels according to oral apertures was influenced by Wallis's classification, while certain features such as the phonetic notation of vowel-length by double letters (e.g. *ii*, *uu*, etc.) are not used by Wallis, and may be original.

Newton's phonetic transcriptions are not fully consistent: the illustrative word 'wood' is rendered both with the vowel *uu* and with *w*. It is probable that he was trying to translate his own pronunciation, that of a lad born and bred in Lincolnshire where local, dialectal features come in. The note-book was composed too early to be influenced by the committee of the Royal Society set up in 1664 for improving the English language or by the publication of John Wilkins's *Essay towards a Real Character and a Philosophical Language* (1668).

(2) Newton frequently wrote 'yo^r' or 'o^r' for 'your' and 'our'. Throughout the correspondence these abbreviations will be printed in full.



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6 MAY 1665

From the original⁽¹⁾ in King's College Library, Cambridge

Isack

received your leter and I perceive you
 letter from mee with your cloth but
 none to you your sisters⁽²⁾ present thai
 love to you with my motherly lov
 you and prayers to god for you I
 your loving mother

hanah

wollstrup may the 6. 1665

END

09.02.93

FIN