

The Indianapolis Literary Club 2007-2008: 130th Year

An Inconvenient Truth: Legacy of a Creative Bacillus

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"There is no great genius without a mixture of madness." (Lat., Nullum magnum ingenium sine mixtura dementia)

Aristotle (384 B.C.-322 B.C.), quoted by Robert Burton's "Anatomy of Melancholy" (1621)

"Where youth grows pale, and spectre-thin, and dies;"

John Keats (1795-1821)

"The Lord will smite you with consumption, and with fever, inflammation, and fiery heat, and with drought, and with blasting, and with mildew; they shall pursue you until you perish."

Bible (KJV): Deuteronomy, Chapter 28

"Whilst meager phthisis gives a silent blow:
Her stroaks are sure, but her advances slow.
No loud alarms nor fierce assaults are shown.
She starves the fortress first, then takes the town."

Samuel Garth (1661-1791) From Canto VI "The Dispensary" 155-58

"There was Father, and Mother, and Emmy, and Jane
And Lou, and Ellen, and John and me--
And father was killed in the war, and Lou
She died of consumption, and John did too,
And Emmy she went with the pleurisy."

James Whitcomb Riley (1849-1916) From "Spirits At Home"; "The Family"

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Stephen J. Jay / SJay
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Acknowledgments:

I am grateful to many persons who aided my research for this essay over the past two years; some help was dutiful and expected, some unexpected from those piqued to curiosity by the topic. Thanks to all.

Bridget K. Balint, Ph.D., Classical Studies, Indiana University shared ideas about researching Aretaeus's work as translated in the 16th century and later, looking for commentaries of Renaissance and early modern physicians that might have used the term: *Spes Phthisica*, the hopeful consumptive.

Professor Dr. med. Johanna Bleker, Institut für Geschichte der Medizin der Charite-Universitätsmedizin Berlin, offered invaluable information and suggestions regarding the German scholar, Jacob Schonlein, and his early 19th century work in tuberculosis.

Dr. Alan Chedzoy (Weymouth, Dorset, England) who authored "Sheridan's Nightingale" (1997) kindly shared his thoughts regarding Elizabeth Linley's travails with tuberculosis; he met a descendant of her from California who brought one of Eliza's shoes, "not more than five inches long." Her beauty and talents far exceeded her diminutive size. (Letter: A. Chedzoy to S. Jay 14, October, 2007)

Angela Courtney, Librarian for English and American Literature, Theater, Philosophy, and Film Studies, Herman B. Wells Library, Indiana University, searched London Times archives for references to "*spes phthisica*" and Elizabeth (Linley) Sheridan—and recovered some 18th century "gems".

Danita L. Davis, Visual Resource Specialist, Herron Art Library, Indiana University Purdue University at Indianapolis (IUPUI) provided a key reference from Thieme-Becker *Kunstler Lixikon* that verified that James E. Doyle, illustrator, draughtsman, and writer, supplied the design for D. George Thompson's 1851 copper plate engraving of "A Literary Party at Sir Joshua Reynolds's." A copy of the Thompson print hangs in the Commons at Park Tudor School, Indianapolis, Indiana, site of the bimonthly meetings of the Indianapolis Literary Club.

Gregory Dobrov, Ph.D. Associate Professor, Classics Department, Loyola University, offered excellent advice of searching the classics' literature for evidence of the origin of "*Spes Phthisica*," as Dr. Dobrov referred to it: "the hybrid brainchild of a modern (Victorian?) scholar who paired the Greek "*phthisikos*" with the Latin word for "hope" ("I would have expected "*spes consumptive*" vel sim".)

Nancy L. Eckerman, Ruth Lilly Medical Library, Special Collections/History of Medicine and Nursing, Indiana University School of Medicine, found important documents and sources in Germany and France. The RLML interlibrary staff: Michael Wilkinson and Sherry Kieper processed innumerable orders.

Jack Eckert, Reference Librarian, Center for the History of Medicine, Francis A. Countway Library of Medicine, Harvard University, who has offered valuable help to me in previous research, was unable to find references to the term "spes phthisica" earlier than 1871 but shared Rene Dubos' references to it as well as Aretaeus and Murice Porot's *La psychologie des tuberculeux* (Paris 1950). Eckert searched Countway and U.S. data archives and was unable to find lecture notes of students of Johann Lukas Schonlein.

Stephen Greenberg, History of Medicine Division, National Library of Medicine, NIH, Bethesda, MD, helped me access IndexCat, an invaluable source of 16th-19th century references to tuberculosis.

Ann Hanson, Ph.D., Visiting Fellow, Department of Classics, Yale University, a 1992 MacArthur Fellow, searched early Greek and Latin sources for evidence of the joining of "spes" and "phthisica" but without success. She suggested I focus on the Renaissance or later as the likely periods when "spes phthisica" was coined. She provided keen insights regarding the joining of spes and phthisica into the "hopeful consumptive" idea. While possible in the Romantic Era, Dr. Hanson thought it unimaginable that in Greek and Roman antiquity people would have endorsed a notion: "euphoria of the consumptive." Dr. Hanson shared unique European data bases regarding Renaissance medicine and kindly directed me to Professor Helen King.

Giles R. Hoyt, Professor, Director, Max Kade German-American Center, Indiana University Purdue University at Indianapolis and wise counsel, directed me to German literature sources and translated early German medical papers.

Stacie L. Kadleck, graduate student, Department of Classical Studies, Indiana University, Bloomington, IN, translated from Latin to English the dissertation (publicly defended on 19 July 1823) of Carolus Augustus Guielmus Buhle of Halensis entitled: *De arthronis tuberculosis*. She did a masterful work on this translation.

Ursula Kolmstetter, Head Librarian, Stout Library, Indianapolis Museum of Art, Indianapolis, Indiana, searched for primary source evidence that an original painting by James William Edmund Doyle, Uncle of Sir Arthur Conan Doyle, was used by D. George Thompson in his engraving of 1851: "A Literary Party at Sir Joshua Reynolds's".

Hans-Joerg Lieder, Kalliope, (German Archives Server) EUBAM Office for Libraries, Berlin, provided information regarding Johann Lukas Schonlein's time as a lecturer in Wurzburg and his involvement in the book published by his students under Schonlein's name: *Allgemeine und specielle Pathologie und Therapie*, 1832.

Helen King, Ph.D., Professor and Chair Department of Classics, University of Reading, England, offered advice for navigating early medical dictionaries/encyclopedias. She had not seen the term: "Spes Phthisica" in the Renaissance literature she has reviewed, but she has not looked for it specifically.

David Ladouceur, Ph.D., Associate Professor, Department of Classics, University of Notre Dame verified that the words "tuberculosus, tuberculosum, and tuberculosis" in the dissertation by Buhl from Halle: *De Arthroncis Tuberculosis*, are in the adjectival forms and do not reflect the unitary concept of tuberculosis as we understand it today.

Larry Principe, historian of science at Johns Hopkins University, kindly shared thoughts about where I might find information regarding "Spes Phthisica." He has not seen it referenced in the 17th century literature of which he is most familiar.

Christopher Roden, co-founder of the Arthur Conan Doyle Society, British Columbia, CA, provided biographical information on Arthur Conan Doyle's uncle, James E. Doyle, the English illustrator, engraver, and writer, who created the original image used by D. George Thompson in his engraving: *The Joshua Reynolds's Literary Party*.

Matthew Roller, Ph.D., Professor and Chair, Latin literature, Roman social and cultural history, Graeco-Roman philosophy, Department of Classics, Johns Hopkins University, kindly reviewed the PHI data base and found references to phthisis/phthisicus for "consumption"/"consumptive" by the elder Pliny but he did not find the conjunction with "spes" as in the term: "spes phthisica".

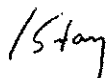
Ralph M. Rosen, Ph.D., Professor of Classical Studies, University of Pennsylvania, offered insight into the "linguistic barbarism" of joining "spes" (Latin) with "phthisica." (Gr.) He was unable to locate the term in the Hippocratic corpus or Galen or in Pliny.

Jacob Simon, Chief Curator, National Portrait Gallery, St. Martin's Place, London, UK, responded to my inquiries regarding the original art work by James E. Doyle (*Joshua Reynolds's Literary Party*) from which the D. George Thompson etching was created. Erika Ingham, Assistant Curator (Archive & Library) at NPG was unable to locate the original painting of James E. Doyle and the NPG has "no record of it, so "it is possible that it never existed except as a preparatory drawing."

Tony White, Head, Fine Arts Library, Indiana University and his staff searched for specific information regarding the provenance of James E. Doyle's original painting that allegedly provided the basis for the engraving by D. George Thompson's work: "*The Literary Party at Sir Joshua Reynolds.*"

January 7, 2008

Stephen J. Jay



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Introduction

It was fitting the literary genius, Samuel Johnson, would comment in his semi-weekly publication, "The Rambler", that "A genius, whatever it be is like a fire in the flint, only to be produced by collision with a proper subject." (1) With expected wit, Johnson added: "Imagination, a licentious and vagrant faculty, unsusceptible of limitations and impatient of restraint, has always endeavored to baffle the logician, to perplex the confines of distinction, and burst the enclosures of regularity."

Johnson's creativity in the 18th century followed the primal literary outburst of Homer by some two and one-half millennia. Homer's genius created Odysseus, "the man who was never at a loss," (2-5) and it inspired John Keats to pen: "On First Looking into Chapman's Homer," a poem of exploration and discovery. (6-9) While Homer's Odyssey has been called "the first and probably greatest adventure story of all time," (2, 3) Keats's poem is of the finest sonnets in the English language.

Whether Samuel Johnson's creative wit or Homer's genius that infected John Keats, or Shakespeare's voice of Romeo to Juliet: "Death that hath suckt the honey of thy breath" (10) -- all these would be considered from the minds of creative genius.

My purpose this evening is: 1. to explore the nature of creativity; 2. to show how in a remarkable turn of history, disease and creative genius became reciprocal metaphors; 3. to share three brief stories that epitomize the Romantic Age notions of disease and creativity; and finally 4. to reflect on cultural and scientific legacies of this history for our nascent 21st century.

The Nature of Creativity and Genius

What is creative genius? (1-5) The Oxford English Dictionary (OED) says "to create" is "to produce where nothing was before." Chaucer first used the word in 1393 when study of such an idea was based in mysticism and spirituality. The sense in which we use the word "genius" today --that of "native intellectual power of the exalted type" --did not develop until the 18th century; the word was not even in Samuel Johnson's Dictionary. During the English Enlightenment, dogma and divine authority were criticized and concepts about research and freedom to inquire emerged. By the 1800's four principles had been established about creativity: 1. genius is not supernatural; 2. genius is a potential in everyone; 3. talent and genius are different; 4. the potential for creativity depends on political atmosphere at the time. (4)

To poets and philosophers, creativity embodies the search for truth and beauty. In Keats's: "Ode on a Grecian Urn": "Beauty is truth, truth beauty, --that is all Ye know on

earth, and all ye need to know.” (6, 7) Coleridge said: “beauty is unity in variety,” and Jacob Bronowski, author of “The Ascent of Man,” reflected that, whether in poetry, painting, the arts or science, creative genius searches for “hidden likenesses.” (8, 9) One author suggested: “genius is the net result of nature’s method of smoking out a family in order to get the honey.” (10)

Today scientists say little is known about creativity. (11, 12) It is rare and requires the simultaneous presence of: intelligence; perseverance; unconventionality; the ability to think in a particular manner and make analogies between two or more ideas or images previously thought to be unrelated. (4, p137; 148; 13) The relative influence of “nature” and “nurture” is debated but no one doubts both are important. Francis Galton, cousin of Charles Darwin, described synesthesia, or hearing colors and tasting shapes which occur more frequently in creative people. (14, 15)

But of all the theories about the origins of creative genius, the idea that disease may cause or promote it is both provocative and counter-intuitive.

Disease and Creative Genius—are they related?

Aristotle claimed: “No great genius has ever existed without some touch of madness. (1, 2); and to the English poet, John Dryden (1631-1700) (3, 4):

“Great wits are sure to madness near allied,
And thin partitions do their bounds divide.”

Questions of the nature of the relationship between disease and genius have swirled through the ages to the present. (5-12) Does disease cause genius? Or, does genius cause disease? Do the seeds of genius lie dormant until an illness creates the motivation for creativity to flourish? (13) As Dr. Charles Mayo put it: “Does the artisan, shorn of his strength (by disease) ... learn that his brain is mightier than his hands?”

Mad-genius has intrigued scholars and pundits. (14-16) College curricula and Internet sites reflect this interest. The Academy Award winning movie, “A Beautiful Mind,” starring Russell Crowe as the real life John Nash, a Princeton professor, paranoid schizophrenic, and Nobel Laureate in economics in 1994, has reinforced the mad-genius idea. (17-19)

Nash is a modern on the long list of famous persons whose diseases have been linked to creative genius: the sculptor Benvenuto Cellini and musician Paganini were syphilitic; Dostoevsky and Flaubert, epileptic; Ravel, suffered dementia; Hans Christian Anderson, Balzac, F. Scott Fitzgerald, Hemingway, Mark Twain, Virginia Wolf; Keats, Beethoven, van Gogh, Gauguin, Michelangelo, were “manic-depressive”, or bi-polar. (6, 11-14, 16, 18, 20-26) Other conditions associated with creativity include: neuroses, schizophrenia; brain injuries and drug use. (19, 20, 27) Louis Hector Berlioz sought creative refuge in music and opium, the drug favored by poets and artists of the 19th century and epitomized

by the English essayist: Thomas De Quincey's stream of consciousness prose:
Confessions of an English Opium Eater (1821). (23, 28-30)

But, the disease that became synonymous with creative genius in the 18th and 19th centuries was neither syphilis nor manic-depression, but the cause of one in seven deaths of Europeans and Americans, a disease of ancients—"consumption"—also known as phthisis, scrofula, the Great White Plague, and today, tuberculosis. (31-36)

Tuberculosis and Creative Genius—are they related?

In ancient times, consumption and genius were thought related: consumption the "fire" that both wasted the body and caused peculiar nervous forces in the intellectually gifted. (1-9) The Cappadocian Aretaeus wrote in the second century A.D.: "...when blood comes from the lung...patients do not give up hope...It is simply wonderful how the strength of the body holds out; the strength of the mind even surpasses that of the body." (10-13)

In Classical culture the consumptive was often heroic: In Plutarch's story of King Antigonus III of Macedonea, battlefield heroism was linked to bravery of defying consumption: Antigonus cried out for joy after the victory: "O happy day," as he died "bursting his lung." (14) In the 17th century, this heroic view described the tuberculous Moliere, who on stage in a fit of coughing, bravely masked his cough, finished the play, and died half an hour later, a heroic act of a creative actor. (14)

By the 18th and 19th centuries classical virtue had shifted from heroic generals to enlightened civic humanism. (14) During the Age of Reason and The Enlightenment there was primacy in deductive reasoning, but the Romantic Age brought intuition; imagination; feeling, and the philosophy of aesthetics, which were widely portrayed in literature, poetry, opera, theater, and in art. (14, 18-29)

William Cullen Bryant wrote in 1824 of consumption: (30)

"...Death should come
Gently, to one of gentle mould like thee,
As light winds wandering through groves of bloom
Detach the delicate blossom from the tree..."

Dr. Thomas Young said medical opinion concurred that "...genius, passion, and delicate sensibility develop in victims of pulmonary consumption." (14) Thoreau wrote in his Journal (1852) after seeing fall's first spotted Maple leaves: "Decay and disease are often beautiful, like...the hectic glow of consumption." Thoreau acquired tuberculosis at 17 and died of it at 44. (17, 27;p118-39, 31, 32) In Franz Liszt's 1851 monograph on Chopin: he compared the tuberculous Chopin "...in his delicate fragility with the "wonderfully colored flowers swaying on ineffably delicate stems." (32) This metaphor for the consumptive was more appealing than the marauding epidemics of plague, typhus,

or cholera with the specter of mass victims. Tuberculosis was a “civilized” illness, its victims viewed with respect and even esteem for their creative genius.

The Judeo-Christian belief in the “good death” fit the often slow, “pining away” of the tuberculous. (15) Sir Thomas Browne’s “Letter to a Friend” describes a “peaceful death...his soft departure, which was scarce an expiration; and his end not unlike his beginning...his departure so like unto sleep...” (33-35) The sentiment expressed by Thomas Fuller became a prevalent view: “What is thy disease—a consumption? Indeed a certain messenger of death; but know, that of all the bailiffs sent to arrest us to the debt of nature, none useth his prisoners with more civility and courtesie.” (14)

In Susan Sontag’s classic book, *Illness as a Metaphor* (36), she was critical of these Romantic Age portrayals of tuberculosis in aesthetic terms but other diseases in unaesthetic language. Diseases such as consumption were often mild and were seen as a badge of the social and cultural distinction of the afflicted. Sontag and others have been highly critical of the syrupy sentimentality of these romantic ideas; but one author, reflecting on the poignant story of the creative and consumptive Ellen Emerson, first wife of Ralph Waldo Emerson, who died at 19, defends the “consolatory literature” of the Romantic Era as a vital coping mechanism used by consumptives and their families facing tragic death. (37-39)

Language of Creative Consumption: “Spes Phthisica”

The idea that consumption was the “kindling force of genius,” the creative spark of Keats or Ellen Emerson, became embodied in the term “spes phthisica,” a curious hybrid: with Latin “spes” meaning hope, followed by: “Phthisica”, the Latinized word from the Greek, meaning “consumption.” (1-6) Spes Phthisica means the hopeful consumptive. (7-9) One Latin scholar, with a wit, told me the hybrid term constituted, “linguistic barbarism.” (10)

Clinicians had long observed the exaggerated sense of well-being, euphoria, and optimism for recovery in consumptives. (1, 8:150, 11-38) Sir Thomas Brown wrote of his friend as the “hopeful consumptive,” (39-41) and Sir William Osler referred to spes phthisica as the “peculiarly hopeful temperament...a curious characteristic of the disease.” (42)

Clinicians proposed theories to explain spes phthisica. Hopeful, creative genius was thought to arise from toxic mania, “sensitization of protoplasm,” and “psychical quickening” from bacterial toxins. (37, 43-49) A professor of English from Mount Holyoke College said that: “In the future some Columbus in literature will come along and tell us that every problem in literary genius goes back not to the man alone but to the microbe and the man.” (44)

Some suggested that “tuberculous byproducts” caused spes phthisica helping victims to “bear their burdens ...cheerfully...and enable a quickening of their genius.... (11, 21, 37, 50, 51) One author concluded that to create “an almost sure recipe for producing the highest type of the creative mind, he would postulate an initial spark of genius plus

tuberculosis” and that “If ... (tuberculosis) tends to unfit its victims for material success, so also does it tend to quicken and to inspire the intellect—a divine compensation.” Drawing on Shakespeare, the author reflected on the paradox of tuberculosis: “Sweet are the uses of adversity, which, like the toad, ugly and venomous, Wears yet a precious jewel in his head.” (52)

This author buttressed his case by presenting biographies of fifty “literary geniuses” in whom tuberculosis “appears to have been a more or less direct factor in exciting, if not inaugurating, creative ideas of the highest order”: Milton; Shelley; Elizabeth Barrett Browning; Thoreau; Balzac; Edward Gibbon; Voltaire; the Bronte sisters; Nathaniel Hawthorne; Dostoyevski; Robert Louis Stevenson and Keats. (24)

Stories

There are an endless number of stories of persons of genius, whose works have been attributed to tuberculosis and who exhibited “*spes phthisica*,” but I want to share just three with you.

John Keats:

John Keats was born in a livery stable on October 29, 1795, suffered dire poverty, ill-health, and hopeless love of Fanny Brawne, but throughout his brief life, the fire of genius smoldered, then burned brightly before disease extinguished it, February 23, 1821. (1-11)

In their classic book: “The Great White Plague”, Rene and Jean Dubos cited John Keats as an embodiment of the tragedy of tuberculosis: “the perverted attitudes of the romantic era toward the disease” and the ignorance of medicine in the early 1800s. (2, 11, 12-14). The romantic notion that Keats’s consumption was caused by brutal criticism of his poem, *Endymion*, was fostered by his friends Percy Bysshe Shelley and Lord Byron, who believed the harsh effect on Keats’s susceptible mind caused his consumption.

Trained as a physician at Guys Hospital in London (7:p72, 15), Keats was well aware of the natural course of pulmonary tuberculosis. (7:p75) When only 14 yrs, he nursed his dying tuberculous mother, Frances, and at 23, Keats cared for his brother, Tom, who also died of consumption. When Keats showed signs of the disease, he sought medical help in Rome from the famous Dr. John Clark (7:p79-82, 13, 15); but within months, he too succumbed to consumption; he was 25. Buried in the Protestant Cemetery in Rome, and by his request, Keats’s name did not appear on the tomb stone, just the words: “Here lies one whose name was writ in water.” (7:p82) In just 18 months, from 1818 to 1819, Keats, wrote the bulk of his life’s work, considered among the best in the English language. Percy Bysshe Shelley’s famous elegy, “*Adonais*”, was inspired by the death of his friend, Keats. (6, 9, 12, 13, 16, 17)

In 1895, Sir William Osler read a moving tribute to Keats at the Johns Hopkins Historical Club, on the 100th anniversary of Keats’s birth. Osler commented that Keats “...unlike

so many consumptives had none of the spes phthisica, which carries them hopefully to the very gates of the grave. He knew how desperate was his state.” (18)

Robert Louis Stevenson:

Robert Louis Stevenson was often cited as an example of how creativity and spes phthisica may increase during active tuberculosis. (1-3) Stevenson wrote “A Child’s Garden of Verses,” “Dr. Jekyll and Mr. Hyde,” and “Kidnapped” between 1885 and 1886, while symptomatic from his disease. Unlike Keats, Stevenson spoke openly of his buoyed spirits during the active phases of tuberculosis, describing: “stimulation of the brain”, “puzzling exuberance,” and “delicate exhilaration.” One author suggested “toxins” from his tuberculous infection “may serve as a whip to drive the mind...” (3-5) But others noted that Stevenson was also creative when his tuberculosis was quiescent. (6-8)

Stevenson traveled the world searching for a cure, from cold Davos to warm Marseille, to Dr. Trudeau’s Saranac Lake Sanatorium, to San Francisco, and Sydney. His Odyssey ended in 1890 on the remote South Pacific island, Upolu, (oo-po’loo) in Western Samoa; he lived there on a 400 acre estate with his wife until his death at 44, on December 3, 1894. On top of Mount Vaea, 1,500 ft. above the Pacific Ocean, Stevenson’s white plaster sarcophagus rests and on its side his “Requiem” is engraved in shiny brass (2):

“Under the wide and starry sky,
Dig the grave and let me lie.
Glad did I live and gladly die,
And I laid me down with a will.

This be the verse you grave for me:
Here he lies where he longed to be;
Home is the sailor, home from the sea,
And the hunter home from the hill.

Elizabeth (Linley) Sheridan:

Elizabeth (Linley) Sheridan, the subject of my last story, is someone you probably don’t know, but her brief creative life is no less interesting than Keats’s and Stevenson’s. (1, 2, 3) In tuberculous men the romantic ideal was creative genius, but in women it was beauty-physical and spiritual. (4) Mrs. Sheridan epitomized this ideal that one author likened to: “withering flowers gliding gently down to the grave, diffusing around her as she fades an atmosphere of increasing sweetness.” (1, 5, 6)

There was a market for such metaphors and consumption became a commodity in the 18th century. (7, 8) Publishers, physicians, and sanitoriums profited handsomely from the tuberculous; someone with humor called this “the consumption of consumption,” a practice denounced by Edgar Allen Poe.” (9-11) Washington Irving’s popular Sketch Book portrayed beautiful women dying romantic deaths: “I have seen many instances of

women running to waste and self-neglect, and disappearing gradually from the earth, almost as if they had been exhaled to heaven; and have repeatedly fancied that I could trace their death through the various declensions of consumption, cold, debility, languor, melancholy, until I reached the first symptom of disappointed love." (11, 12-15) Such stories sold well.

Consumptive art also flourished and artists featured tuberculous women in the likeness of Henry Fielding's, Moll Flanders, who succumbed to love-melancholy. (11, 16) The dying tubercular maiden, an angel too pure to remain in the material world, became the subject of the palette, brush, pen, and musical score, and the ideas of religious redemption and atonement for sin were part of these palettes. The standard of feminine beauty, "the fragile silhouette, with long limbs, long fingers, long throat, the tired head leaning on a pillow, with prominent eyes and twisted sensual mouth became the unhealthy, perverted symbol of Romanticism." (15, 17, 18) Seeking this image, young women without consumption ate sand, drank vinegar and lemon-juice to destroy their appetites. (16, 18) Today, young women emulate supermodels such as Kate Moss with her heroin chic image, popularized in Calvin Klein ads. (11, 16, 19-21)

Elizabeth Linley was born in 1754 in Bath, one of 12 children, 7 of whom went on to have musical or theatrical careers, as had their father, Thomas Linley, a prominent musician who managed the famous Drury Lane Theatre in London. (1) The distinguished composer, Charles Burney, said the Linley children's music reminded him of a "Nest of Nightingales." The more talented of these exceptional "Nightingales" was affectionately called, Eliza, who by the time she was only 18, was recognized as "one of the finest sopranos of the century." (1, 23)

A beautiful and remarkably talented young woman, Eliza appeared on canvases of the greatest artists of 18th century England. Dr. Samuel Johnson, nephew to the great portrait artist, Joshua Reynolds, observed one of Reynolds's sittings of Elizabeth and commented: "I cannot suppose there was ever a greater beauty in all the world, nor even Helen or Cleopatra could have exceeded her." (22) She was considered by some to suffer consumption as atonement for her youthful indiscretions, but she was thought by others a saint with "ethereal radiance."

Elizabeth Linley attracted admirers and suitors; King George III attended her concerts and the observant Horace Walpole said the King had ogled Miss Linley "as much as he dares to do in so holy a place as an oratorio and at so devout a service as "Alexander's feast". (24, 25) The Prince of Wales, the future King George IV, was also fond of Eliza, whose suitors were serious, indeed. Richard Brinsley Sheridan, who would become one of the greatest English playwrights, orators, and members of parliament, fought two duels for her hand. (1, 26, 27) When Eliza's father failed at arranging for her marriage to a wealthy 60 year old aristocrat, Richard Sheridan and Elizabeth, both under age, eloped to France, a cause célèbre of the day. Shortly after their marriage, and to the consternation of the cult-like public admirers of Elizabeth's remarkable musical talent, her husband refused to allow his new wife to perform again in public; she was only 19. (27)

Eliza raised a family but was instrumental in her husband's success in theater and parliament, working quietly in the shadow of his brilliant, though impetuous and philandering ways. The Sheridan household guests included a "who's who" of English literary and political luminaries: actor David Garrick, statesman, Edmond Burke, and lexicographer, Samuel Johnson, with whom it is said Eliza discussed literary matters as an equal. (28) Great artists of the day were close friends and frequent guests; Thomas Gainsborough and Joshua Reynolds captured Eliza on numerous canvases; it was said Reynolds was more than a little in love with her; he used Elizabeth's image as a model for the virgin in his painting: "Nativity." Reynolds and Johnson founded the famous Literary Club, whose members included Eliza's husband, Richard Sheridan. James E. Doyle, Uncle of Sir Arthur Conan Doyle, painted a gathering of the Club, a print of which, from an engraving of D. George Thompson, hangs on the wall behind me. (16, 29-43)

Tragedy came often to Elizabeth. Her brother, Thomas, a violinist, died at 21 in a boating accident; his friend Mozart said of him: "he was a true genius and had he lived he would have been one of the greatest ornaments of the musical world." (1). Eliza nursed her tuberculous sister, Mary, and when Mary died, Eliza's had lost her youthful companion who was at her side and immortalized in Thomas Gainsborough's great portrait: "The Linley Sisters," (1772). Gainsborough and Reynolds captured young Eliza's consumptive visage, a pale, wistful and melancholic countenance. (35, 36)

Eliza expected an early grave; she was consumptive most of her life, suffering numerous miscarriages and a still birth. (37) Only two and one half months before her death, Elizabeth gave birth to a baby girl, Mary, probably by her lover, Lord Edward Fitzgerald; the child, whom Eliza called her, "little badge of affection," died four months later, possibly of seizures from tuberculous meningitis. (38, 39) Two months before her death, a frail Eliza gave a final concert for her friends and family; her husband wrote of the poignant event: "Last night she desired to be placed at the Piano-Forte. Looking like a shadow of her own picture she played some notes with the tears dropping down her thin arms. Her mind is become heavenly, but her mortal form is fading from my sight-and I look in vain into my own mind for assent to her apparent conviction that all will not perish." (49, 50) Richard Sheridan was struck by how closely this scene of Eliza resembled Joshua Reynolds's portrait of her entitled: "Mrs. Sheridan as St. Cecilia", painted two years previously and considered by Reynolds's to be his greatest work. (25, 52) It hung in Reynolds's studio for 16 years and he sold it reluctantly to Eliza's husband. Today, it hangs in the Baron's Room at Waddeson Manor, Aylesbury, Buckinghamshire, the Manor built by Baron Ferdinand Rothschild to display his art treasures.

When Eliza became desperately ill, she went to the spa at Hotwells, in Bristol, where famous consumptives went for the cure; (40-43) despite having the best physicians of the day, fresh air and water, numerous bleedings, blisters, and leeches, Eliza died June 28, 1792; the "Fair Maid of Bath," as she was affectionately known was 38. (44, 45, 46)

The Times of London's obituary commented: "The best and truest panegyric of the late Mrs. Sheridan is summed up in the two following elegant lines—(47)

“Her form each beauty of her mind express’d;
“Her mind was Virtue by the Graces dress’d.”

The New London Magazine likened Mrs. Sheridan to a “rare flower prematurely mown while it blossomed.” (48) and the English poet Richard Graves wrote “On the Death of Mrs. Sheridan” (49)

“Yet whilst, alas! Each mortal mourns,
Rejoice! Ye heavenly Choir!
To your embraces she returns;
And, with her social lyre,
Eliza now resumes her seat,
And makes your harmony compleat.”

In a stirring tribute, (48), one author, reflecting on the wedding of Richard Sheridan and Elizabeth said: “It formed an epoch dear to the interests of Parnassus (the home of the muses)—it was an eternal covenant between “Genius and Beauty.” The author said of Elizabeth’s health in recent years: “an interesting pensiveness, an undescribable languor, in the eyes of Mrs. Sheridan, which seemed to look with majestic sorrow upon the frivolities of an elbowing multitude—her vision seemed clouded by the pressure of an overcharged understanding—they were like two gems dimmed by the breath of melancholy!”

Thomas Moore said of Elizabeth: “There is seldom, perhaps, existed a finer combination of all those qualities that attract both the eye and heart.” (53) Moore added that a late Bishop used to say that Elizabeth (she) “seemed to him the connecting link between woman and angel.” Mrs. Sheridan’s biographer commented: “After her death the moralists made her a saint once more but simultaneously utilised her story as an awful warning to young women.” (1) The tragic, redemptive quality of Elizabeth’s fate in 1792 antedated by more than 100 years, the fate of Sister Therese Martin, a Carmelite nun, who died of tuberculosis at 24 and whose autobiography “Story of a Soul” created a cult following among Catholics. Known as “Little Flower,” she was proclaimed co-patron saint of France with Joan of Arc, in 1925. (54)

Elizabeth’s husband, Richard Brinsley Sheridan lived to the 19th century, dying penniless in 1816. (26) In losing Elizabeth, he had “lost his better angel.” (26) He was buried in Poets’ Corner at Westminster Abbey, the rightful successor to David Garrick as the leading figure of the English theater. (55)

The stories of Keats, Stevenson, and Elizabeth Sheridan reflect 18th and 19th century perceptions of consumption, genius and beauty but these Romantic Era ideas were about to change.

Robert Koch: the end and the beginning

On the 24th of March, 1882, Dr. Robert Koch delivered a lecture: “Uber Tuberkulose” (concerning tuberculosis) before the Berlin Physiological Society. (1-3) Koch cited statistics that “...one-seventh of all human beings die of tuberculosis,” then methodically showed how he had discovered a bacterium that caused the “most important disease of mankind of all time.” (1). There was stunned silence when he finished- no questions, no applause. Nobel Laureate Paul Erlich said: This evening remains imprinted on my memory as the most awe-inspiring scientific event I have ever attended.” Koch’s paper was published in Germany on April 10 and in the New York Times, May 3, 1882.

Koch received a Nobel Prize; his work accelerated the de-mystification of consumption. (4-6) The word “tuberculosis” replaced ancient terms: consumption and phthisis. Science displaced the romantic ideas about tuberculosis. (7-14) The old language and metaphors faded; by the early 1900s, “spes phthisica” was rarely mentioned. Consumption, the muse of literature and the arts for a century, was increasingly viewed as a blot on a society that would allow the conditions for TB to flourish. (15) TB went into the “closet”; patients and families became secretive about the disease. The Romantic Age was over. (16)

What does modern science tell us about creative genius—and spes phthisica?

Let’s now “fast-forward” to 2008 and reflect on the question of what modern science tells us about creative genius and the Romantic Age notions about consumption and spes phthisica.

The popular ancient belief that consumption was hereditary was largely dismissed following Koch’s discovery. (1, 2) But, geneticists have discovered susceptibility to TB is indeed influenced by one’s genes, what Pasteur called “the seed and the soil.” (3-6) Similarly, scientists have found suggestive evidence that stress may promote tuberculous infection, at least partial validation of this ancient idea. (7, 8)

Are genius and madness linked? Today scientists know that creativity and mental illness share an aberration in the way information is processed in the brain. (9-12) One author concluded that: the “difference between the schizophrenic act and the act of creation is the difference between Don Quixote-the madman- and the author Cervantes. (11) We know that bipolar disease, Attention Deficit Disease (ADD); and autism are genetically linked to creativity; (13-21) Brain trauma, stroke or dementia may foster creativity. (12, 22-24) Perhaps Aristotle was correct. (25)

Is tuberculosis genetically linked with creativity and perhaps even the euphoria of spes phthisica? Scientists have found that Nitric Oxide is produced in tuberculosis infections, and potentiates dopaminergic (“feel good”) activities in the brain. Is NO the “toxin” proposed by early clinicians as a cause of mental changes in tuberculosis? (26-34) Research is incomplete, but data suggest ancient ideas about consumption and the human condition, including creative genius and spes phthisica may indeed have a scientific basis.

Tuberculosis: 21st Century Legacies

Finally, the history of tuberculosis, including the creative persons who suffered the disease and the scientists such as Robert Koch who discovered its cause, reflects the remarkable impact one ancient disease has made in shaping societies. What are the legacies of this history for our 21st century?

When Robert Koch discovered the cause of tuberculosis in 1882, the disease had killed about one billion persons since 1700, John Keats, Stevenson, and Elizabeth Sheridan among the victims. By 1900, it was anticipated medicine would soon prevent, cure and rid the world of consumption. (1) But when the Dubos's' book, *Great White Plague*, was published 70 years after Koch's discovery, the "cure" for tuberculosis was elusive. The authors warned against the illusion of "conquering" tuberculosis by treating the disease, rather than addressing root causes of tuberculosis: poverty; social disruptions; and lack of quality care. (2)

Today, 125 years since Koch's discovery, the TB pandemic rages on. More people are dying of TB today than at any time in history. (3) One-third of the world's population is infected, and annually there are 8.8 million new cases and 1.6 million deaths. (4-9) In 2006, there were 13,767 new cases of TB in the U.S., a record low rate; but the rate of decline has slowed since 2000 (10) and TB rates among the foreign born are ten times that of U.S. born persons. These are worrying trends. In Indiana in 1900, when our former Club member John N. Hurty ran the State Board of Health and Mrs. Lew Wallace was advocating for a state TB sanitarium, 5,000 persons died annually in Indiana of TB. (11-14) Today, TB deaths in Indiana are rare, and only about 130 new cases of TB occur annually; but an epidemic recently in Fort Wayne prompts us to resist complacency.

While the U.S. and developed nations control TB, developing nations are struggling. (3, 6, 7) New strains of TB have emerged and the language of TB is again changing to reflect the science: "multi-drug resistant TB" and "extensively drug resistant TB" kill at alarming rates, particularly in countries where treatment is lacking. (4, 6, 7, 15) A new strategy, the *Global Plan to Stop TB*, will treat 50,000,000 persons over the next decade, at a cost of \$56 billion, with a goal to eliminate TB as a public health threat by 2050. (4, 9, 16)

This is a tragic legacy for our 21st century. Few would have predicted this outcome when Koch stunned his audience in 1882 when a cure was thought imminent. In Eliza's time tuberculosis killed the rich and poor, Kings, Queens, and serfs. Since tuberculosis today exists predominately in severely impoverished nations, among the desperately poor and malnourished, often with AIDS, it seems unlikely we will see a modern day Keats, Stevenson or Elizabeth Sheridan, arise from such circumstances. TB has become a disease of the margins of society- the least among us.

Conclusion

Perhaps Homer's *Odyssey* is a metaphor for the evolution of civilization and Odysseus, "the man who was never at loss," the archetype of modern day problem-solvers, whether

individuals or governments. (1-8) Today we might reasonably ask: “Will the developed nations of the world respond creatively to the tuberculosis pandemic? Will we negotiate the “political narrows” guarded by Scylla and Charybdis who challenged Odysseus’s journey? Or will we continue to reject the inconvenient truth that we have not done enough to eliminate an ancient disease that is both preventable and curable, and pass the responsibility to future generations?”

End: An Inconvenient Truth: Legacy of a Creative Bacillus.

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Inconvenient Truth: Legacy of a Creative Bacillus
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January 7, 2008

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