

*Genius and Insanity.* By ARTHUR MACDONALD, Ph.D.,  
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In the study of genius and insanity we shall endeavour to follow the empirical rather than the polemical method. This will require the statement of many facts, gathered from different sources, but principally from the instructive works, "L'Homme de Génie," by Cesare Lombroso, and "Psychologie Morbide," by Moreau (de Tours).

The natural difficulty of obtaining facts of an abnormal or pathological nature, and in other respects unfavourable, is obvious. But authors have not only concealed such data, but have not considered them of importance. It is due to the medical men whose life brings them closest to abnormal reality, that such facts have been gathered.

If it be said that the abnormal or exceptional must be taken with some caution, because it is natural for the mind to exaggerate striking characteristics, it must be remembered that such facts, when unfavourable to reputation, are concealed. In the study of any abnormal individual, as the insane or criminal, one finds much more concealed than is known.

#### *Insanity.*

It is generally accepted by alienists that a large part of mental affections are the result of degeneracy: that is to say, it is the action of heredity upon the offspring of drunken, syphilitic, insane, and phthisical parents. Sometimes a serious wound on the head has the same effect.

The most frequent characteristics of this degeneracy are: Apathy, loss of moral sense, impulsiveness, propensity to doubt, psychological disproportion, caused by an excessive development of certain faculties or by absence of others, verbosity or exaggerated acuteness, extreme vanity or eccentricity, excessive preoccupation with one's own personality, mystical interpretation of the most simple facts, abuse of symbols or special terms, which sometimes suppress every other form of expression. Lombroso finds also these characteristics: Irregularity in teeth, excessive asymmetry of face and head, left-handedness, stuttering, rachitism, phthisis, excessive fecundity, neutralized later by abortion or complete sterility, preceded by anomalies which always grow more in the children; face and head

voluminous or very small, smallness and disproportion of body, and sexual precocity.

Some definitions of insanity are: Insanity is a disease of the person, resting upon and caused by a brain affection (Schüle).\* Here mental compulsion constitutes the essence of mental derangement, which cannot be reasoned away by logic or obstructed by the will. This compulsion is grounded in the fundamental organic brain disease, which gives it control of the mental faculties; we then cease to be ourselves.

Every mental disease is a reaction of a nervous system impaired in its nutrition, and begins and ends with melancholia (Arndt).†

Insanity can be defined, from an anatomical point of view, as a diffuse disease of the brain, including the so-called nutritive changes, especially the inflammatory and degenerative. From a clinical point of view, insanity is a special kind of cerebral disease distinguished by functional disturbances of the mind; mental diseases are a special class of cerebral diseases (Krafft-Ebing).‡ Krafft-Ebing suggestively adds that brain and nervous disease are of the same species, and that the passage from one (chorea, hysteria, epilepsy) to the other is frequent in individuals of the same family.

#### *Genius.*

Holding in mind the general idea and characteristics of insanity, we may take up the consideration of genius. As an introduction, we can do no better than to listen to the testimony of genius itself.

Aristotle, the father of philosophers, remarks that, under the influence of a congestion of the head, there are persons who become poets, prophets, and sibyls; thus, Mark of Syracuse, a poet to be recommended as long as the mania endured, could not compose as soon as health returned.

Plato says, in the "Phædus," that delirium is no evil, but a great benefaction, when it emanates from the divinity. Democritus goes still further, and makes insanity an essential condition of true poetry. Cicero speaks of the *furor poeticus*; Horace of the *amabilis insania*. Diderot writes, "Oh, how close the insane and men of genius touch; they are chained, or statues are raised to them." Lamartine speaks of this mental disease called genius; Pascal, of extreme mind as akin to extreme madness.

\* "Klinische Psychiatrie."

† "Psychiatrie."

‡ "Lehrbuch der Psychiatrie."

However paradoxical these sayings may seem, a serious investigation of facts will show that the resemblances between the highest mental activity and that of the diseased mind are numerous, and not a few specialists are inclined to the conclusion that genius is a neurotic phenomenon, a semi-morbid state of the brain, a veritable nervous erethism.

*Physical Characteristics.*

In general, men of genius are small in stature and pale in colour; this paleness is a sign of physical degeneracy, and is most frequent in those morally low. Many are rachitic, and some are known to have had cranial and cerebral lesions.

Vico, Clement VI., and Malbranche had their skulls fractured. Pericles, Romagnosi, Bichât, Kant,\* and Dante had cranial asymmetry. Dante had an abnormal development of the left parietal bone, and two osteomata in the frontal bone. Kant was ultra-brachycephalic (88·5); the disproportion between the upper part of the occipital bone and the lower part is noteworthy; the same is true as to the minimum smallness of the frontal arc as compared with the parietal.

The "soudures" of the sutures in the crania of Byron, Pascal, and Humboldt are to be noted. Descartes was sub-microcephalic. Milton, Linné, Cuvier, and Gibbon were hydrocephalic (?) Dante and Gambetta had small cranial capacity. Rousseau had hydrospical ventricles. Gauss† and Bichât had a more developed left hemisphere than right.

Bischoff and Rüdinger, in a study of eighteen brains of German *savants*, have found remarkable congenital anomalies of the cerebral convolutions.

Thus, according to Lombroso, "as genius is often expiated by the inferiority of certain psychical functions, so it is also accompanied by anomalies in that organ which is the source of its glory."

*General Facts.*

Æsop, Virgil, Demosthenes, Alcibiades, Erasmus, Cato of Utica, Charles V., stammered.

Sterility is not uncommon in great men, as Dryden, Addison, Pope, Swift, Johnson, and Goldsmith.

Many were celibates, as Kant, Newton, Beethoven, Gassendi, Galileo, Descartes, Locke, Spinoza, Bayle, Leibnitz, Hume,

\* Kupfer, "Der Schädel Kant's," 1881.

† Wagner, "Das Hirngewicht der Menschen," 1870.

Hobbes, Gibbon, Macaulay, Leonardo da Vinci, Michael Angelo, Handel, Mendelssohn, Voltaire, and others.

According to Lombroso "almost all men of genius differ as much from their fathers as from their mothers, which is a characteristic of degeneracy, and thus the physical resemblances between geniuses of different epochs and races are noticed, as in Julius Cæsar and Napoleon. They sometimes lose their national type, and it occurs in the most noble traits, as elevation of forehead, remarkable development of nose and head, and vivacity of the eyes." A parallel phenomenon exists in cretins, criminals, and the insane. Humboldt, Virchow, Bismarck, and Helmholtz do not have the German physiognomy. Byron did not have either the physiognomy or the character of the English.

Precocity is a characteristic of genius and insanity. Dante composed verses at nine; Tasso at 10; Comte and Pascal were great thinkers at 13; Niebuhr at seven; Jonathan Edwards at 12; Bossuet at 12; Voltaire at 13; Goethe before 10; Victor Hugo at 15; Pope at 12; Fénélon at 15; Mirabeau at 10; Handel and Beethoven composed at 13; Mozart gave concerts at 6; Raphael was renowned at 14. Lombroso considers this precocity unhealthy and atavistic—it is observed among all savages. The proverb that a man who has genius at five is insane at 15 is often verified in our asylums. The sons of the insane are often precocious children. But some great men were regarded as poor pupils, as for instance Pestalozzi, Wellington, Balzac, Humboldt, Boccacio, Linné, Newton, and Walter Scott.

The unconsciousness and spontaneity of genius resemble epileptic attacks (Lombroso). Hagen makes irresistible impulse one of the characteristics of genius. Haydn attributes his "Creation" to a mysterious grace descending from on high. Some men of genius, who have observed themselves, describe their inspiration as a gentle fever, during which their thought becomes rapid and involuntary. Such is the thought of Dante, when he says:

". . . l'mi son un che, quando  
Amore spira, noto ed in quel modo  
Che detta dentro vo significando."\*

Napoleon said that the chance of battles is the result of a moment of hidden thought. Mozart avowed that his musical inventions came involuntarily, like dreams. Montesquieu outlined "L'esprit des lois" in a carriage. Socrates says

\* "I am so made that when love inspires me, I attend: and according as it speaks in me I express myself."

that poets create, not by reflection, but by natural instinct. Voltaire said, in writing to Diderot, that all manifestations of genius are effects of instinct, and that all the philosophers of the world together could not have given "Les animaux malades de la peste," which La Fontaine composed without knowing even what he did. According to Goethe, a certain cerebral irritation is necessary to poets. Klopstock declared that in dreams he had found many inspirations for his poem.

Thus, as the great thoughts of great men and the deep convictions of prophets and saints develop spontaneously, so it is with the ideas of the insane.

Boileau and Chateaubriand could not hear a person praised, even their shoemaker, without feeling a certain opposition. Schopenhauer became furious and refused to pay a bill, in which his name was written with a double "p." Such manifestations of unhealthy vanity are very similar to the ambitions of monomaniacs.

Geniuses are inclined to misinterpret the acts of others, consider themselves persecuted, and find everywhere causes of suffering and melancholy. These are well-known tendencies of the insane.

Originality is very common, both to men of genius and the insane, but in the latter case it is usually without purpose.

*Biographical Facts Bearing upon Insanity and Allied  
Nervous Diseases.*

Socrates, though not positively insane, had hallucinations. He would dance and jump in the street with no apparent reason. The demon of Socrates which inspired him was without doubt a hallucination.

Lucretius was attacked with intermittent mania. Bayle says this mania left him lucid intervals, during which he composed six books: "De Rerum Naturá." He was forty-four years of age when he committed suicide.

The mother of Charles V. was insane and deformed; his grandfather, on his mother's side, died at 62 in a state of deep melancholia. Charles himself stammered, and had epileptic attacks during his youth.\* His retreat to the monastery is known, where he had the singular phantasy of celebrating his own funeral rites.

Cromwell, when young, had a hallucination in his room: suddenly the curtains opened and a woman of gigantic stature appeared to him, announcing his future greatness.† Later in

\* Michelet.

† Fleury, "Histoire d'Angleterre."

life he had violent attacks of melancholic humour. His moral life was influenced by a sickly and neuropathical constitution which he had at birth. His brothers died in their infancy. One of his daughters died of chagrin.

Richelieu, the cardinal, had an elder brother who was a singular man, committing suicide because of a rebuke from his parents. The sister of Richelieu was insane; Richelieu himself had attacks of insanity; he would picture himself as a horse, but afterwards would have no remembrance of it.

Malebranche heard distinctly in him the voice of God. Descartes, after a long retirement, was followed by an invisible person, who urged him to pursue his investigations after the truth.

Goethe was sure one day of having perceived the image of himself coming to meet him. His mother died of an epileptic attack.

The pathetic insanity of Rousseau and the ecstatic hallucinations of Swedenborg are well known.

Hegel had the mania of greatness. He said: "I can say with Christ not only that I teach the truth, but I am myself the truth." Hegel's sister was insane; she drowned herself.\*

Comte was attacked in 1826 with mental alienation, remaining in an insane asylum a year. He also had the mania of greatness in thinking that he was the High Priest of humanity.

Newton was subject to vertigo. In the latter years of his life he fell into a melancholia, which deprived him of all thought.† He was also for some time in a species of mental stupor. In a letter to Pepys he says that he passed some months without having his "former consistency of mind."‡

Swift died insane.

Chateaubriand attempted suicide. He says himself that his chief fault is weariness, disgust of everything, and perpetual doubt.§ His father died of apoplexy. He was subject a long time to convulsive movements of the arm. His brother was an eccentric man and partially insane, given to all vices, and dying of paralysis.

George Sand says that when about 17 years of age she became deeply melancholic, that later she was tempted to suicide; that this temptation was so vivid, sudden, and strange

\* "Revue des Deux Mondes," Avril, 1850.

† Zimmerman, "De l'Experience."

‡ Newton, par P. de Rémusat, "Revue des Deux Mondes," 15 Décembre, 1856.

§ "Mémoires d'outre-tombe;" see "La Presse," 29 Octobre, 1843.

that she considered it a species of insanity. "This took the form of a fixed idea, and caused at times monomania." This idea was awakened usually by the sight of water, or a precipice, loaded firearms, or a vial containing a poisonous substance. The father of George Sand was subject to similar spells.\*

Walter Scott, during his infancy, had precarious health, and before the age of two was paralyzed in his right limb. He had a stroke of apoplexy. One day he had a vision; he had just learned of the death of Byron. On coming into the dining-room he saw before him the image of his dead friend; on advancing towards it, he recognized that the vision was due to drapery extended over the screen.†

Beethoven was naturally bizarre and very irritable. He became deaf, and fell into a profound melancholia, in which he died. His death was premature.

Mohammed was epileptic. He lost his father in infancy, and his mother in childhood. He was a travelling merchant, and married a wealthy widow 15 years older than himself. He used to live alone in a cave; he had interviews with the angel Gabriel. His revelations began with visions in sleep; he persistently claimed to be a messenger from God, receiving his first revelation at the age of 42.

Raphael experienced temptations to suicide. He himself says:—"I tied the fisherman's cords, which I found in the boat, eight times around her body and mine, tightly as in a winding sheet. I raised her in my arms, which I had kept free, in order to precipitate her with me into the waves . . . at the moment I was to leap to be swallowed for ever with her. I felt her pallid head turn upon my shoulder like a dead weight, and her body sink down upon my knees."‡

Tacitus had a son who was an idiot.

Quintilian had two sons die at an early age, both of whom were very precocious.

Pascal,§ from birth till death, had general nervous suffering. At one year of age he fell into a languor, in which he could not see water without manifesting great outbursts of passion; and, still more strange, he could not bear to see his father and mother near one another. In 1627 he had paralysis from his waist down, so that he could not walk without crutches. His feet were as cold as marble. This condition continued about

\* George Sand, "Histoire de ma vie."

† "Edinburgh Medical and Surgical Journal," Jan., 1843.

‡ Raphael, "Pages de la vingtième année."

§ "L'Amulette de Pascal," 1846.

three months. During his last hours he was taken with terrible convulsions, continuing for a day, when he died. The autopsy showed peculiarities: His cranium appeared to have no suture, unless perhaps the lamboid or sagittal. The substance of a large quantity of the brain was very much condensed. Opposite the ventricles there were two impressions, as of a finger in wax. These cavities were full of clotted and decayed blood, and there was, it is said, a gangrenous condition of the dura mater.

Pope was rickety. He had hallucinations; he seemed one day to see an arm come out of the wall, and he inquired of his physician what this could be.

Mozart's musical talent was manifested at three years of age; between four and six he composed with expertness.\* He was subject to fainting fits before and during the composition of his famous "Requiem." He died at thirty-six of cerebral hydropsy. He had a presentiment of his approaching end; he always thought that the unknown person who presented himself to him was not an ordinary being, but surely had relations with another world, and that he was sent to him to announce his end.† Mozart was convinced that the Italians wished to poison him.

Cuvier died of an affection of the nervous centres. The autopsy showed a voluminous brain. He lost all his children by a fever called "cerebral."

Cæsar was epileptic, of feeble constitution, with pallid skin, and subject to headaches.

Molière suffered from convulsions. The least delay or disarrangement put him into a convulsion, and prevented him from waking for a fortnight. He had numerous attacks of melancholia.

Napoleon had a bent back, an involuntary movement of the right shoulder, and another movement of the mouth from left to right. When in anger, according to his own expression, he looked like a hurricane. He felt a vibration in the calf of his left leg.‡ Having a very delicate head, he did not like new hats. He feared apoplexy. General Rapp, desiring to speak with him, entered his room, but found him so preoccupied that he did not notice his arrival. The General, seeing him immobile, thought he might be sick, so made a noise on purpose. Napoleon immediately turned round, and,

\* G. de Chadenil, "Le Siècle," 12 février, 1858.

† See "Vies de Haydn, de Mozart et de Métastare," Paris, 1817.

‡ See "Mémoires de Saint-Hilaire," t. iii., p. 341.



seizing Rapp by the arm, said to him: "See up there!" The General did not respond. "What," said Napoleon, "do you not discover it? It is before you, brilliant, becoming animated by degrees; it cried out that it would never abandon me. I see it on all great occasions; it orders me to advance, and it is to me a constant sign of fortune."

Some great men have believed in the existence of a genius-protector, and there is little doubt but that many of their hallucinations have aided in the execution of their plans.

Voltaire, like Cicero, Demosthenes, Newton, and Walter Scott, was born under the saddest and most alarming conditions of health. His feebleness was such that he could not be taken to church to be christened. During his first years he manifested an extraordinary mind. In his old age he was like a bent shadow.\* He had an attack of apoplexy at the age of 83. His autopsy showed a slight thickness of the bony walls of the cranium. In spite of his advanced age there was an enormous development of the encephalon.†

Linné, a precocious genius, had a cranium hydrocephalic in form. He suffered from a stroke of paralysis. At the end of one attack he had forgotten even his name. He died in a state of senile dementia.

Madame de Stael died in a state of delirium, which lasted several days, and according to some authors several months. Moreau of Tours says that she had a nervous habit of rolling continually between her fingers small strips of paper, an ample provision of which was kept on her mantelpiece. She used opium immoderately. She had a singular idea during her whole life—that she should be wrapped in fur before burial, as if she was afraid of being cold in the tomb.

Henry Heine died of a chronic disease of the spinal column.

Michel Angelo,‡ while painting "The Last Judgment," fell from his scaffold, and received a painful injury in the leg. He shut himself up, and would not see anyone. Bacio Rontini, a celebrated physician, came by accident to see him. He found all the doors closed. No one responding, he went into the cellar, and came upstairs. He found Michel Angelo in his room, "resolved to let himself die." His friend, the physician, would not leave him. He brought him through the peculiar condition into which he had fallen.

\* Ségur, "Mem.," t. i.

† R. Parise, "Philosophie et Hygiène," p. 296, v. i.

‡ "Histoire de la peinture en Italie," t. ii., p. 377. (Réveillé-Parise).