The school of suspicion: three masters and a visiting professor united by migraine

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ABSTRACT

Introduction. In 1965, the French philosopher and anthropologist Paul Ricoeur published *De l'interprétation: essai sur Freud*, in which he reflected on the interpretation of texts and coined an opportune term, the "school of suspicion," which was dominated by three masters (Marx, Nietzsche, and Freud) whose work had an immense influence on contemporary culture. These masters were influenced by Darwin, who turned his suspicion towards the traditional view of humankind and its origins. The aim of this review is to perform a descriptive study including aspects of the lives and works of these authors and of the available literature on their headache disorders, based on their own descriptions and interpretations of their headaches.

Development. Data on the lives and works of the authors were taken from the references cited in the corresponding sections. The analysis and classification of headaches, and the discussion on the influence of these disorders on the life and work of each author, are based on a thorough search of the literature.

Conclusions. The three masters and the visiting professor were all blessed with considerable talent. Beyond the associated pain, migraine may have interfered both in their physical well-being and in their mental, emotional, and existential experiences, influencing their creative capacity. Thus, it is tempting to suggest that all the suffering involved in migraine serves the greater good of our species.

KEYWORDS

Headache, migraine, Karl Marx, Friedrich Nietzsche, Sigmund Freud, Charles Darwin

"And then, again, the more distinctly a man knows,
the more intelligent he is, the more pain he has;
the man who is gifted with genius suffers most of all."

The world as will and representation
Arthur Schopenhauer

Introduction

In 1965, the French philosopher and anthropologist Paul Ricoeur published one of the most influential works on the study of hermeneutics, *De l'interprétation: essai sur Freud*; the first Spanish-language translation was published five years later.[1] In the preface, Ricoeur writes that the book was born of three lectures delivered at the University of Yale in 1961, and that it "deals with Freud and not with psychoanalysis […]. Secondly, this book is one not of psychology but of philosophy. My interest centers on the new understanding of man that Freud introduces."

Ricoeur was acknowledged for having revolutionised hermeneutic phenomenology, which he defined as "the theory of the rules that preside over exegesis—that is, over the interpretation of a particular text, or of a group of signs that may be viewed as a text,"[1(p.8)] expanding the study of text interpretation. He considered the theory

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Received: 29 December 2025 / Accepted: 23 March 2026
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of interpretation to begin with doubt, which he places under the sign of suspicion: "Against interpretation as restoration of meaning we shall oppose interpretation according to what I collectively call the school of suspicion […]. Three masters, seemingly mutually exclusively, dominate the school of suspicion: Marx, Nietzsche, and Freud."[1(p.32)] Three figures who, decisively, have had a considerable impact on contemporary culture and its diverse manifestations.[2]

In the words of Prof Francesc Torralba: "There are thinkers who attain the status of an event, because after them, the task of thinking is radically changed. They open a breach in the history of ideas in such a way that it is impossible to think, after them, without taking into account their contributions."[2(p.3)]

Ricoeur defines them as "three great destroyers" because, from different suppositions, they considered consciousness as a whole to be a false consciousness. Each, in his own way, expresses the crisis of the philosophy of modernity.

Karl Marx detects the problem by discovering that ideology is in fact a false consciousness, masked by materialism and economic alienation. Nietzsche shows how consciousness implies resignation and hypocrisy, critiques the false moral consciousness that leads humankind to decadence, and seeks, beyond the "force" and "weakness" of the will to power, the key to lying and masks. Freud was suspicious of consciousness and reason, asserting that the majority of our lives is controlled by the unconscious, repressed instincts, and drives, and revealing that human motivation is irrational and that civilisation requires constant repression of our desires.

> Fundamentally, the Genealogy of morals in Nietzsche's sense, the theory of ideologies in the Marxist sense, and the theory of ideals and illusions in Freud's sense represent three convergent procedures of demystification.[1(p.34)]

Ricoeur's opportune expression has been widely used in the fields of philosophy and theology, and, on occasion, has been extended to other contemporary thinkers who have extensively practised suspicion.[2]

For our purposes, it is relevant to include a visiting professor in this "school": Charles Darwin, a milestone in contemporary thought, who, without intending to do so, turned his suspicion towards the traditional view of humans and the origin of the human species.[2] Freud said of Darwin (and is quoted by Ricoeur) in his 1917 essay *A difficulty of psychoanalysis* that he is responsible for one of the great "narcissistic injuries" in Western culture: the biological injury.

With different levels of evidence, these "suspicious" men (Figure 1) all had migraines, one of the diseases causing the greatest disability and suffering in humans.[3]

The aim of this review is to perform a descriptive study including aspects of the lives and works of these authors and of the available literature on their headache disorders, based on their own descriptions and interpretations of their headaches.

Development

Data on the lives and works of the authors were taken from the references cited in the corresponding sections. The analysis and classification of headaches, and the discussion of the influence of these disorders on the life and work of each author, are based on a search of the PubMed and Scopus databases, using the keywords included in the text.

Karl Marx (Trier, 1818 - London, 1883)

1. Life and works[4,5]

There is widespread consensus in academia and among historians that Marx created one of the most influential ideologies in human history, which eventually led to a drastic transformation of our world.

He was born in the city of Trier, on the banks of the river Moselle in the Rhineland, where the French Revolutionary Army had abolished the former feudal relations, enabling the development of the bourgeoisie, which then sought to impede the reactionary Prussia. His father was a lawyer and a convert from Judaism to Protestantism. The ideological struggle of the French Revolution and the obstinate conservatism of the Prussian state served as inspiration and motivation for Marx.

At 18 years of age, he was sent to study law at the University of Bonn, but dedicated his time to enjoying the freedoms of student life, and his father sent him to the University of Berlin the following academic year. There, he met a group of bohemian students and professors, the young Hegelians, who were obsessed with the ideas of Georg Hegel. Marx and the young Hegelians believed that the greatest obstacle to human progress was religion, which

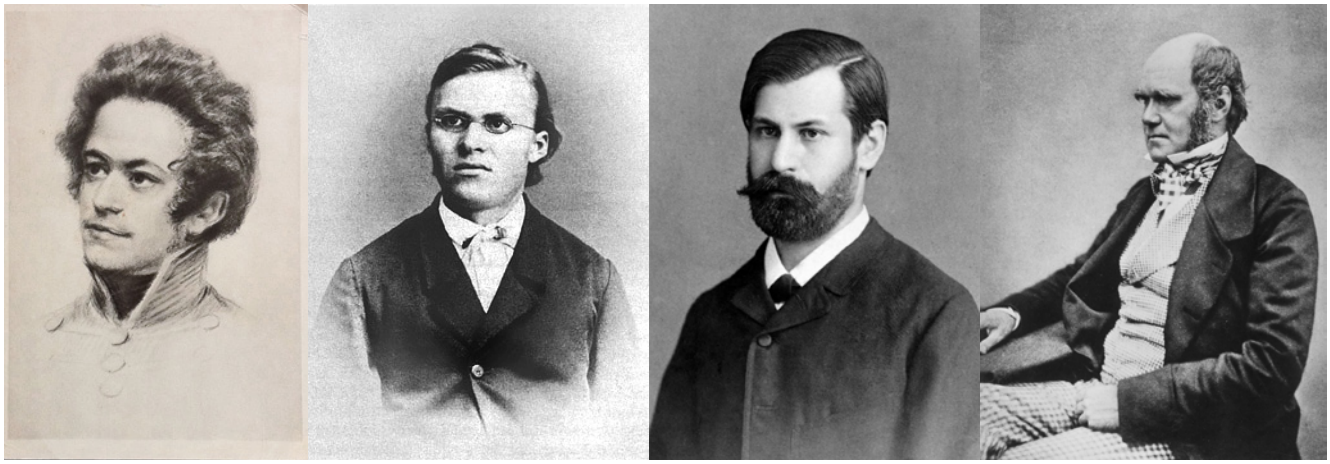


Figure 1. The suspicious academics. From left to right: Marx, Nietzsche, Freud, and Darwin. Public domain images.

they decided to critique and attack: "the critique of religion is the prerequisite of every critique."[6(p.131)] However, given the close relationship between church and state, to criticise religion was to criticise Prussia.

Marx aspired to a career in academia, and studied for a doctorate, writing his dissertation on the differences between the natural philosophy of Democritus and Epicurus. However, the Prussian authorities did not tolerate subversion in the universities. Thus, he had to find another platform for his ideas, and his outlet was journalism, a rapidly growing industry.

From 1842, he wrote for and subsequently directed the *Rheinische Zeitung* (Rhenish Gazette); with the publication of his articles, he fully implicated himself in the political struggle.

The newspaper closed down a year later. Displeased, he decided to travel to Paris, the hub of provocative and innovative ideas and the convergence point of the revolution. The city was full of radical thinkers whose ideas threatened to completely overturn society.

In just a year, Marx's intellectual horizon expanded exponentially, and he began to give form to his own provocative philosophy. His essays written during that period show his search to precisely identify the limitations on human liberty. Rather than seeing religion as the root of our problems, describing it as "the opium of the people,"[6] he believed that the true source of our sorrows, of our alienation, was the capitalist economic model, the way in which society was organised to supply our material needs.

In Paris, Marx renewed contact with a friend who had written for his defunct newspaper. Friedrich Engels showed Marx the sheer misery and material squalor of industrial life,[7] which he had seen firsthand at his father's textile mill in Manchester, and the pair swore to open people's eyes to the devastating reality of capitalism.

However, Paris turned out not to be a safe haven: Prussian spies alerted the French authorities to the danger of Marx's ideas, and he was ordered to leave the country. Exiled, Marx came to Brussels in February 1845, but Prussia once again pressured the authorities to expel him, and he was forced to renounce his citizenship.

During those years, Marx and Engels developed the theoretical foundation of dialectical and historical materialism, the proletarian conception of the world, and other key elements of their philosophy, which they summarise in a transcendental sentence: "The philosophers have only interpreted the world, in various ways; the point is to change it."[4]

The outstanding question was how could they bring their revolutionary theory to those who were destined to put it into practice: the proletariat. They had only one option, joining existing organisations: the League of the Just (motto: "all men are brothers"), which in 1847 changed

its name to the Communist League ("workers of the world, unite!"), which commissioned Marx and Engels to write a political programme, *The Communist manifesto*, a pamphlet just 30 pages long that marked the birth of scientific communism.

With the ink of the manifesto still wet, social revolutions began to erupt across Europe due to poor harvests and famine. In this environment, Marx installed himself in Cologne, where he edited and published the *New Rhenish Gazette*, which disseminated news of the revolutions of 1848.[8]

However, the insurrections soon collapsed, and the ruling classes quickly regained control across Europe. Marx was arrested and tried for inciting rebellion. He had only one place left to turn, and left for England in August 1849.

The period from 1849 to 1853 were the hardest years for the Marx family, overwhelmed by poverty and want. In spite of these circumstances, Marx continued working feverishly, dedicating his days to revolutionary organisation and to the study of economics and capitalism. He was a regular at the British Museum's new Reading Room, where he could be found from nine in the morning to seven in the evening, collecting documentation for his definitive critique of capitalism.

Marx had paved the way for the creation of a workers' association, and his efforts were recognised in 1864 when he was elected leader of the General Council of the International Workingmen's Association.

On 14 September 1867, after 16 years during which Marx analysed and reviewed over 1500 books, his magnum opus, *Das Kapital* (Volume 1), appeared in Hamburg, with 1000 copies printed.

In the book, Marx's analysis focuses on the relationship between capital and labour, and explains how capitalism works: the theory of surplus value. To the question "where does profit come from?," Marx responds that it comes from labour. When a person goes to work, everything that brought him there (food, clothing, housing, etc) costs money. His labour pays for all that, but the amount of labour performed over the working day, sometimes up to fifteen hours, is greater than the amount needed. The difference between what he ought to earn (the true value of his work) and what he actually earns is surplus value, the source of profit; Marx introduces here the concept of exploitation.

In 1870, Engels was able to travel to London, relieving Marx of some of his work and enabling him to retire from public life in 1873.

In 1878, nearly 60 years old, Marx was left disabled by a worsening of his fragile health. He was deeply affected by the deaths of his wife Jenny von Westphalen and of his eldest daughter, which hastened the end of his life.

Karl Marx died on 14 March 1883. Engels paid for his burial. Only 11 people attended the funeral. Engels' final words at the service were: "His name will endure through the ages, and so also will his work."[A]

2. Marx's migraine

Francis Wheen's entertaining biography of Marx portrays an exceptional individual who developed his extraordinary ideas against a situation of frightful poverty and disease. Marx was gifted with impressive mental and physical strength, but no constitution, however healthy, could survive unscathed those long years of excessive work and physical deprivation, poor diet, and sedentary lifestyle.[4]

One study revealed that Marx was particularly affected by two diseases: a liver disorder that has not been characterised, and a recently identified dermatological condition.[9,10] This question is addressed later in the article, as our main interest is describing whether Marx had migraine and the sources supporting this hypothesis.

Friedman's[11] classic article on headache in history and literature lists Marx among the historical figures affected by migraine attacks, citing a study by Regnault.[12] Similarly, an article by Jones[13] on famous individuals with headache takes the reference from Friedman and goes a step further, suggesting that though little is known about Marx's migraine, his influence was "quite a headache generator" for others.

The articles by Anitra Nelson[9,10] are based on data from Marx's correspondence. At 37 years of age, he suffered the greatest tragedy of his life: the death due to influenza of his third child and eldest son, Edgar. Shortly before Edgar's death, he wrote to Engels that: "My head [is] afire […]."[9] A few days after the funeral, he said that: "Since

[A]Taken from: Frederick Engels' speech at the grave of Karl Marx [Internet]. Marxists.org. Accessed 8 Sep, 2026. www.marxists.org/archive/marx/works/1883/death/burial.htm.



Figure 2. Front cover of the Bolivian journal *La Migraña*, dedicated to the bicentenary of the birth of Karl Marx. Public domain image.

the funeral I have been fortunate enough to have such splitting headaches that I can neither think nor hear nor see."[9]

Based on this description, it is debatable whether Marx's headaches met diagnostic criteria for migraine, which are based exclusively on the description given by the patient. The phrases "head afire" and "such splitting headaches" may be interpreted as metaphors, a literary device that is frequently used in the description of pain.[14] Although the duration and accompanying symptoms of migraine are not described, the description does note severe intensity and exacerbation with activity.

Let us return to the dermatological disease mentioned previously. This was revealed thanks to the astuteness of a dermatologist who, analysing the original correspondence, believes the disabling skin disease to have been hidradenitis suppurativa, which had a substantial effect on the man and his work.[15] This entity was another of the comorbidities associated with migraine; according to a recent study, patients with hidradenitis suppurativa present greater risk of migraine.[16]

Finally, I would like to conclude this section with a curious image, the front page of the Bolivian journal *La migraña* on the bicentenary of Marx's birth (Figure 2).

Friedrich Wilhelm Nietzsche (Röcken, 1844 - Weimar, 1900)

1. Life and works[17,18]

Nietzsche is considered one of the most important and influential philosophers in history. His father, the protestant pastor Carl Ludwig Nietzsche, developed a terminal brain disease that left him blind and unable to leave bed until his death. The autopsy study revealed "cerebral softening" that affected a quarter of the brain.[19] Friedrich was marked for life by his beloved father's suffering. His family subsequently moved to Naumburg, where he was raised in a strict religious environment. After completing primary school, he enrolled at the prestigious school at Schulpforta, which offered rigorous humanist training in classical languages.

At 20 years of age, he was admitted to the University of Bonn to study theology, following the family tradition, and philology, given his interest in classics; there, he studied under Friedrich Ritschl, a professor of Greek philology who years later became his mentor. But Nietzsche was dissatisfied with the environment at the university, and transferred the next year to the University of Leipzig, again studying philology. In December 1865, looking through the shelves of a bookshop, he came across a copy of *The world as will and representation*, by the philosopher Arthur Schopenhauer. He leafed through the book and bought it, reading it enthusiastically. This experience was his philosophical awakening; the voluntarism and pessimism of Schopenhauer's philosophy marked him and impregnated all of his works.

In 1868, he contacted another of the figures who would leave a decisive mark on his life, Richard Wagner and his wife Cosima, whom he gifted the manuscript of the first version of his work *The birth of tragedy* for her birthday in 1870. He spent happy years with the Wagners, though their friendship ended tempestuously.

A year later, when Nietzsche was only 25 years old, Ritschl proposed him for the position of professor of Greek philology at the University of Basel, where he

remained for 10 years until, disgusted with the triviality of academic life and his declining health, he definitively retired, receiving a lifetime pension.

Driven by his poor health to seek warmer climes, and set on living a philosophical life, Nietzsche spent the remainder of his lucid years in nomadic solitude, travelling and residing in hotels and guest houses in different cities.

In 1880, he spent his first summer in Sils Maria, a Swiss mountain village that became his spiritual home. On one of his walks in the area, he had one of his most crucial thoughts, the idea of the eternal recurrence. The eternal return represents an exuberant, optimistic acceptance of life. Suffering is not something through which we may redeem ourselves, as taught by religion, or that should be avoided at all costs, as in Schopenhauer's view; rather, we must accept it and dominate it. To live life to the fullest, one must dare to suffer but overcome it: as Nietzsche says in his book *Twilight of the idols* (aphorism 8), "what doesn't kill me, makes me stronger."

In 1882, Nietzsche predicted a crisis of values, asserting in *The gay science* that humanity's hands were stained with blood: not only have we killed God, but we have killed that which gives our lives meaning: "God is dead." This harsh, raw language reflects how terrifying he expected the consequence to be: if we do not believe in God, then there is no authority supporting the moral values held by European society for nearly two millennia. Free from the control of divine authority, we are liberated, or condemned to create our own values.

The same year, he experienced one of the greatest disappointments of his life. In spring 1882, he met and became infatuated with Lou Andreas-Salomé, a beautiful and intelligent young woman with whom he spent hours discussing philosophy, but who rejected him.

From 1883 to 1888, the ideas and thoughts captured in his books were simply incredible. Despite his fragile health, he wrote the main parts of his key works in rapid succession. In 1883, he published *Thus spoke Zarathustra*, seen as his greatest and most influential work; the book is a parody of the bible and introduces one of his best-known concepts, the *Übermensch* or superman. The book is a parable about the importance of overcoming all the obstacles that prevent us from experiencing happiness. In 1886, he published *Beyond good and evil*, in which he introduced the idea that Christian values are a slave morality, a morality of the weak, which leads us to mediocrity.

In 1888, he moved to Turin; in a constant state of euphoria, he wrote four books in a year. There, his mind began to deteriorate, and his correspondence began to show glimpses of the first signs of madness: he signed letters as the Antichrist, as the Greek god Dionysus, or simply as "the crucified."

In 1889, in a piazza in Turin, after witnessing a coachman whipping his horse, he embraced the animal, weeping, and collapsed. His mind never recovered. After admission to a psychiatric hospital in Basel, he was hospitalised at the Psychiatric Clinic of the University of Jena, directed by Otto Binswanger. His mother brought him to her home in Naumburg in 1890, where she and his sister cared for him until his death on 25 August 1900.

2. Nietzsche's migraine

There has been great speculation about the neurological disease responsible for Nietzsche's dementia, ranging from neurosyphilis to a retro-orbital meningioma and, given his family history, frontotemporal dementia, CADASIL, or MELAS.[19-22]

What is beyond doubt is that from childhood, Nietzsche suffered with recurrent headaches with the characteristics of migraine.

According to Ronald Hayman's wonderful biography *Nietzsche: a critical life*, the philosopher began having headaches at nine years of age.

In his work Über *das Pathologische bei Nietzsche*, the German psychiatrist Paul Julius Möbius gives a detailed description of Nietzsche's recurrent migraine attacks, which he suffered "as many as 118 times per year."

But there is no better description than Nietzsche's own account of his headaches in his writings. In *De mi vida: escritos autobiográficos de juventud (1856-1869)* (Of my life: autobiographical writings of youth [1856-1869]), a collection of texts translated to Spanish by Luis Fernando Moreno Claros,[B] the philosopher recalls when he was 14 years old: "I conceived all these projects, including that of writing a novel, *Death and ruin*, when, in the final semester of fourth grade, I stopped attending school due to my headaches.

[B]The collection is available on the Elejandría web portal.



Figure 3. Poster for the film *When Nietzsche wept* (Pinchas Perry, 2007). Public domain image.

Four years later, in 1862, he recounts how his headaches were prolonged over time: "At school in Pforta. Summer holidays in Gorenzen. Later, until St Michael's Day, headache."

Although in these early years he gives no further details, he does provide these later on, between August and December 1865. One paragraph allows us to infer the presence of visual aura:

> I close my eyes. At first all is dark, but not completely black. […] lights and shadows withdraw and, between them, a glimmer of light signals. […] I see a figure, sometimes yellow and sometimes another colour, that immediately transforms into another figure, which immediately loses its contours.

Nietzsche experienced migraine throughout his life. In one of his final works, *Ecce homo: how one becomes what one is*,[C] published posthumously in 1908, he writes:

> In the midst of the agony of a headache which lasted three days, accompanied by violent nausea, […]. With my head wrapped in bandages, and extremely painful, I dictated […].

In this regard, it has been suggested that migraine influenced Nietzsche's writing style, which takes the form of intermittent, short, aphoristic paragraphs, sometimes scarcely related with one another or lacking direct continuity. So great was the magnitude of headache that he only allowed himself to write in paragraphs with concentrated information, which may appear unfocused. This is particularly apparent in *Human, all too human* and *The dawn of day*, among other works.[17]

Assuming the concept of the autobiographical pact introduced by the French professor and essayist Philippe Lejeune (*The autobiographical pact and other studies*) and, therefore, the honesty and authenticity of the account given by the narrative self in these texts, certain fictional works of literature and film are also relevant.

In a scene in the film *When Nietzsche wept* (Figure 3), based on a novel by the psychiatrist Irvin Yalom and set in late 1882, the young Lou Salomé makes an appointment with the famous Viennese physician Josef Breuer (who discovered the role of the inner ear in regulating balance, and was a precursor to the psychoanalytic method), hoping that he would receive the anonymous German philosopher Friedrich Nietzsche, whom he might help both physically and psychologically: according to his letters to Salomé, the philosopher was experiencing suicidal tendencies, in addition to his severe physical ailments.

Below is a transcription of part of the conversation between the two:

> Salomé: My friend is sick.
> Breuer: What is the nature of his illness?
> Salomé: Headaches. Tormenting headaches.

Stefan Zweig was a hugely popular essayist, biographer, and novelist. His narrative capacity, his masterful description of emotions, and his elegant style make him a fascinating narrator.

[C]Nietzsche F. Ecce homo (Nietzsche's autobiography). [Ludovici A.M., transl.]. In: Levy O., ed. The complete works of Friedrich Nietzsche, vol. 17. Edinburgh: T.N. Foulis; 1911.

In his book *Hölderlin, Klinst, and Nietzsche: the struggle with the daemon* (with the term *daemon* referring to a force that drives our otherwise inert being to creative passion, to excess, to ecstasy), Zweig[23] recreates the lives of the great cursed poet, the unfortunate writer, and the philosopher who interests us here.

Zweig writes of Nietzsche that:

> Immediately […] he would retire to his room, […] exiguous and chilly and dowdy. The table was usually littered with sheets of manuscript, with jottings on scraps of papers, with proofs. Not a flower, not an ornament […]. On a shelf were ranged innumerable bottles of tinctures of this, that, and the other medicament to cure headache (to which he was a martyr), colic, spasmodic vomiting […].
>
> There were days which he spent entirely in bed, a prey to cramp in the stomach, to nausea, reduced to semiconsciousness by pain, his temples pulsing furiously […].[23]

The first paragraph of the chapter "Apologia for illness" is fierce:

> Nietzsche's body was affected with so many and varied tribulations that in the end he could with perfect truth declare: "At every age of my life, suffering, monstrous suffering, was my lot." Headaches so ferocious that all he could do was to collapse onto a couch and groan in agony, […] cramps when he would vomit blood, migrainous conditions of every sort, […]. Ignoring such precautionary measures, he would spend ten hours at a stretch over his writing-table. But his brain took revenge for this excess; cephalalgia was the result.[23]

Sigmund Freud (Příbor, 1856 - London, 1939)

1. Life and works[24,25]

Recognised as a fundamental figure in modern thought and a master of suspicion due to his hermeneutics of the unconscious, Freud was the answer to Friedrich Schiller's hope about the nature of the human soul that "for the other realms of nature there should arise a Linnaeus to classify impulses and inclinations."[D]

When he was three years old, his father's business went bankrupt and the family moved to Vienna, the dynastic capital of the Habsburg monarchy, a city at the forefront of social change. Intensely dedicated to his studies, Freud was top of his class and graduated with honours from the Leopoldstädter Kommunal-Realgymnasium.

At 17 years of age, he began studying at the University of Vienna. He was initially interested in philosophy and law but, attracted by Darwin and his theory of evolution, he enrolled in physiology and medicine, earning his doctorate in 1881.

In 1885, working as professor of neuropathology, he was assigned a grant and moved to Paris to study under Charcot at La Salpêtrière, where he learned from the French neurologist's research into hysteria and hypnosis.[26]

From 1882, he was a friend of the eminent physician Josef Breuer; one of Breuer's patients greatly attracted his attention. The physician had treated and cured a patient, Bertha Pappenheim (alias Anna O), by using hypnosis to reveal significant details about her personal life.

In 1891, Freud opened a private consultation at number 19, Berggasse, and began applying Breuer's cathartic method to his own patients. However, he realised that not all patients were susceptible to hypnosis, and set about developing a new version of talking therapy. He invited patients to recline on his famous couch and encouraged them to share whatever thoughts passed through their head, while he systematically dug through and sorted their memories. He named this free association method psychoanalysis.

In 1895, he and Breuer published their findings in *Studies on hysteria*. The same year, he published a critical review of Möbius' book *Die Migräne*.

Freud wanted to identify a single cause of hysterical neurosis, and began to see sex as the central problem, though Breuer did not share this view. However, another friend, the physician Wilhelm Fliess, was more receptive to the so-called seduction theory, with which Freud hoped to explain the origin of neurosis, attributing it to experiences of childhood sexual abuse.

He explained his theory at a meeting of the Society for Neurology and Psychiatry of Vienna, but his dissertation was met with perplexity and scepticism. This *annus horribilis* culminated with the devastating death of Freud's father.

[D]Zweig S. Mental healers: Mesmer, Eddy, Freud. Paul E, Paul S, transl. London: Cassell and Company; 1933.

Freud found flaws in his seduction theory and chose another path. For a long time, he had been self-analysing his fragmented recollections of childhood, and subsequently began analysing his own dreams, which he considered scientifically relevant. Freud thought of dreams as products of the mind that reveal something about who we are.

In his 1900 book *The interpretation of dreams*, Freud posits a radical new understanding of human nature, with the unconscious as a store of repressed desires and irrational impulses, the occult origin to that which motivates us and makes us who we are.

In his next book, *The psychopathology of everyday life*, he introduced the concept of the lapsus, asserting that our repressed desires do not only emerge in our dreams, but that they also infiltrate our waking life.

In *Three essays on the theory of sexuality*, Freud addresses the concept of eroticism as a source of attraction and arousal and describes the development of the libido or sexual drive.

Freud feared that psychoanalysis might be considered a "Jewish science." However, one crucial fact led to the global prestige of his name and ideas: the First World War and the clinical challenge of the trauma of soldiers exposed to the horrors of war.

Until then, Freud had considered sexuality to be the only cause of neurosis, but in 1920 he published *Beyond the pleasure principle*, in which he postulated a second fundamental force in the mind: the death drive. He continued revising his theories with the publication in 1923 of *The ego and the id*, in which he proposed that the mind is made up of three elements: the id, an unconscious part that holds our passions; the superego, an inner consciousness that imposed impossible rules, a strict moral guardian; and the ego, which stands between the conflicted mind and external reality, and which may be strengthened by psychoanalysis.

The irremediable antagonism between instinctual drives and social restrictions imposed by culture, which caused a feeling of guilt, is addressed in his essay *Civilisation and its discontents*, considered one of the most influential critical texts in the social sciences.

At the same time as Freud's influence was growing, the Nazis came to power in neighbouring Germany, threatening not only his work, but also his life. After the annexation of Austria in 1938, Freud fled for his life, taking exile in London, aged 82 years and battling cancer. Fortunately, he had earned an excellent reputation both in Vienna and in the rest of the world, and many important figures helped him in his escape. Princess Marie Bonaparte herself, together with other influential people of the day, were able to raise a small fortune, which he spent on exit visas for himself and his close family.

On 23 September 1939, with considerable physical deterioration and unable to bear the pain caused by the oral cancer detected in 1923, he reminded his personal doctor, Max Schur, of his promise to administer terminal sedation to spare him the final suffering. At his funeral, his friend Stefan Zweig said these words:

> Each of us, the men of the twentieth century, would be another, different person without him, without his thought and understanding. Each of us would think, judge, feel, more narrowly, less freely, less justly without his thinking ahead of us, without this powerful inward stimulus he has given us.

2. Freud's migraine

According to the biography by his personal physician Max Schur, *Freud: living and dying*,[27] the founder of psychoanalysis suffered with headaches throughout his life, but especially between the ages of 24 and 45 years. Freud himself describes the headaches in his correspondence.[28] In a letter dated 17 May 1885, addressed to his future wife Martha Bernays, he writes:

> When the letter came I was suffering from migraine, the third attack this week, by the way, although I am otherwise in excellent health. —I suspect the tartar sauce I had for lunch […] disagreed with me— I took some cocaine, watched the migraine vanish at once, […] but I was so wound up that I had to go on working and writing and couldn't get to sleep before four in the morning.

Although Freud considered his headaches to be migraines, it is difficult to establish a diagnosis due to the scant description of his symptoms.[28]

It is unclear whether his headaches were accompanied by nausea or vomiting, although he did report neurological symptoms. For instance, in *The psychopathology of everyday life*, he writes that: "The slight attacks of migraine, from which I am still suffering, are wont to announce themselves hours before through the forgetting of names, and at the height of the attack […] I am often unable to recall all proper names."[E] This experience

may be considered a pioneering description of cognitive symptoms associated with migraine.[29,30]

The book *Sigmund Freud: life and work*[24] is unique among biographies of Freud, partly due to the personality of its author, Ernest Jones, who was a close friend and collaborator of Freud throughout his life, as well as a prominent psychoanalyst. Jones writes that: "All his life Freud was subject to incapacitating spells of migraine quite refractory to any treatment." And he does not hesitate to call Freud "a martyr to migraine."

Schur's[27] biography proposes potential trigger factors: sensitivity to dry and sirocco winds, as well as the tension caused by practising psychoanalysis and Freud's treatment of pain with cocaine, aspirin, and pyrazolone.

Not only did Freud suffer with migraines, he also hypothesised about their pathogenesis. In 1895, he published a critical review of Möbius' book *Die Migräne*. He acknowledges that migraine is extremely common and easily acquired, and differentiates between "symptomatic" migraine attacks and "migraine disease," and critiques "migraine equivalents" and genetic causes of migraine, advocating for the importance of "nasal causes" (nasal reflex neurosis).

His support for this theory, which was very popular at the time, may have been influenced by his relationship with the otorhinolaryngologist Wilhelm Fliess, with whom he shared his experience of migraine in their ample correspondence.[31] In a letter dated 19 April 1894, he stresses the relationship between the nose and migraine pathogenesis, introducing an interesting aspect: disgust at certain odours. He conjectures that migraine is "a matter of summation" of causes, including susceptibility and trigger factors, that "the logical centre for migraine is a trigeminal nucleus," and speculates that "it is not impossible that migraine may include a spastic innervation of the muscles of blood vessels in the reflex sphere of the dural region."[31(p.142-144)]

Thus, Freud anticipated the importance of vascular and neurogenic mechanisms in migraine pathogenesis.

[E]Freud, S. Psychopathology of everyday life. Brill AA, transl. London: T. Fischer Unwin Ltd.; 1920.

Charles Darwin (Shrewsbury, 1809 - Downe, 1882)

1. Brief review of Darwin's life[32] and migraines

Darwin's ideas had an undeniable impact on the thought and science of the 19th and 20th centuries. The seismic wave that followed the earthquake of his theory of the evolution of species by natural selection also had an impact on our masters of suspicion.

In 1825, Darwin's father sent him to the University of Edinburgh to study medicine. However, the subject did not hold his attention, and after his second year, his father suggested a career in the clergy. Darwin agreed, and transferred to Christ's College, Cambridge, in 1828. More so than his academic studies at Cambridge, Darwin benefited from auditing the classes of reverend John Henslow, a botanist and entomologist whose friendship was an "inestimable benefit," as it was Henslow who gave Darwin the opportunity to embark on the voyage of HMS *Beagle* (Figure 4) as the ship's naturalist. Darwin writes in his autobiography that he "was born a naturalist."[33] Thus, in 1831, just 22 years old, he embarked on a scientific expedition around the world. Upon his return five years later, he carried with him the seed of the biological theory of evolution. His revolutionary ideas took form in the publication in 1859 of *On the origin of species* (Figure 5), "no doubt the chief work of my life."

Beginning a year after his return from the voyage of HMS *Beagle*, he suffered with chronic health problems until the age of 60 years. Darwin described how any kind of stress would leave him completely paralysed; later, he ceased attending parties because he found them too exhausting; and three years later, in 1842, he withdrew from public life. There has been much speculation about the cause of Darwin's ill health.[34-37]

The celebrated biography by John Bowlby[32] argues for a psychosomatic origin on account of the episodic nature of symptoms and the improvement in the final decade of his life.

It has also been suggested that Darwin had cyclical vomiting syndrome, which is well documented in association with migraine.[32]

What is beyond doubt is that he suffered throughout his adult life with recurrent, disabling headaches, apparently triggered by the slightest departure from routine, which with all certainty would be diagnosed today as migraine.[11,13]



Figure 4. *HMS Beagle*. Owen Stanley, 1841. Source: National Maritime Museum, Greenwich, London.

Darwin himself described his intense headaches. In the book *The voyage of the Beagle*,[38] the entry for 3 and 4 October 1833 notes that: "I was confined for these two days to my bed by a headache."

Conclusions

Independently of their classification as "academics of suspicion," these three masters and the visiting professor were gifted with considerable talent, enjoying an extraordinary mental ability to create or invent new things; they were admirable individuals who, with their innovative capacity, surpassed the rationalism and prevailing ideas of their times. Some excellent studies have addressed the "cerebral origins" of genius,[39] the neuroscience of creativity,[40] and disease in general as a source of creativity.[41]

More than a simple headache, migraine affects not only a person's physical well-being, but also their mental, emotional, and existential experience.

How did these geniuses interpret their pain? Did it influence their creative capacity?

The master offering the most information is Nietzsche. His personal experience of disease is a constant presence in his works; his reaction is one of gratitude, as we observe in aphorism 295 of *The gay science*: "Indeed, from the bottom of my soul I am gratefully disposed to all my misery and sickness, […] because such things leave me a hundred back-doors through which I can escape from permanent habits."[F]

He even considered disease to be necessary to self-realisation (aphorism 120): "In the end the great question

[F]Nietzsche F. The gay science. Common T, transl. [s.l.]: Digireads.com publishing; 2009.
[G]Nietzsche F. Human, all too human. Zimmern H, Cohn PV, transl. Mineola (NY): Dover Publications Inc.; 2006.

might still remain open: whether we could *do without* sickness for the development of our virtue, and whether our thirst for knowledge and self-knowledge would not especially need the sickly soul as well as the sound one."

In *Human, all too human*, he reflects on sickness as the root of genius: "The man who is bed-ridden […] gains this piece of knowledge from the idleness to which his illness condemns him."[G]

Zweig also mentions this in the psychobiography cited previously: "This hypersensitiveness, which could be shaken acutely by the most airy of impacts—impacts hardly penetrating the superficial layers of consciousness where ordinary mortals are concerned—was the root and origin of his woes, and the wellspring of his amazing power to appreciate values."[23]

Marx found that pain heightened his ability to think abstractly.[9]

With regard to Darwin, it has been suggested that his seclusion and withdrawal allowed him the long, profound reflection that illuminated the theory of evolution.[42]

This is wonderfully explained by Elizabeth Loder[43]:

> It is noteworthy that the theory of evolution, which provides the fundamental explanation for the existence of migraine, may in part owe its origin to Darwin's own headaches. For although he was never moved to speculate on the broader evolutionary advantages of headache, it is clear that headaches provided Darwin with a socially acceptable reason to avoid many unwanted social and academic obligations. The consequent lack of distraction provided time for the lengthy reflection, reading, and synthesis of ideas necessary to discern the fundamental organising principle of all life.

Thus, it is tempting to suspect that all the suffering involved in migraine serves the greater good of our species.[44]

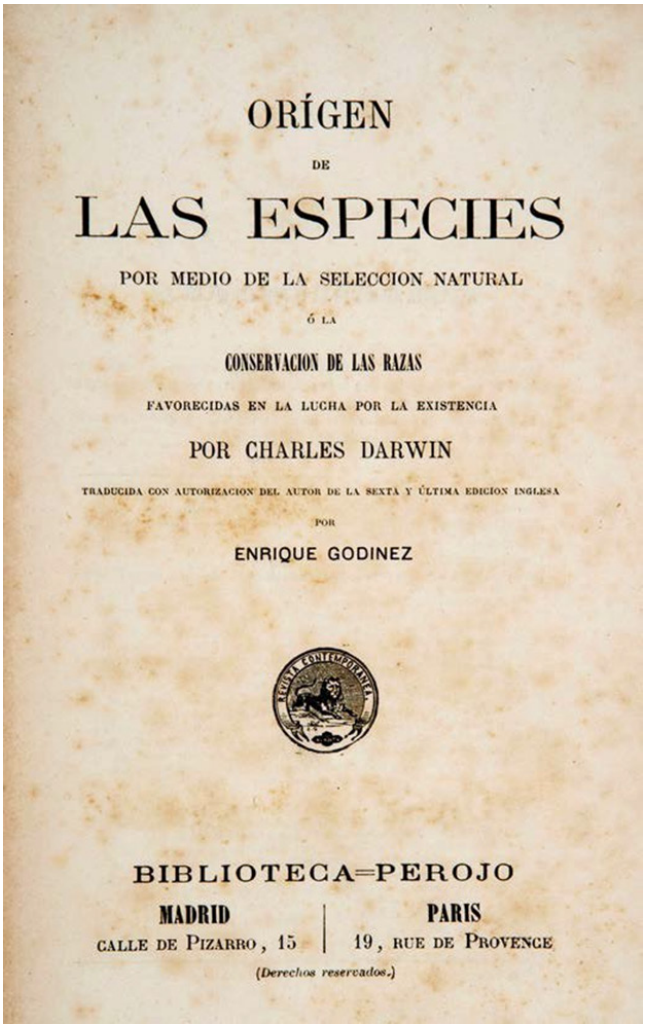

ORÍGEN
DE
LAS ESPECIES
POR MEDIO DE LA SELECCION NATURAL
Ó LA
CONSERVACION DE LAS RAZAS
FAVORECIDAS EN LA LUCHA POR LA EXISTENCIA
POR CHARLES DARWIN
TRADUCIDA CON AUTORIZACION DEL AUTOR DE LA SEXTA Y ÚLTIMA EDICION INGLESA
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Figure 5. Front cover of the first complete Spanish-language edition of *The origin of species* (Biblioteca Perojo, Madrid, 1877). Source: Wikimedia Commons.

Dedication

To Manuel Guzmán, manager of the Lilly Foundation, on the occasion of his retirement.

Acknowledgements

I would like to thank Prof José María Ramírez Moreno for his critical review of the manuscript and for his advice.

Conflicts of interest and funding

None.

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