Neurological study of the decadent novel À *rebours* (*Against the grain*) by Joris-Karl Huysmans

L. C. Álvaro González

Department of Neurology. Hospital de Basurto, Bilbao, Spain. Department of Neurosciences. Universidad del País Vasco, Leoia, Spain. Part of this study was presented at the 2018 Annual Meeting of the Spanish Society of Neurology in Seville.

ABSTRACT

Introduction. Joris-Karl Huysmans was a prominent writer of the French decadent movement, which rejected the utilitarian ideology of the day, considering it to be degenerate, homogeneous, and lacking in principles, and proposing a new style, to be achieved by cultivating sensibility and human emotion. Evasion and aesthetic enjoyment became the new moral principles. This represents a vital shift, captured in Huysmans's work by details of neurological interest, particularly in his 1884 novel *À rebours (Against the grain)*.

Methods. The novel was analysed systematically through the selection, classification, and analysis of the fragments considered to be of semiological and historical value from the perspective of neurology and neuropsychiatry.

Results. The following points are considered noteworthy: 1) descriptions of degeneration, which are novel for their symbolic, intelligent application to members of the nobility; 2) migraine with associated allodynia, aura, and vertigo; 3) syphilis, with congenital traits and skin lesions, associated with degeneration and atavistic fear; 4) an exploration of the limits of sensory perception, with a pioneering neuro-literary description of taste-music synaesthesia and a case of olfactory Stendhal syndrome; 5) a portrayal of automatic memory, a quarter of a century before Proust's famous description of the madeleine; 6) several emotional disorders (hypochondria, anxiety, depression), defined by Huysmans as "neuroses"; and 7) doctors specialising in "nervous disorders," whose description displays the paternalistic traits characteristic of the day, which at the time were not widely accepted.

Discussion. À *rebours* can be considered a "fully-realised novel," a total work of art, for its originality, influence, and inclusion of science, medicine, and neurology. Huysmans anticipated such neurobiological phenomena as synaesthesia and automatic memory; his use of degeneration theory and its characteristic features (syphilis, migraine) was intelligently adapted for the purposes of his social critique. The rich phenomenology and clinical details included are of neuro-historical and educational value.

KEYWORDS

À rebours, degeneration theory, Huysmans, medicine and literature, Stendhal syndrome, synaesthesia

Introduction

Fin-de-siècle crisis and decadence

À *rebours* (*Against the grain*), by the French writer Joris-Karl Huysmans (1848-1907), was published in 1884, a time of political, social, and ideological crisis which began with the end of the Franco-Prussian War of 1870.

Corresponding author: Dr Luis Carlos Álvaro González E-mail: luiscarlosalvaro@yahoo.es The French defeat led to the fall of Napoleon III and the formation of the French Third Republic, which was consolidated in 1876 with the electoral triumph of the republicans over the monarchists. Republican reforms included the freedom of association and of the press and free, compulsory primary education, although the extremely liberal economic model favoured business and

Received: 4 April 2019 / Accepted: 10 July 2019 © 2018 Sociedad Española de Neurología wealth, leaving a large part of society in poverty. Social frustration grew with the defeat of the Paris Commune in 1871, which represented the end of the revolutionary ideology and led to pessimism and scepticism among the French youth.¹

This social climate saw the triumph of Émile Zola's naturalist literary model, based on rationalist, scientistic principles, whereby experimental and positivist models should be applied to literature. The medical field ran parallel to this movement, acquiring the status of a science with the publication of Claude Bernard's Introduction à l'étude de la médecine expérimentale (Introduction to the study of experimental medicine) in 1865. Against this backdrop of the triumph of reason and social scepticism, which defines the fin-de-siècle crisis, appeared a group of young, rebellious, non-conformist writers and artists, who developed a profound critique of society's norms and values. To this end, against the sovereignty of reason in the formal scientific method (Claude Bernard) and literature (Émile Zola), they defended the use of sensibility and imagination as the route to a profound, unknown truth. This demands a radical transformation, both of language and in the subjects addressed by literature. This generation of writers sought to express the most personal emotions and the most refined sentiments as a form of triumph over the present, which their work aimed not only to unmask, but to disassemble, attacking what they saw as its artistically shallow and socially perverse nature.

These young writers and artists were known as the decadents, a term coined by the French press of the day and intelligently and ironically adopted by the movement's adherents. They adapted to the label, changing its intended meaning to refer to themselves as sensitive artists, renewing and critiquing, addressing a society that was undergoing a phase of decadence, that demanded a transformation that they themselves (decadent on the strength of the facts) could provide through their refinement, melancholy, and critical sense.² They subscribed to ideas previously expounded by Baudelaire, who recalled the birth of a literary renewal and its profound impact on the crisis and the social and political disintegration of the decline of the Roman Empire.

The same period saw key developments in the history of neurology and neuroscience. In 1882 (two years prior to the publication of \hat{A} *rebours*), the first chair of diseases

of the nervous system was established at the Salpêtrière hospital in Paris. The position was held by Jean-Martin Charcot, and is central to our understanding the development not only of neurology, but also of psychiatry, neuroscience, and even the reciprocal influence between the sciences (neuroscience) and the arts. For example, Sigmund Freud studied passionately under Charcot from 1885 to 1886; it was not until this time that he began to develop his psychoanalytic theory, relativising anthropocentrism through the recognition of unconscious forces that modulate human freedom. The ongoing influence of psychoanalysis over the arts in general since its very conception should be no cause for surprise. Even without considering Freud's influence, Charcot and his famous Tuesday lessons at the Salpêtrière directly influenced writers including Maupassant, who produced such important works as The Horla, which could not be understood without the neurological teachings imparted by Charcot.³

À rebours and Jean des Esseintes: a social and literary model

Georges Charles Huysmans (adapted to the Flemish Joris-Karl Huysmans; Figure 1) was the son and grandson of Dutch painters, and became the most distinguished artist of the decadence movement. His work À rebours was born in the context of the fin-desiècle crisis of cultural values and concern with renewal. From the time of its publication, it provoked a scandal among orthodox artistic intellectuals and literary critics. Émile Zola, with whom Huysmans had lodged and who had praised him in the early days of his career as a writer, well understood the meaning of Huysmans's novel and critiqued it harshly, despite the author's efforts to dissimulate the sensibility of the protagonist (Jean Floressas des Esseintes) with naturalistic touches that he knew to be to the taste of his former mentor. In spite of official rejection, À rebours rapidly became a Bible of the decadence movement among the rebellious youth.²

More than a school, decadence was an atmosphere of concern among a group of non-conformist artists. With their literary works, they passionately criticised the decadence of the age of vulgar mediocrity in which they lived, dominated by bourgeois rationalism and utilitarianism. Their chosen weapons were artistic refinement, praising fantasy and cultivating sensibility; and spiritual aristocracy, standing in opposition to the vulgarity and homogenisation of their materialistic



Figure 1. Joris-Karl Huysmans. Left: an 1878 portrait by Jean Louis Forain. Right: a photograph of the author later in life

society. These ideas feed into sensibility, with the decadents searching for meaning through spirituality (religiosity, Satanism), and the popularity of dandyism, another means of challenging vulgarity by exhibiting a refined, individual sensibility. Des Esseintes displayed all these traits, hence his rapid literary triumph, with an entire generation of writers identifying with and idolising the character.⁴

It is easily understandable that this should happen in France, where such poets as Mallarmé and Verlaine wrote decadent poetry influenced by Huysmans, and prosewriters including Barbey D'Aurevilly and his close friend Villiers de l'Isle-Adam wrote texts impregnated with mysticism and the supernatural. Villiers was a ruined aristocrat and, like Barbey, a dandy.⁵ Verlaine's eccentric, bohemian lifestyle was also well-suited to the principles of decadence. However, the true value of decadence as a social and artistic movement is its influence in other countries and languages. In the Spanish language,

this influence is palpable in the modernist prose and poetry of Juan Ramón Jiménez and Rubén Darío, and in the works of Valle Inclán, who renewed language and subject matter and whose eccentric, bohemian lifestyle greatly resembled that of the French decadent ideal. Other noteworthy figures are Oscar Wilde in the United Kingdom and Gabrielle D'Annunzio² in Italy. The latter was a refined nobleman who produced penetrating work; he was eventually drawn towards fascism. Huysmans's reach and influence continue even today: in his novel Soumission, Michel Houellebecq6 describes an apocalyptic France dominated and governed by an Islamist movement; the novel is guided by the firstperson narrative of a literature professor specialising in Huysmans. The vicissitudes of Houellebecq's novel are illustrated by different facets of Huysmans's life and work. The author chooses Huysmans specifically because he represents a departure from the "mainstream" intellectuals to whom the majority of academic studies are dedicated.



Figure 2. Front covers of the Spanish and French editions of \dot{A} rebours used in this study

Methods

For the purposes of the present study, we can note two essential facts in \hat{A} *rebours*:

1) The rejection of naturalism and faith in the realist, scientistic description of the environment.

2) The cultivation of sensibility and mental fantasy as the essence of the search for narrative truth.

Given these two factors, we would expect the text to include details of medical and neurological interest.

Firstly, the disdain for naturalism makes it plausible that we may find caricatures of realist description, or even descriptions fitting the official naturalist models: Huysmans indeed strove not to offend his patron Zola (although, as we have noted, without success). Secondly, the cultivation of sensibility means we may expect to find unique sensory descriptions.

Taking this as our working hypothesis, the present study was developed through a methodical reading of the novel, analysing and interpreting excerpts deemed to be of neurological interest. To this end, a general reading of the novel was followed by a slower, more thorough reading, taking into account any mention of any medical term or condition (eg, syphilis, fever, vision), descriptions of sensory phenomena (taste, smell, vision, hearing), the use of drugs or potential treatments (eg, absinthe, mercury), and medications. Such fragments were considered to be relevant to the objectives of this study, and are classified in the clinical language of neurology and neuropsychiatry, according to their semiological value, and studied within the historical context of the text. The original French text⁷ and the Spanish translation by Juan Herrero⁸ were used for this study (Figure 2).^a In the interest of brevity, excerpts are reproduced in English only.

Results

1. Degeneration theory

Degeneration theory, which was very much in vogue in the 19th century, maintains that members of disadvantaged groups (the poor, marginalised, etc), and their descendants, were destined to continue deteriorating. These lineages were affected by marked physical and mental impairment, infections (particularly syphilis) and diseases of deficiency, and social inequality, resulting in delinquency and crime. Progressive degeneration and its propensity to be transmitted meant that these individuals and their offspring were destined to disappear.⁹

Huysmans opts to portray these traits of degeneration through the nobility. In the first chapter, he describes

^a Translator's note: the fragments cited in this translation of the article are from the anonymously translated English edition of \hat{A} rebours published by Dover Publications.



Figure 3. Left: a depiction of the protagonist Jean des Esseintes, portrayed as a nobleman, standing beside a portrait of one of his ancestors (described as degenerates). Right: an 1886 portrait by Giovanni Boldini of the dandy Robert de Montesquiou, who was highly respected by decadent figures, including Huysmans and his protagonist

the lineage of the des Esseintes family, of which the protagonist is the last descendant (Figure 3). Jean des Esseintes and his ancestors patently show physical and mental faults, vertical transmission, and endogamy.^{8(p1-5)}:

The entire des Esseintes family is affected:

Snuffling, grotesque greybeards, repeating *ad nauseum* a wearisome string of insipid outworn platitudes.

Mummies.

The gradual degradation of this ancient house had followed a regular and unbroken course.

Endogamy:

The des Esseintes had for centuries been in the habit of intermarrying among themselves.

Mental and physical deficiencies:

The vitiation of an exhausted race, the excess of lymph in the blood, were plainly to be traced.

A frail young man of thirty, anaemic and nervous, with hollow cheeks, [...] a small but still straight nose, and long, slender hands.

Limited intelligence:

He showed himself a perfect fool directly any attempt was made to teach him the merest rudiments of the physical sciences.

[The Jesuits] realised that this pupil of theirs would never enhance the fame of their House.

Sensory hypersensitivity:

The Duchess could not endure light or sound without suffering from nervous attacks.

The noble classes finally reveal their degeneration through their depraved behaviour, and are condemned to extinction:

Yes, nobility was utterly decayed, dead; aristocracy has fallen into idiocy or filthy pleasures! It was perishing in the degeneracy of its members, whose faculties grew more debased with each succeeding generation till they ended with the instincts of gorillas quickened in the pates of grooms and jockeys [...], wallowed in the mud of legal actions [...].^{8(p200-201)}

2. Migraine

Headache, resembling migraine, was a common trait in "degenerate" groups. Migraine was known at the time to be a severe, hereditary condition, commonly presenting with what we know today as comorbidities (rheumatic [fibromyalgia], digestive, respiratory, etc), and was linked to the concept of degeneration.¹⁰

Typical clinical features:

[...] neuralgic agonies that [...] beat with a neverceasing hammering at his temples, sending stabbing throbs through his eyelids, provoked fits of nausea he could only subdue by stretching himself flat on his back in the dark.^{8(p81)}

Trigger factors and heredity associated with degeneration theory:

The excesses of his bachelorhood, the abnormal strains put upon his brain had extraordinarily aggravated his original nervous weakness, still further impoverished the blood of his race.^{8(p81)}

As well as pain, the novel describes aura, including what would today be called migrainous vertigo and associated or isolated visual manifestations:

A. His eyes, too, were affected, he saw things double and turning round and round; soon the sense of distance grew confused, his glass seemed to be a mile away from his hand. [...] He went and lay down on the sofa in the drawing-room; but then the rolling of a ship at sea began, increasing his nausea still further. He sprang up again, resolved to take a digestive to settle the eggs in his stomach. [...] He reached instead up to a higher shelf for a bottle of Bénédictine, which he selected to keep by him because of its shape which struck him as suggestive of ideas at once pleasantly festive and vaguely mystical.^{8(p154)}

B. He gazed with a dazed look at the beds of vegetables that the servants had planted. But it was only after an hour had elapsed that his eyes saw what he was looking at, for a greenish mist floated before his eyes and prevented his making out more than the blurred images, as if viewed through deep water, of objects, whose appearance and colour kept continually changing. In the end, however, he recovered his balance and found himself able to distinguish clearly onions and cabbages [...].⁸(p155-156)

3. Syphilis

This disease, considered the scourge of humanity for hundreds of years, was used as subject matter in some literary works¹¹; given its high prevalence in certain social classes, specific treatises dedicated to the subject were widely distributed in France and translated into Spanish.¹² Given the accuracy and understanding shown in Huysmans's descriptions, it is not unreasonable to suspect that he may have been familiar with such texts. \hat{A} *rebours* describes various forms and manifestations of the disease as well as dreamlike, symbolic manifestations of its "attacks"; these descriptions constitute precursors to surrealism, and are born of the ancestral, atavistic fear of an often fatal disorder.

Facial deformities of congenital syphilis:

A bulldog face, $[\ldots]$ irregular teeth projecting below a flat nose. $^{8(\mathrm{p90})}$

The great imitator:

To this day it was raging everywhere, disguised under ordinary symptoms of headache or bronchitis, hysteria or gout. $^{8(\rm p89)}$

Facial skin involvement and preference for disadvantaged groups, as described by degeneration theory:

From time to time, it would climb to the surface, attacking for choice badly cared-for, badly-fed people breaking out in gold pieces, setting, in horrid irony, a Nautch-girl's parure of sequins on its wretched victims' brows, inscribing their skin, for a crown to their misery, with the very symbol of wealth and well-being.^{8(p89)}

Symbolism of a vertical and horizontal illness affecting a degenerate society:

Ever since the beginning of the world, from sire to son, all living creatures were hanging on the inexhaustible heritage, the everlasting malady that has devastated the ancestors of the men of to-day, has eaten to the very bone old fossil forms which we dig up at the present moment.^{8(p89)}

4. Sensory alterations

The essence of the decadent project was to exploit all aspects of the sensory to the greatest possible extent. These descriptions represent an authentic phenomenology, cultivated by eminently sensitive individuals who, through emotions so evoked, sought to access a new world and a truth that they might elevate above the monotony and tedium of the day. In this context, the description of synaesthesia and an original case of olfactory Stendhal syndrome are particularly striking.

Taste-music synaesthesia:

Each liquor corresponded, so he held, in taste with the sound of a particular instrument. Dry Curaçao, for instance, was like the clarinet with its shrill, velvety note; kümmel like the oboe, whose timbre is sonorous and nasal; crème de menthe and anisette like the flute, at one and the same time sweet and poignant, whining and soft. Then, to complete the orchestra, comes kirsch, blowing a wild trumpet blast; gin and whisky, deafening the palate with their harsh outbursts of cornets and trombones; liqueur brandy, blaring with the overwhelming crash of the tubas; [...] quartettes of stringed instruments might be contrived to play upon the palatal arch [...]; with the alto, simulated by rum, more robust, more rumbling, more heavy in tone; with vespetro, longdrawn, pathetic, as sad and tender as a violincello; with the double-bass, full-bodied, solid and black as a fine, old bitter beer. One might even, if anxious to make a quintet, add yet another instrument, the harp, mimicked with a sufficiently close approximation by the keen savour, the silvery note, clear and self-sufficing, of dry cumin.^{8(p44-45)}

Des Esseintes also cultivates the sense of smell, becoming an expert in perfumery, distinguishing basic scents and combinations during long sessions in which he masters "the grammar, [understands] the syntax of odours."^{8(p107)} Huysmans describes:

A mistress who found ineffable pleasure in certain aromatics and certain balms [...] the smell of chimney soot, of wet plaster from a house building in rainy weather, or of dust churned up by the heavy thunder drops of a summer storm.^{8(p113)}

Even more striking is the author's use of metaphor, evoking musical melodies through smells, in a correspondence activity in which he refers to the poetry of Baudelaire:

Of old, he had loved to soothe his spirit with harmonies in perfumery; he would use effects analogous to those of the poets, would adopt, in equal measure, the admirable metric scheme characterising certain pieces of Baudelaire's, for instance *l'Irréparable* and *le Balcon*, where the last of the five lines composing the strophe is the echo of the first, returning like a refrain to drown the soul in infinite depths of melancholy and languor.^{8(p110)}

The refinement of des Esseintes's sense of smell leads him to develop an olfactory Stendhal syndrome:

But next moment, the wind seemed to bring with it a vague breath of essence of bergamot, mingled with a smell of jasmine, cassia, and rose-water. [...] The odour changed and altered, however. An uncertain savour of tincture of tolu, balm of Peru, saffron, blended together by a few drops of amber and musk; [...] the scent of frangipane [...] filled all the air from the valley of Fontenay away to the Fort, assailing his exhausted sense of smell, shaking afresh his shattered nerves, prostrating him to such a degree that he fell swooning and half dying across the window sill.^{8(p116)}

5. Automatic memory

Automatic memory is based on emotional contact, in the sense that the perception of a sensory stimulus linked to

events of consolidated, previous emotional significance evokes a whole series of memories or events related to that perception, loaded with "affective valence," a term coined recently by Antonio Damasio.¹³ The concept of automatic memory is associated with Proust and the famous madeleine scene in "Combray," the initial part of the first volume of his magnum opus *In search of lost time*; however, it was the philosopher Henri Bergson, winner of the 1927 Nobel Prize for Literature, who systematised this association, linking it to perceptive memory and time.¹⁴ In fact, as the novel À *rebours* was published in 1884, it pre-dates Proust's description by 29 years. Let us analyse this scene and others that link automatic memory and synaesthesia.

The clearest example of affective reminiscence is the song of the cricket:

[...] he had suspended from the ceiling of the room we speak of a little cage of silver wire in which a cricket was kept prisoner to chirp [...]. Whenever he heard this sound, which he had so often listened to on many an evening of constraint and silence in his mother's chamber [...], a sudden commotion would shake his soul, a longing for revenge of dreary hours endured in former times.^{8(p10)}

The painful memory of having a tooth extracted is evoked in vivid detail through a particular aroma in one of the episodes of gustatory and olfactory synaesthesia discussed above:

The acrid, carbolic flavour forcibly recalled the very same sensation that had filled his mouth and burned his tongue while the dentists were at work on his gums. [...] Thereupon the drama had begun. [...] Des Esseintes had felt a sensation of cold in his cheek, then his eyes had seen three dozen candles all at once, and so unspeakable were the tortures he was enduring, he had started beating the floor with his feet and bellowing like an animal under the slaughterer's knife. [...] 'B'rrr...' He shivered, horrified at these dismal reminiscences. He sprang back up to break the horrid nightmare of his thoughts, and coming back to everyday matters [...].^{8(p46-48)}

6. Emotional disorders

The perceptive and emotional hypersensitivity that the decadents cultivated is reflected in their greatest representative, the character of des Esseintes. Des Esseintes seeks out manifestations of his intense and vivid emotional life, which are almost circumstantial to his experience of the search for truth, through sentiment itself. In this sense, these manifestations can hardly be considered pathological from the perspective of the description, although today they would have names and classifications. The following examples were identified in the analysis of *À rebours*:

Hypochondriac symptoms:

The dread of the disease will end by bringing on the disease itself $[\ldots]^{.8(p76)}$

Manifestations of anxiety

He felt stifled under the sheets, while his whole body was tormented with tinglings. $^{8(\mathrm{p}94)}$

Depressive symptoms:

[He felt] overborne by an unspeakable melancholy, by an obstinate distress, the mysterious intensity of which brooked no consolation, no comparison, no respite. [...] [He was] tormented by an anxiety the more implacable because he could no longer discover its cause.^{8(p193)}

Other symptoms resemble acute anxiety attacks:

Now, however, when his nerves were all sick and on edge, there were days when such reading exhausted him, days when it left him with trembling hands [...], feeling himself [...] seized by unreasoning pangs of dread, by a secret terror.^{8(p179)}

The narrator describes how des Esseintes's mental experiences were stimulated by attacks of "neurosis."^{8(p165)}

In one episode, des Esseintes even experiences sexual impotence associated with a lack of desire linked to his emotional state and which he is able to overcome by thinking of Siraudain bonbons (Siraudin was a famous Parisian confectioner of the 19th century), thanks to his sensibility and vivid emotions. The bonbons evoke olfactory-gustatory synaesthesia, directly implicating his erotic memory. Today, this would be considered a placebo effect. Huysmans describes the episode as follows:

These bonbons, an invention of Siraudin's known under the ridiculous name of "Perles des Pyrénées," consisted of a drop of sarcanthus scent, a drop of essence of woman, crystallized in a piece of sugar; they entered by the papillae of the mouth, evoking reminiscences of water opalescent with rare vinegars; and deep, searching kisses.^{8(p97)}

7. Physicians in À rebours

In the latter part of the novel, the narrative turns towards medicine, with des Esseintes developing more symptoms and greater functional impairment in addition to sensory and emotional hypersensitivity. With the combination of migraine, vomiting, loss of appetite, and severe anxiety and depression, des Esseintes recognises his own physical, mental, and also social decline, choosing a life of solitude and isolation in the countryside; Huysmans himself had done the same earlier in his life, although he had lived with a mistress, whereas des Esseintes leaves alone with a servant. With the onset of this phase of deterioration, the protagonist becomes aware of his illness, and seeks a medical consultation. Thus, physicians and medicine penetrate the novel, offering a window into aspects of historical as well as narrative interest.

Des Esseintes is well acquainted with a physician, whom he speaks about and summons from Paris. The physician is not named, but may be Axel Munthe¹⁴ or even Charcot,¹⁵ given des Esseintes's social standing and the description of the medic:

This physician was a noted specialist, renowned for the cure of nervous disorders. $^{8(\mathrm{p193})}$

The physician "asked the patient very few questions, knowing indeed his antecedents for many years past"^{8(p195)}; we should therefore not be surprised that des Esseintes should speak of neuroses, showing his familiarity with contemporary medical terminology and his real understanding of nervous diseases and even popular treatments, which are established in the therapeutic manuals of the day¹⁶:

No matter how learned and how perspicacious they may be, doctors really know nothing about nervous disease, the very cause of which they cannot tell. Like all the rest, he would prescribe the everlasting oxide of zinc and quinine, bromide of potassium and valerian.^{8(p193-194)}

Shortly thereafter, he speaks of how:

No better than quinine did the stomach tolerate iron, even mitigated by the addition of laudanum, and these drugs had to be replaced by preparations of arsenic.^{8(p197)}

While this may prompt us to think of syphilis, this was not the only indication.¹⁶

Des Esseintes's treatment does not end here; rather, this famous physician, a specialist on the nervous system, treats his dietary deficiencies with "peptone" injections and prescribes a diet of "cod liver oil (20 grammes), beef tea (200 grammes), Burgundy (200 grammes), yolk of one egg."^{8(p196)}

However, the physician's main approach is to prescribe caution, trying to force des Esseintes to return to the reality he wishes to ignore and explaining the pressing need to return to the city, to entertainment and society, in order to avoid madness or death: [The doctor] simply assured his hearer that this radical change of life which he ordered was in his opinion a matter of life and death, of restored health or insanity followed at short notice by tuberculosis.^{8(p198)}

Des Esseintes does not accept this ("Then it is a case either of death or deportation!"). This exchange is a clear example of what we now recognise as the paternalistic nature of 19th-century medicine, a century before the emergence of bioethics and the principles of autonomy in the therapeutic field. The all-powerful role and absolute, patriarchal attitude of physicians at the time is well demonstrated in the following passage:

[The doctor] had merely repeated in a dry tone admitting of no reply, that his verdict, confirmed moreover by all the writers on nervous diseases, was that distraction, amusement, cheerfulness, were the only means of benefiting this complaint [...]. Finally, annoyed by his patient's reproaches, he had once for all declared his refusal to go on with his case unless he consented [...].^{8(p199)}

Given des Esseintes's dissatisfaction, he seeks to compare his physician's diagnosis and proposed treatment against the recommendations of other physicians (a second opinion):

Des Esseintes had immediately repaired to Paris, where he had consulted other specialists and frankly submitted his case to them; all had with one accord and unhesitatingly approved their colleague's prescriptions.^{8(p199-200)}

Therefore, he received a concordant diagnosis.

Discussion

Insights from À rebours: interpretation and discussion

The concept of degeneration constitutes a key theme in the novel. Intuitively, it appears linked to the term "decadence," which was used to refer to this group of writers, who in turn associated it with the state of contemporary society. Nothing could better describe this social situation than degeneration theory: sagas of individuals affected by progressive mental, moral, and physical decline, and suffering physical illnesses considered to be caused by social decadence. These included venereal diseases, principally syphilis, but also such moral "afflictions" as sloth, insensitivity to fellow man, and behavioural degradation, eventually leading to crime. All these blemishes would be transmitted to successive generations, who would eventually become profoundly intellectually disabled, poisoned by alcohol and drugs, and marginalised, and would transmit these problems not only to their own class but to the rest of society, spreading physical disorders (like syphilis) and making victims of their depraved behaviour.⁹

Degeneration theory was influential in all areas of culture, permeating science, medicine, anthropology, and law. This trend is also observed in Spain (see the excellent descriptions by realist and naturalist writers including Galdós and Pardo-Bazán) and the rest of Europe and the United States. However, it was most influential in France, where it was first conceived by Morel in his 1857 book Traité des dégénérescences physiques, intellectuelles et morales de l'espèce humaine. Important figures in the dissemination and influence of degeneration theory were Maudsley, who profiled the clinical traits and described increasing degeneration in successive generations; Lombroso, an Italian criminologist who proposed the existence of inherent physical and behavioural traits by which to identify criminals; and finally Francis Galton,¹⁸ who was known for his ideas of "racial hygiene." Familiar with his relative Darwin's theory of evolution, and with Mendelian inheritance, he considered this degeneration to be both genetic and environmental in origin. These individuals represented a risk to society, and eugenics was needed to defend against them. This saw the emergence of such proposals as marriage restrictions, sterilisation, and diagnostic or therapeutic interventions on immigration. This explains why customs posts in the United States almost immediately adopted the intelligence quotient (developed in 1904 by Binet on the orders of the minister of education, who wanted a test to distinguish children with intellectual disability from those who were merely disinterested) to detect suspected degenerates among the thousands of immigrants arriving in the country, according to Stephen J. Gould.¹⁹ It would be nearly half a century before the largest eugenics policy in history would be enacted, and birth registries in countries around the world were becoming filled with Eugenes and Eugenias; the popularity of these names dropped exponentially after the Second World War.18

The originality of Huysmans's novel lies in the fact that those depicted as degenerates are not the lower classes, as was dictated by the official doctrine,^{9,18,19} but the nobility. The upper classes, considered until then to be the most distinguished, are portrayed as victims of degeneration; this is a perfect metaphor for denouncing the morality of the time, the tedium, corruption, and decadence characterising the nobility. This phenomenon goes beyond a simple caricature of degeneration theory, as it is interpreted by Herrero in his introduction to the Spanish translation of the novel.² Indeed, it constitutes a symbolic transformation, which is highly appropriate for the purposes of the unmasking required of intellectuals (both then and now) to perform.

Huysmans skilfully employs naturalist narrative techniques in his writing; this is shown both in the intelligent transition of values described above, and in his art criticism, typified by his analysis of the medieval painter Grünewald's image of Christ on the Isenheim Altarpiece. He interprets this Christ, ugly and disincarnate, as a divine reflection of humanity's corruption, expressed through the painting's monstrous, carnal cruelty.²⁰ For models, Grünewald used cadavers with visible areas of ischaemia in different phases of progression ranging from cyanosis to necrosis; they would have died from Saint Anthony's fire, a common form of ergotism caused by consumption of rye bread (a staple in times of poverty) contaminated with rye ergot fungus, which produces ergot derivatives in the bread dough.21

In addition to the genetic and hereditary nature of degeneration, we should also comment on other neurological disorders mentioned in the novel. It was known at the time that migraine was hereditary, and that syphilis could be transmitted both horizontally and vertically. The fact that Huysmans's protagonist should suffer from migraine, and the allusions to syphilis, therefore seem logical. Despite its obvious link to decadence, the author does not directly assert that des Esseintes has syphilis. It is highly likely that due to the many similarities between Huysmans and his protagonist, to do so would have been to admit that he himself had the disease. Given the high mortality rate associated with syphilis, which led to mental alienation and affected his contemporaries Maupassant, the Goncourt brothers, and Toulouse-Lautrec,²² among others, Huysmans understandably would have wanted not to raise suspicion about himself. This seems the most reasonable explanation that the protagonist does not suffer from a disorder that repeatedly appears in his imagination and speech, but which he never confesses to himself (whereas he does acknowledge his degeneration and all the associated disorders). If Huysmans did have syphilis, he concealed it well: no mention is made in any

biography, and he lived to the age of 59, when he died of mouth cancer.

Huysmans employs degeneration theory in an original manner, shifting the most genuine sense of the concept onto the nobility. He does not make distinctions based on gender, nor are the disorders inherent to the concept of degeneration (syphilis, migraine, neurosis) shown predominantly to affect women. This stands in contrast to the depiction of these disorders in other works,¹¹ in which they originate in and are spread by women. This trend reflects the male distrust of women and the clearly defined gender roles of the latter half of the 19th century; it would be a century before women's rights were recognised (much later than the rights of the child, which were established in the 19th century).

An essential resource for decadent artists was the cultivation of the different senses. Not only did they consider each sense individually, but they also searched for correspondences between them,²³ beginning with the poems "Correspondances" by Baudelaire and "Voyelles" by Mallarmé.²⁴ This question constituted a great preoccupation for the intellectual class of fin-de-siècle Paris, which sought a formula for a translation between the different senses, a kind of universal algorithm for understanding the correspondence between the arts: musical notes (melody) and painted colours, or flavours and smells, differentiated to the limit of sensory perception (a central element in the novel À rebours) with other forms of perception, such as music (in the case of des Esseintes) and literary language (Baudelaire and Mallarmé). This environment of phenomenological investigation and exchange of information was recently addressed in an original essay.²⁵ We know that connections were established between different areas of the arts, science (naturally the area of greatest interest for the purposes of the present study), and alchemy and the occult; the latter had a long history and was of great interest to decadent artists. In addition to cultivating the senses, we should note the importance of spirituality to these writers in their search for truth and in revealing the degeneration of the society in which they lived.³ This may be why, years after the publication of À rebours, Huysmans sought refuge in Catholicism, becoming a Benedictine oblate late in life.^{2,3}

Let us now address the scientific interest of the novel, beginning with the phenomenon of synaesthesia. The

term synaesthesia (from the Greek σύν syn, "together," and aloonoic aisthesis, "sensation") refers to the joint perception of two sensory modalities, with a sensory stimulus leading to sensations both in that modality (inducer) and in a completely different one (concurrent). Given this experience, what could be more natural than to have recourse to the world of synaesthesia in the search for a grammar and correspondence between sensory modalities? One of the most distinguished synaesthetes, the painter Kandinsky,25 dedicated a book to this task in 1904. Neither is it rare for today's artists to ask experts on synaesthesia about these same correspondences.²³ Therefore, not only does Huysmans demonstrate a sequela of fin-de-siècle Parisian trends in his expert portraval of synaesthesia²⁴; he also stands as a pioneer in this neuroliterary field. He should be doubly commended, as in addition to the originality of his description, Huysmans was not himself a synaesthete. Artists who did have the condition include the painters Kandinsky (who used his own sensory experiences in the search for translation between the arts) and van Gogh; such great musicians as Alexander Scriabin, Rimsky-Korsakov, Oliver Messiaen, Franz Liszt, and Jean Sibelius; the writer Nabokov; the philosopher Wittgenstein; and scientists including Nikola Tesla and Richard Feynman.

The first accurate, scientifically rigorous description of synaesthesia was by Francis Galton (also an important thinker in degeneration theory) in an article printed in Nature in 1880, four years before the publication of À rebours, providing precise clinical features and describing the hereditary nature of the condition. Numerous texts have since been published, with the number of publications on the subject increasing exponentially in the 21st century.^{23,26} Given this understanding, we know that the attempts by Kandinsky, Huysmans, and other fin-de-siècle artists to find correspondences between the senses were doomed to failure. Put simply, synaesthesia does not work in this way²⁶: these are perceptive processes (not cortical processes involving memory or imagination) that are consistent and stable over time, with one or at most two or three simple variants (the most common being grapheme-colour synaesthesia, where letters or numbers appear to have colours), which operate unidirectionally, automatically, and immediately. Perhaps the only feature shared with the exploration and profile characterised in the arts is the emotional aspect: these sensory experiences are so clear, so profound, that they cause a sense of satisfaction; similarly, incongruence

between the inducer and the concurrent (seeing letters in a colour other than their actual colour) leads to discomfort due to excessive connectivity between perceptive cortical areas and the limbic system.²⁷ Neuroliterary or artistic portrayals are accurate in this respect, despite the incompatibility of the other traits described with the actual clinical profile of individuals with synaesthesia. We now know synaesthesia to be a trait and a spectrum of sensations that is relatively common in the population (2%-5%). This high prevalence is explained by evolutionary advantages associated with the condition. Essentially, synaesthetes are able to detect differences between that which appears the same or similar, linking this ability with such neurolinguistic skills as metaphor, or with creativity.²⁶ This is probably the reason for the greater prevalence of synaesthesia among artists than in the general population, a recent subject of discussion.^{23,27}

Secondary and induced synaesthesias, particularly secondary to the consumption of drugs (typically hallucinogens) are also reported; this phenomenon was described by Théophile Gautier in 1843. In À rebours, Huysmans mentions numerous therapeutic and recreational substances that may provoke synaesthesia; these include absinthe and morphine derivatives, and potentially a great many more than those noted in the results section. While it is plausible that Huysmans himself may have experimented with these substances, hence being able to describe the experience first-hand, the clinical and biographical evidence does not support this. These synaesthesias are not automatic, show high inter-subject variability, and are usually accompanied by hallucinations and intense experiential flow²¹; these phenomena are not mentioned in À rebours. Likewise, the author is not known to have experimented with hallucinogens or other drugs, as is the case with Baudelaire and Mallarmé, for example; rather, he was more interested in spiritual, almost mystical, recreation.^{2,4}

To complete our analysis of the novel, we should underscore Huysmans's originality, with two pioneering descriptions. Firstly, the case of olfactory Stendhal syndrome, which had not previously been described: the syndrome is characterised as an emotional hypersensitivity to beauty, usually visual beauty but also acoustic or environmental in the broader sense (Jerusalem syndrome). Secondly, automatic memory, evoked not by taste (as in Proust's madeleine episode), but by sound; this description pre-dates Proust's by a quarter of a century, as noted by Herrero.² Near the end of the novel, we encounter physicians specialising in "nervous maladies." As mentioned earlier, these were the golden years of Jean-Martin Charcot and his rebellious disciple Axel Munthe, both of whom were renowned for treating neurotic conditions in noble patients¹⁵; it therefore seems likely that Huysmans would use traits of one or the other (or both) for the purposes of literary characterisation of the physician in À rebours. The character's imposing personality corresponds with the authoritarian, paternalist style of 19th-century medicine, which we continue to draw on for purely clinical insights, despite great ethical advances made. The respected, influential medical professor is an important figure in 19th-century literature. Similar figures are found in the work of Pérez Galdos, Stendhal, and Chekhov,^{9,15} and stand in contrast with other physicians in works by the same authors, who are described as hard-working, self-sacrificing, and humbly devoted to their profession. Both types of physician existed, and serve different narrative purposes. Firstly, physicians of great prestige were more appropriate for treating characters belonging to the upper class, such as des Esseintes. Like his protagonist, Huysmans lived through a golden age of neurology, with a generation of clinicians who, based on their biographies, could themselves have been literary characters (one example being Gilles de la Tourette, who was the victim of attempted murder by a hysterical patient, Rose Kamper, and also displayed traits of the syndrome he described²⁸), and a multitude of descriptions of neurological disorders that were almost simultaneously profiled by neuroscientists and portrayed in literature, as was the case with hysteria²⁹ and many other neurological disorders.^{3,9} The observations of the present study represent part of this tradition.

Conflicts of interest

The author has no conflicts of interest to declare.

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