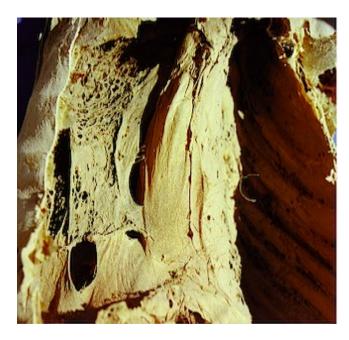


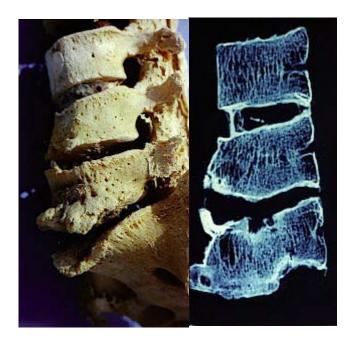


# Tuberculosis in humans has an ancient history, often revealed by paleopathology.

### Mummies from ancient Egypt show evidence of tuberculous disease in their bones.



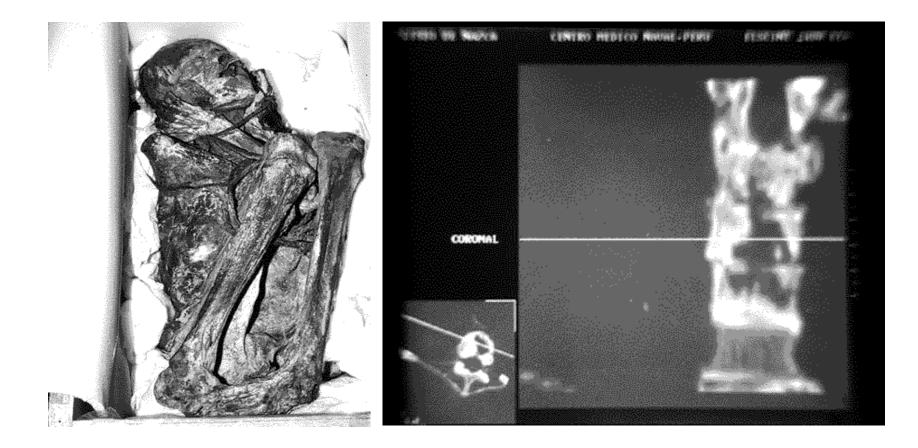




### Mummy of the Egyptian priest Nesphereân, XXIst dynasty (about 1000 BC).

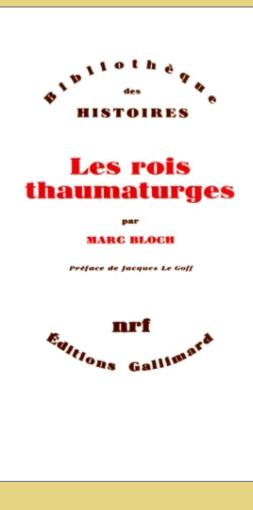
Torso presenting with extensive pleural adhesions and anterior destruction of two lumbar vertebral bodies.

CT scans revealed osteolytic destruction with osteosclerotic margins.



Similar findings may be seen in the New World, such as Mummy 67466 from the Museo Nacional, Lima, Peru.

Here, the coronal CT scan shows osteolytic lesions involving T10-T12



Another form of tuberculosis, namely, swelling of the lymph glands, predominated in a form known historically as scrofula, or the "King's Evil', since monarchs were believed to receive from God a healing power at the time of their anointment.



'Ceremonies of the touch' were performed by the French and English monarchs to cure the swelling in the necks of those suffering from scrofula. **Tuberculosis emerged as a major plague** in the XVIII and XIX centuries, when the massive changes brought about by trade, urbanisation, industrialisation and immigration deprived people of nutritious food, subjected them to long working hours, and housed them in wretched, crowded tenements.



In the first half of the XIX century more people in the Western world died of tuberculosis than of any other epidemic disease.

Mortality rates due to tuberculosis probably ranged between 300 and 500 per 100,000 population.

In England and Wales, over 50,000 people died from tuberculosis annually, compared with the 40,000 cholera victims in the worst single year for cholera, 1849.



Lungenschwindsucht. Philips pulmonalis.

The increased density of people provided the ideal conditions for the aerial transmission of pulmonary tuberculosis, known earlier as 'consumption' or 'phthisis'.

The wasting away that the disease causes, with cachexia, or excessive thinness, accounts for the name 'consumption' which was commonly used in the nineteenth century.

The victim seemed to be consumed by an inner fire, became thin, pale, weak and feverish.

- The disease acquired an air of fashion because of certain cultural circumstances.
- Some, having looked at the list of writers, composers and artists affected by tuberculosis, believed that sensitive souls were prone to consumption, and that tuberculosis sparked genius.

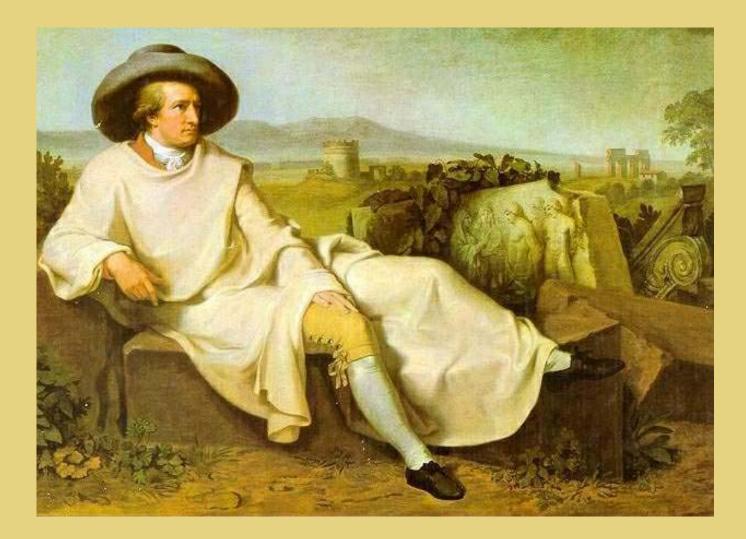
This patina of romanticism helped disguise the even greater impact that tuberculosis had on the poor, especially the urban working class.

In reality, of course, most of its victims belonged to the lower order, even though association with misery and poverty only became more widely acknowledged later in the century.



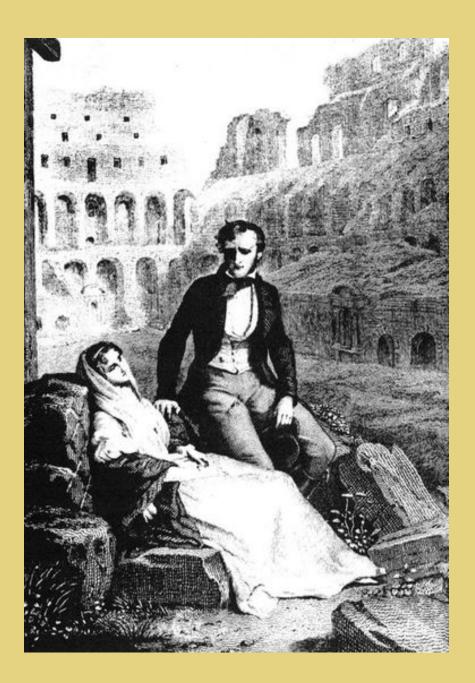


### Samuel Luke Fildes. *Applicants for Admission to a Casual Ward*. 1874



Meanwhile, the wealthy people enjoyed a period of European travel, the so-called *Grand Tour*, lasting from a few months to eight years, with primary destinations of Italy and the Mediterranean countries. Seeking relief, wealthy consumption victims travelled to warmer climates or undertook sea voyages. Such travels often took them to the Mediterranean, referred to as 'the last ditch of the consumptive'.

However, in the Mediterranean countries, the tubercular travellers met hostility that added to the pathos of their stories.



Early in the century, René de Chateaubriand discovered, at his expense, how the fear of contagion was alive in Italy.

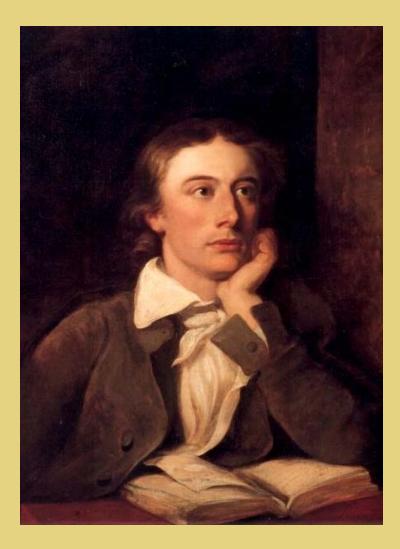
He had much difficulty finding a house to rent in Rome for his friend Madame de Beaumont, who was suffering from advanced phthisis.

He put his carriages on sale in order to secure funds, finding, to his great surprise, that he could find no buyers. The reason: Madame de Beaumont had been seen riding with him two or three times.

Nobody wanted to buy the 'contaminated' carriage, and he was ordered to burn it. John Keats was fourteen years old when his mother died of tuberculosis.

More than twenty years later, on February 3, 1820, he coughed up blood.

He took several short sea voyages, but found himself too weak to sustain lengthy trips.





Reluctantly and perhaps fearfully, Keats accepted the advice of his physicians and friends and decided to go to Italy.



Frightened by his consumption, the Roman landlady and her maid would do nothing to help. His friend Severn had to make the beds, light the fire, and fetch the food by himself.

**On February 23, 1821, Keats died peacefully, as in his sleep.** 

Autopsy showed the lungs to be almost entirely destroyed, his physician wondering how he had managed to survive during the last few months.



Although syphilitic and consumptive since early manhood, Nicolò Paganini had given, throughout his life, strenuous recitals all over Europe.

In 1818, during a concert tour in Naples, Paganini suffered a severe relapse of his disease

Very soon his landlord guessed the nature of the illness. Alarmed at having in his house someone suffering from the dreaded malady, he turned the tenant out into the street with all his possessions.





In Majorca, the natives refused to have anything to do with Chopin or his party, and asked him to pay for his 'infected' bed at the inn.

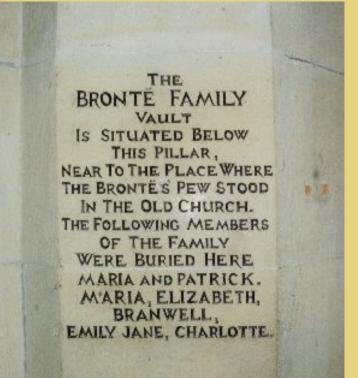
In fact, early Italian and Spanish laws included public health measures not employed in the rest of Europe - and North America – until a century and a half later.

The first regulations requiring reporting of tuberculosis in England were enacted in 1903. Similar rules were put into effect in other Northern European countries about the same time.

**Georges Sand was both surprised and** indignant that the Spaniards ('egotist and coward') could consider tuberculosis to be an infectious disease rather than an hereditary, non-transmissible condition.

How else but by invoking heredity could one explain the remarkable spread of tuberculosis within the Brontë family?

Not knowing of the long and variable incubation period of tuberculosis, one could not understand how an infectious disease could spread by contact and crop up at such different times and ages in the six Brontë children.





In Jane Eyre, Charlotte Brontë describes the illness of a friend of Jane's at Lowood School, in which living conditions were Spartan at best, as in the school that the four oldest Brontë girls had actually attended...

#### JANE EYRE.

An Autobiography.

CURRER BELL.

IN THREE VOLUMES. VOL. I.

LONDON: SMITH, ELDER, AND CO., CORNHILL.

1847.



...and in *Wuthering Heights* Emily Brontë allowed many characters to die of some form of consumption.

#### WUTHERING HEIGHTS

A NOVEL,

ELLIS BELL,

IN THREE VOLUMES.

VOL. I.

LONDON:

THOMAS CAUTLEY NEWBY, PUBLISHER, 72. MORTIMER St., CAVENDISH Sq.

1847.

The prevalence of tuberculosis among romantic heroines helped to create a new image of the desirable female, one who was pale, weak, slender, with cherry lips and flushed cheeks, a long neck and hands, shining eyes, who was often depicted lying on a couch reciting poetry.

Having tuberculosis was imagined to be an aphrodisiac, and to confer a kind of physical beauty and extraordinary powers of seduction (and sexual indulgence).

So glamorised was this image that healthy teenage girls strove to achieve a consumptive look to make themselves more desirable: a wasted pallor was considered a fashionable beauty, whitening powders replacing rouge.

## The Pre-Raphaelite artists of England, in the mid-nineteenth century, exaggerated the thinness and paleness of their female subjects.





To those living during the Victorian Age (1837 to 1901), tuberculosis was romantic and attractive, too, because the disease produced no obvious repulsive lesions, as did syphilis.

The best-sellers of the Victorian Era abound in diseases, and consumption provided a natural manner to dispose of a character and facilitate the plot.

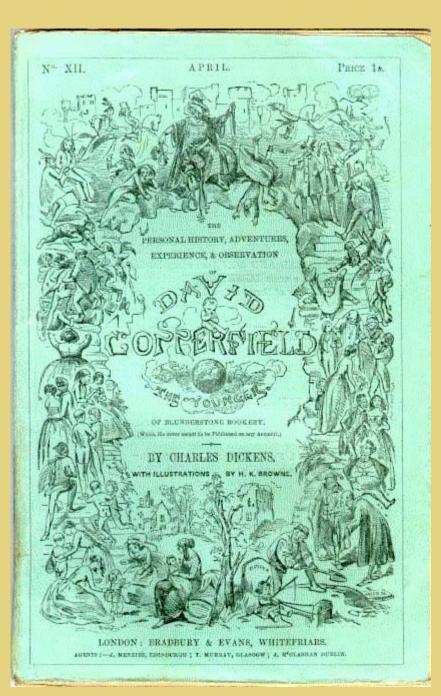
Disease was rarely presented as something negative, unless it affected the villain. Rather, it was used as a device to enlist the sympathies of the reader.

**Dubos. The White Plague** 



Even the most skilful novelists made use of such a convenient device, perfectly believable because the death of young people was a common occurrence.

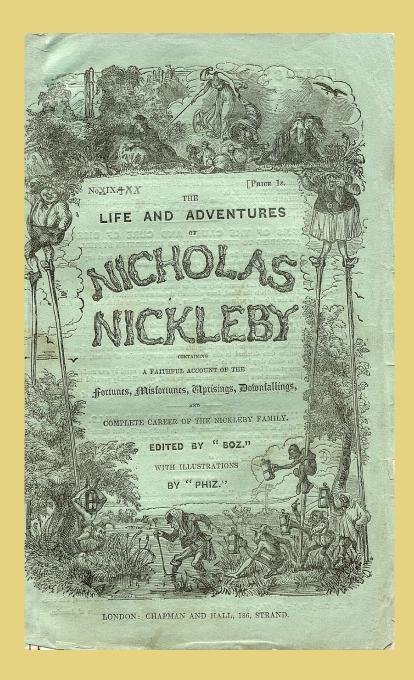
Consumption served the purpose well since it was believed to affect chiefly sensitive natures, and conferred upon them a refined physical charm before causing them to succumb to a painless, poetical death.



In *David Copperfield* Dickens lets Little Blossom die gracefully without disfigurement, almost with any symptoms:

But, as that year wore on, Dora was not strong. ... The spirit fluttered for a moment on the threshold of its little prison, and, unconscious of captivity, took wing.

There is a dread diseases, which so prepares its victims, as it were, for death ... a dread disease. In which the struggle between soul and body is so gradual, quiet, solemn, and the results so sure, that day by day, and grain by grain, the mortal part wastes and withers away, so that the spirit grows light ... a disease in which death and life are so strangely blended that death takes the glow and hue of life, and life the gaunt and grisly form of death – a disease which medicine never cured, wealth warded off, or poverty could boast exemption from – which sometimes moves in giant strides, or sometimes at a tardy sluggish pace, but slow or quick, is ever sure and certain.

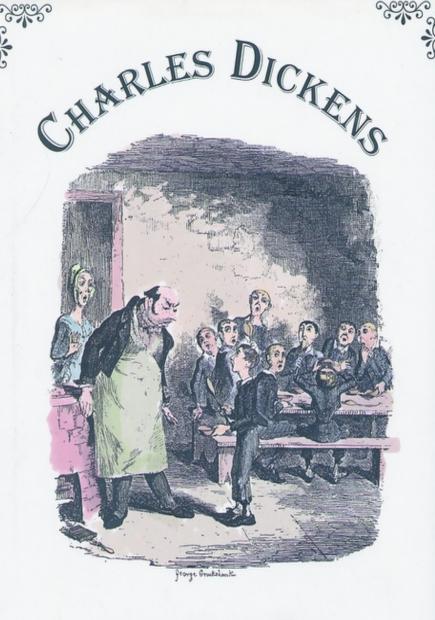


Oliver Twist, the juvenile protagonist of Dickens' 1838 novel, was born in a workhouse.

His mother is romantically described by Dickens at the beginning of the novel in a passage that reads: The pale face of a young woman was raised feebly from the pillow; and a faint voice imperfectly articulated the words, 'Let me see the child, and die.'

Dickens does not offer a cause of death for this pale woman, but he might well have chosen tuberculosis.

In 1844, a survey in an English workhouse found that all of 78 boys and 91 of 94 girls showed signs of the disease.



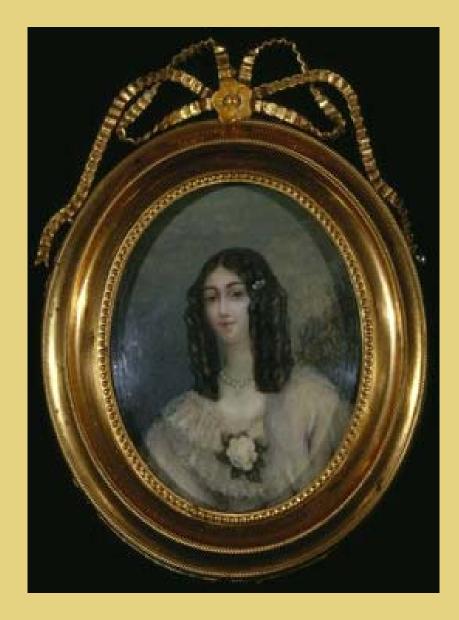
OLIVER TWIST

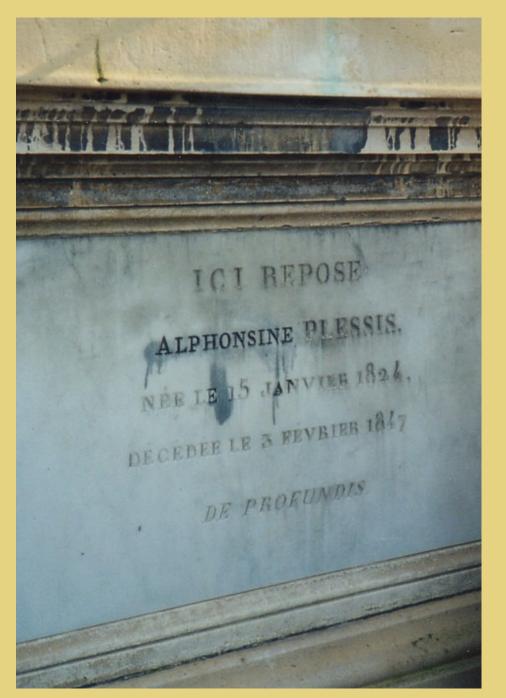




Like their English counterparts, many of the romantic heroines of French literature during the XIX century were consumptive and died young. The model for Margherite Gauthier, in *La Dame aux Camélias*, was Alphonsine Plessis (then Marie Duplessis), one of the fashionable courtesans of the day.

Marie, who had a brief liaison with Alexandre Dumas *fils*, while in a state of advanced pulmonary consumption, continued, to the end, a whirlwind of social life, being the centre of worshipful attention wherever she went.





She finally died in 1847, at the age of twenty-three.

According to Charles Dickens, who attended the public sale of her belongings in Paris, one could have believed that Marie was a Jeanne d'Arc or some other national heroine, so profound was the general sadness.

La Dame aux Camélias, written by Dumas under the influence of the immediate emotion, enjoyed an enormous success, and it became the custom for lovers to take camellias to the grave of Marie-Alphonsine in Paris.



#### Marguerite ... always had with her a bunch of camellias.

### For twenty-five days in every month the camellias were white, and for five they were red.

No one ever knew the reason for this variation in colour, which I mention but cannot explain.

## This allusion was sanitised when Verdi utilised the plot of *La Dame aux Camélias* in *La Traviata*.



But the model of another famous heroine dying of tuberculosis in a lyric opera also lived in Louis-Philippe's Paris.

In 1848, Henri Murger achieved literary success with his novel Scènes de la Vie de Bohème.



Tuberculosis appears frequently in one allusion or another in the novel, which one year later was made into a play and much later served as the basis for Puccini's opera *La Bohème*.



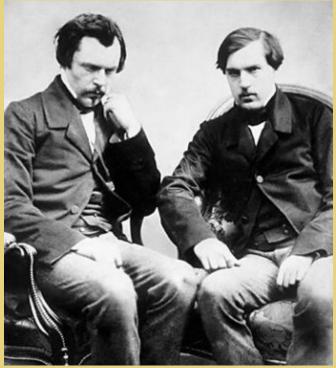
The model for Mimi of the opera *La Bohème* (Mimi/Francine in the novel) was a flower girl of humble origin, married to a poor shoemaker and seeking adventure and romance in a group of unconventional artists and writers, of which her lover Murger was one of the leaders.

She was already very ill, and after a year had to be taken to the Hôpital de la Pitié, where she died of tuberculosis in 1848.

When Edmond and Jules de Goncourt decided to spend some time at the Hôpital de la Charité to obtain material for their novel *Sœur Philomène*, the first death they had occasion to report was that of a phthisiac forty-year-old patient.

And a few days later, having witnessed an older consumptive man being turned out into the snow, they were told that '*if we accepted all the phthisics ... we would not have any room left for other patients*'.





In early XIX-century France medical institutions took advantage of the large numbers of impoverished patients gathered together in Paris hospitals.

They were carefully physically examined during life, and then dissected upon death so that correlations could be made between examination and pathological findings.

**Tuberculosis was a key element in what has been called the 'Paris School' of clinical medicine.** 

## L'AUSCULTATION MÉDIATE

DE

OU

#### TRAITÉ DU DIAGNOSTIC DES MALADIES

#### DES POUMONS ET DU COEUR,

FONDÉ PRINCIPALEMENT SUR CE NOUVEAU MOYEN D'EXPLORATION.

#### PAR R. T. H. LAENNEC,

D. M. P., Médecin de l'Hôpital Necker, Médecin honoraire des Dispensaires, Membre de la Société de la Faculté de Médecine de Paris et de plusieurs autres sociétés nationales et étrangères.

> Miya di µişət iyilyan the tixte siran të dërastan suonin. Pouvoir explorer est, à mon avis, une grande partie de l'art. HIPP., Epid. 111.

#### TOME PREMIER.

#### A PARIS,

CHEZ J.-A. BROSSON et J.-S. CHAUDÉ, Libraires, rue Pierre-Sarrazin, 1º 9.

1819.

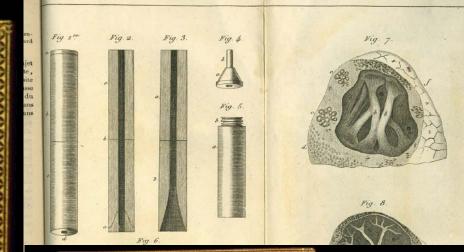


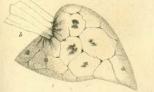
Fig. 3.

Fig. 4

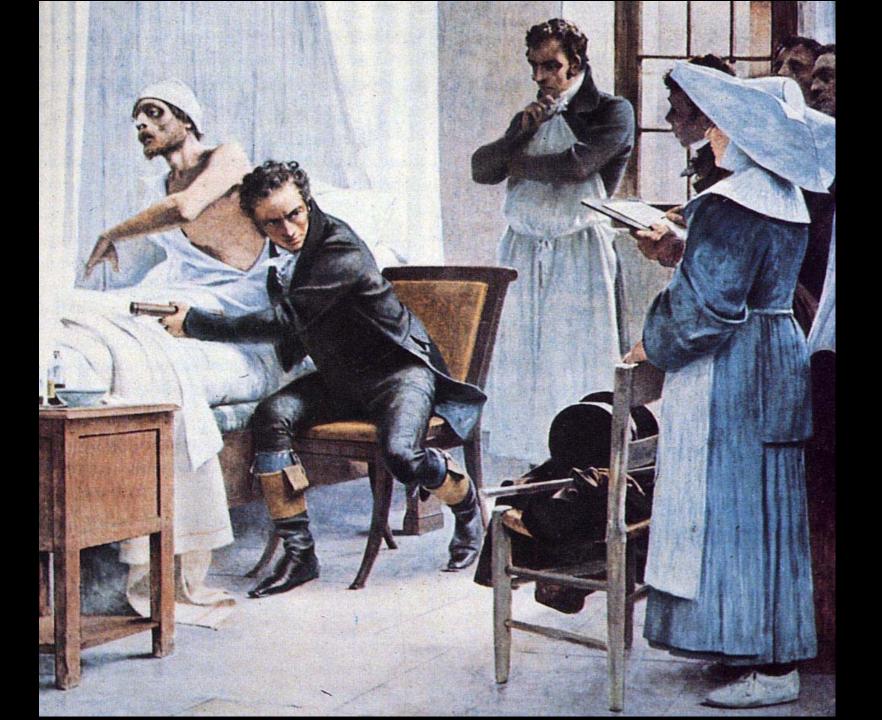
THE REAL PROPERTY OF THE PROPE

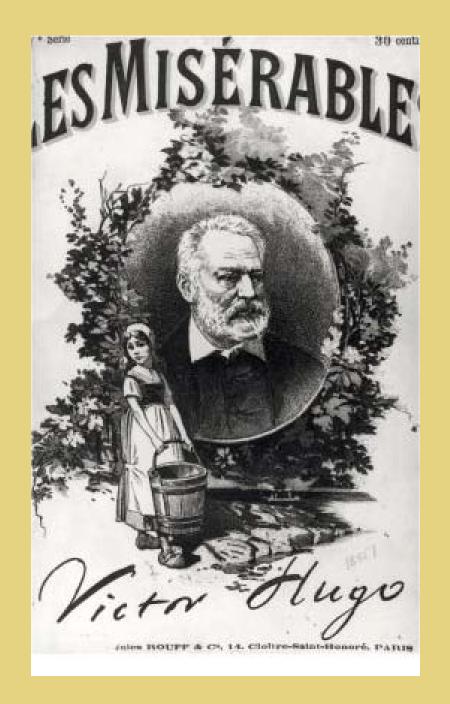


Fig. 2.



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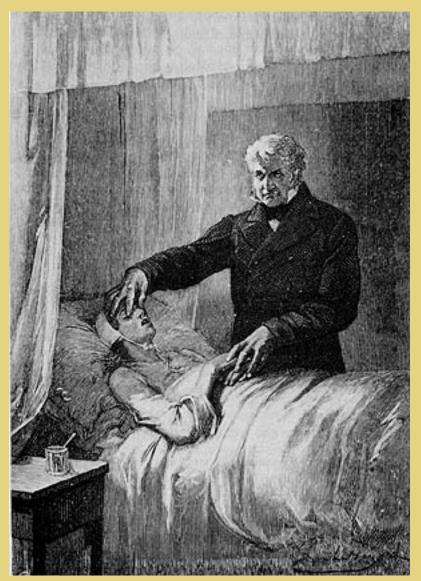
Fantine suffers and dies from "consumption":

**Excessive work fatigued Fantine, and her slight dry cough got worse. (...)** 

A burning fever had come on. She passed a part of the night in delirium and raving.

At that time people were beginning to follow the fine Laennec's fine suggestions in the study and treatment of chest maladies.

The doctor sounded Fantine's chest and shook his head.



Sugar is the most desiccating of all salts; it sucks the liquids of the blood through the veins; hence the coagulation, and then the solidification of the blood; hence tubercles in the lungs, hence death.

That is why diabetes borders on consumption. Then, do not crunch sugar, and you will live. One day Fantine received from the Thenardiers a letter couched in the following terms: 'Cosette is ill with a malady which is going the rounds of the neighbourhood. A miliary fever, they call it.'

On her return, she said to Marguerite:

' What is a miliary fever? Do you know?'

'Yes,' answered the old spinster; 'it is a disease.'

' Does it require many drugs?'

'Oh! terrible drugs.'

' How does one get it? '

' It is a malady that one gets without knowing how.'

' Do people die of it? '

'They may' said Marguerite.



Gavroche ... went, came, mounted, descended, remounted, whistled, and sparkled.

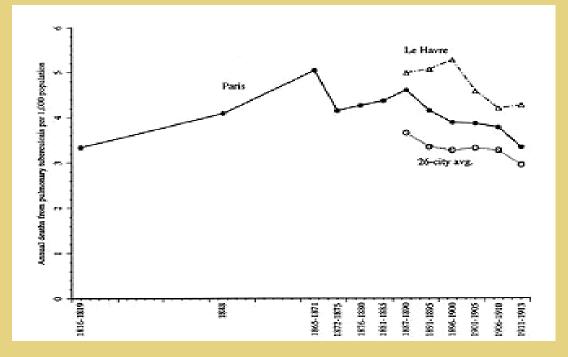
Your barricade is very small. It must be carried up. Put everything on it. ... Hullo, here's a glass door.'

This elicited an exclamation from the workers. 'A glass door? what do you expect us to do with a glass door, tubercle?'

'Hercules yourselves!' retorted Gavroche. 'A glass door is an excellent thing in a barricade. ...

So you've never prigged apples over a wall where there were broken bottles? '

As the XIX century went on (and the disease mortality rate started to fall) many thinkers came to view consumption more clearly as a social problem, rather than as a condition linked with romantic sensibilities.



In France, following the shift from hereditary essentialism to contagionism, it was now held to be a national scourge, highly contagious, lurking around every corner and symptomatic of moral decay.



NAPOLEON III. AND BISMARCK ON THE MORNING AFTER THE BATTLE OF SEDAN.

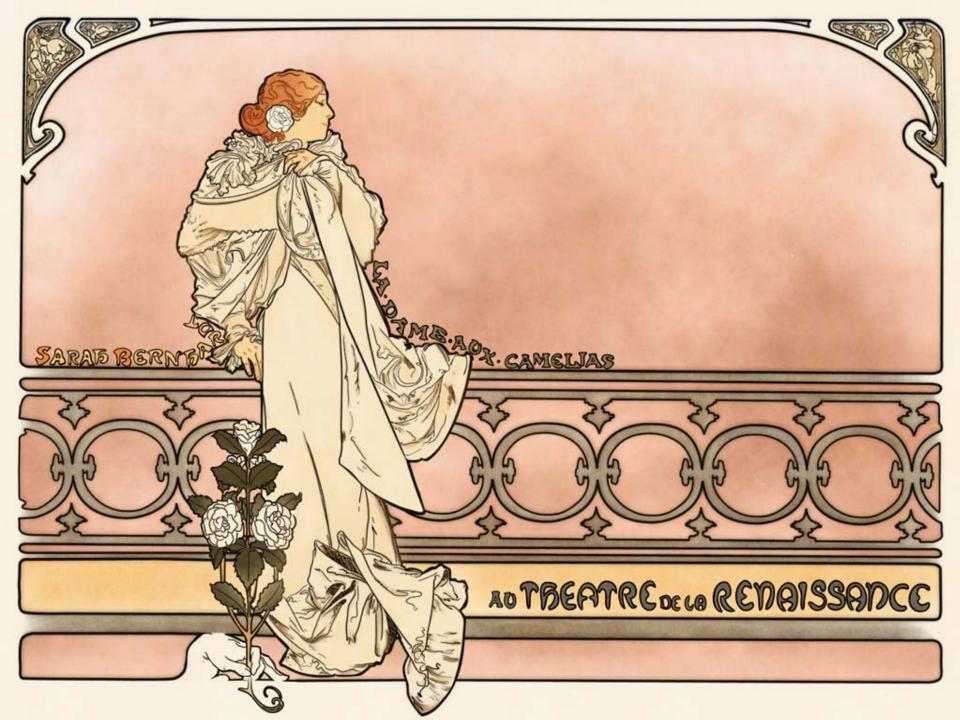
FROM A PAINTING BY WILHELM CAMPHAUSEN.

Associations with tuberculosis and romantic suffering did not disappear; the consumptive images of Sarah Bernhardt (on the stage) and Thérèse de Lisieux (in real life) remained a part of late XIX-century French conceptions of tuberculosis.

Both played important roles in the elaboration of a versatile and long-lasting cultural vision that associated tuberculosis with a heightened state of creativity, emotion, and spirituality and that lent a tragic and redemptive quality to the disease. In autumn of 1897, at the zenith of her popularity, the 'divine Sarah' began a financially successful and critically acclaimed run of *La Dame aux camélias*, the work with which she is more closely identified than any other in her long career.

Her portrayal of Marguerite Gautier, the kind-hearted courtesan doomed to an untimely death, epitomised to many of her admirers her brilliance on the stage.

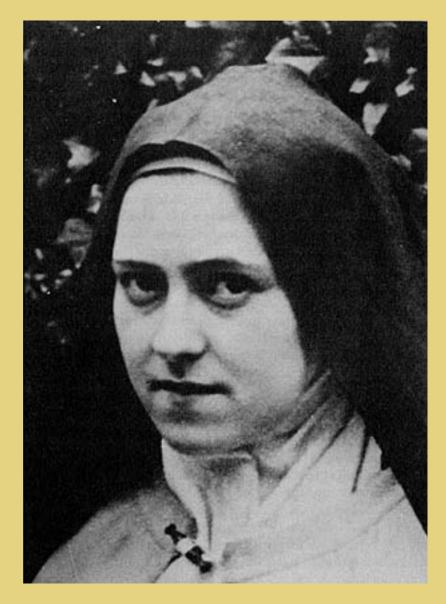




Also in the autumn of 1897, a young nun in the Carmelite convent of Lisieux was enacting her own death scene from tuberculosis - this one all too real, but no less staged.

Twenty-four-year-old Thérèse Martin had led an uneventful and sheltered life, taking the veil at age fifteen.

Her precarious health had deteriorated under the assault of tuberculosis, and she spent much of her last few years in the convent's infirmary.

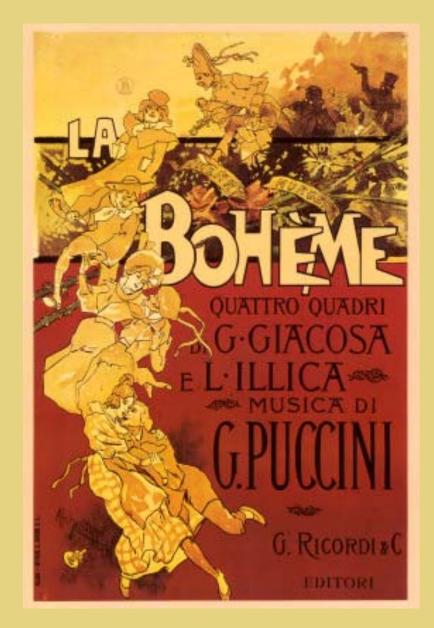




During her illness, Sister Thérèse began to keep a diary at the insistence of the mother superior.

She continued to record her emotions right up until her death, after which the convent authorities published her writings as an autobiography, entitled *Story of a Soul*.

Thérèse soon became a cult figure among Catholics both in France and abroad. In 1925, she became Saint Thérèse of the Child Jesus, and during World War II, Pope Pius XII proclaimed her co-patron saint of France, along with Joan of Arc. The romantic view of the creative, artistic tubercular victim persisted outside France as well. Puccini's La Bohéme was first performed in 1896.



- The Puccini opera may also illustrate the point that more often slums, rather than literary salons, yielded the prototypical consumptive.
- It also exemplified a further burden of stigma, which associated poverty with tuberculosis, in a symbiotic relationship of individual failure.



If tuberculosis had often taken on a romantic aura, it was mostly because the golden youth were cut down in a tragic way.

Possibly its tremendous impact on the people's imagination is best represented by the comment of Henri Murger in his 'Scenes de la vie de Bohéme', so aptely translated into Puccini's music:

# La jeunesse n'a qu'un temps

