

The Name of the Rose/ Der Name der Rose (1986). Basic Aspects of Monastic Medical-Pharmacological Knowledge in the Middle Ages

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Summary

The film entitled *The Name of the Rose* is based on the novel of the same name by Umberto Eco. It is a mediaeval thriller that can be of use for teaching certain aspects of the history of medicine and of pharmacy. Its viewing, directed by an instructor, can help students to gain knowledge of the socio-political context of the times; it improves their overall training and their understanding of a dark period in human history, in which the clash between rationality and a magical-religious view of the universe strongly conditioned the development of the sciences and, in particular, of the medical sciences. This article reviews the main aspects of the monastic medical-pharmacological knowledge through the scenes and dialogues in the film. It is certainly not our intention to analyse the literary work or the faithfulness of its adaptation to the cinema.

Keywords: Middle Ages, Monastic medicine, Monastic pharmacy, Science.

Technical details

Title: *The Name of the Rose*

Original title: *Der Name der Rose*

Country: France, Italy and Germany

Year: 1986

Director: Jean-Jacques Annaud

Music: James Horner

Screenwriter: An adaptation by Andrew Birkin, Gérard Brach, Howard Franklin and Alain Godard of the novel of the same name by Umberto Eco.

Cast: Sean Connery, Christian Slater, Helmut Qualtinger, Elya Baskin, Michael Lonsdale, Volker Preetel, Feodor Chaliapin Jr., William Hickey, Michael Habeck, Urs Althaus, Valentina Vargas, Ron Perlman, Leopoldo Trieste, Franco Valobra, Vernon Dobtcheff, Donald O'Brien (as Donal O'Brian), Andrew Birkin, F. Murray Abraham, Lucien Bodard, Peter Berling and Pete Lancaster.

Color: Color

Runtime: 130 minutes

Genre: Drama, Mystery, *Thriller*, Crime.

Production Companies: Cristaldifilm, France 3 Cinéma, Les Films Ariane, Neue Constantin Film, Rai Uno Radiotelevisione Italiana and Zweites Deutsches Fernsehen (ZDF).

Synopsis: It is the fourteenth Century. At dawn of a beautiful day in 1327, Brother William of Baskerville –a Franciscan monk and former inquisitor– and his disciple –Adso de Melk (who narrates the tale) arrive at a Benedictine abbey located in the north of Italy. Shortly before, this place has witnessed a terrible deed: the death of the young miniaturist Adelmo da Otranto. The abbot asks Brother William to clarify the death, but mysterious murders of the monks continue to occur and this plunges the abbey into despondency and fear at a historical time in which the monks believed that the end of the world was nigh, as announced in the Apocalypse. Little by little, owing to Brother William's perspicacity (he is a true mediaeval Sherlock Holmes)

and the information he learns from some of the monks, the underlying motive of the crimes and characters involved are revealed. *The Name of the Rose* is a tenebrous mediaeval thriller, with an excellent mise-en-scène and brilliantly acted, and is a highly successful adaptation of the also much acclaimed novel by Umberto Eco.

Historical context

After the dismantling of the Roman Empire, the existing civil discords, the struggle between paganism and Christianity, the aversion of Christians to anything that had to do with their adversaries, and the fratricidal fights in conjunction with epidemics and cataclysms led to a substantial reduction in scientific advance and knowledge¹.

At the start of the Middle Ages, the centres of scholarship and medical teaching were moved to monasteries, since these offered several advantages for the development of medical activities. They produced a multitude of texts, dutifully preserved in magnificent libraries, a fundamental element in teaching. Many monks spent years copying, translating and illustrating the classical authors: Aristoteles, Dioscorides, Galen, Oribasius of Pergamo, Alexander of Tralles.... The monasteries also had a garden or orchard where they cultivated the most common medicinal herbs and a room, next to the cupboard containing the “pigments”, or “apothecary”, where a monk in charge of health issues, responsible for medicine and pharmacy, prepared his preparations (compounds), characteristic of a Galen-oriented therapy with a clear religious influence². Moreover, the fact that the monks would frequently travel to other monasteries favoured the exchange of the little scientific knowledge available at the time. The monks and their books were the object of important ecclesiastical restrictions in certain periods, which together with the dangerous cohabitation of mysticism and science, endangered both science and therapy¹.

The film

The film (1986) is an excellent tool for illustrating some aspects of science; in particular of medicine-pharmacy which were still not differentiated in the mediaeval period. The action takes place in the 14th century. Europe is divided into a large number of States. Twenty years previously, the pope had abandoned the Vatican as a result of the civil war that was unleashed in Rome between those in favour of the

Papacy and those in favour of the Emperor. Pope John XXII, the former Bishop of Avignon, established his base there. After his Papacy, there were five French Popes who nominated their nephews as cardinals, excommunicated anybody they felt like, and doubled taxes. This was the apogee of the period of indulgences. The papacy was rife with luxury and pleasures, while the European populace was plunged into a severe economic crisis.

Then, in the heart of the Catholic Church, a great debate took place among the religious orders who were believers in the ascetic way of life and had a less interventionist view of the world and the ecclesiastical hierarchy, who were defenders of the maintenance of religious, political and economic power. The Inquisition worked under this hierarchy and since 1252 had been authorised by the Pope to use torture as a means to collect confessions of heresy; for the poor unfortunate involved this was ineluctably bound to a death sentence. Thus, the theocratic view of the world, dominant in the times, hindered the development of the science to a huge extent.

As from the start of the film, Brother William (Sean Connery) is seen to be a prominent intellectual, of the stature of William of Occam or Thomas of Aquinas, both important propounders of mediaeval scholastic thought². Brother William is a man passionately interested in science. He explicitly mentions his admiration for thinkers such as Roger Bacon (1214-1294), also a Franciscan monk, who was famous for placing empiricism before anything else and for taking the first steps towards the establishment of a modern scientific method. Brother William himself explains to his disciple, Adso de Melk (Christian Slater), the importance of experimentation, especially observation, in the acquisition of knowledge. The film offers many examples of his attitude as regards science, such as deduction -by simple observation- of where the latrines are located, or that a death has occurred recently, or the use of lenses or different measuring instruments such as a sand-clock, a sextant, or an astrolabe (Figure 1). Brother William's attitude in hiding his instruments and astrological observations from the Abbot are reflections of the intolerant ecclesiastical position as regards this type of scientific enquiry and the nebula of fear that such intransigence generated.

The mediaeval abbey in which the action takes place aims to be Benedictine. The exterior shots were taken on a set specially constructed for the film



Figure 1: Brother William's measuring instruments

and the interior shots correspond to different parts of the German Cistercian Monastery at Eberbach (a). Similar to other religious orders, the Benedictines, following the rule established by Saint Benedict in the 6th century, had medico-pharmacy services; that is, a botanical garden, a brother in charge of healthcare and an infirmary:

Before anything else, it is necessary to look after the sick, serving them as though they were Christ himself, because He said: I was ill and you visited me.... There should be a place designed specifically for the ill and, in their service, a brother who fears God, diligent and solicitous, who will offer the sick the use of a bathe whenever necessary; although this should be restricted for the healthy and the younger members. The sick and the weak should also be given meat so that they can replenish their strength (RB 36,13)².

In the film, medical-pharmaceutical activity is reflected as from the first frames. Simultaneously, we see the entry of the main characters into the Benedictine abbey and the health carer -Severino- the herbalist (Elya Baskin), working in the garden and collecting medicinal plants. Later, there are several references to medicinal plants grown by the herbalist. For example: *The Scorzonera stem to cure diarrhoea*

The script does not include any scenes from the Benedictine hospital. The hospital room of the Monastery of Eberbach, which is magnificently conserved, was made into the monk's refectory for the film (Figure 2).

A key element in the medical-pharmaceutical activity of the abbey is its library, which from the outside is a huge edifice in whose interior thousands of books are presumably stored. These are of all types, origin and ideology and have been illustrated over the years in the *Scriptorium*. This room (Figure 3), which in the Eberbach Monastery served as a common dormitory

a.- Information from the Director obtained from the "extras" of the DVD.



Figure 2: Hospital of the Cistercian Monastery at Eberbach, transformed into the refectory for the film

for the monks, has excellent natural illumination, as was usual in the monastic *Scriptoria* of the times, this contrasting with the dark illumination of the rest of the scenes in the film. It is wide and houses the desks, lecterns and books that the monks are working on. The scenes that take place in the *Scriptorium*, which are perhaps slightly anachronic since in the 14th century monastic activity was already in decline owing to the influence of lay competition, are crucial if we are to understand the important work of the copiers, miniaturists and illuminators who spent years transcribing, page by page, the texts of the classical authors concerning medicinal plants or medicine, among others. The illustrations of many such works turned them into true works of art. In the film, the observation through the magnifying lenses of some of these miniatures affords surprising results (Figure 4). The representation of the Pope as a fox, or of the Abbot as a monkey, suggests that the illustrators went about their work with the firm intention of deceiving the reader through the actual miniaturisation of their representations. However, in the film, as has occurred several times along history, direct access to the books is forbidden to the monks, and the librarian jealously exerts an iron censure over who should be allowed to consult them and which ones



Figure 3: Dormitory at the Cistercian Monastery at Eberbach, transformed into the scriptorium for the film



Figure 4: Miniature amplified with a lens

can be consulted. *To think too much*, as appears in the dialogue, may be very dangerous.

The monk in charge of health in the film, a collaborator in the investigation into the crimes, mainly works in his laboratory and hence several scenes are shot there. The laboratory has the typical aspect of the times. The retorts and distillers (Figure 5), which in the Middle Ages were essential for the manufacture of drugs, are spread across the room. The mortars, pestles and balances lie on the tables. The simple compounds (medicinal plants) and the complex drugs (already prepared) are kept in boxes, bottles, ceramic jars, or leather bags. The recipients –with inscriptions or signs indicating their contents- are lined up on shelves and the bags hang from the wall (Figure 6).

In the room we also see, and indeed it is used as the murderer's weapon, an armillary sphere, a device used in astronomy to calculate celestial coordinates, suggesting that the monk in charge of the health of the community had certain knowledge of this science. However, Severino, unlike Brother William, does not appear in the film as an intellectual, although –as is logical- he does seem to have a fairly broad knowledge of the therapeutic properties of plants, of Hippocratic-Galenic theory and of clinical practice.



Figure 5: The botanical laboratory with distillers and retorts



Figure 6: The botanical laboratory with flasks indicating contents on the shelves

Nutrition and hygiene are the main pillars of the Hippocratic-Galenic way of practising medicine. This is essentially based on prevention, such that the maintenance of a healthy body by means of a sensible life is very important. Diet, understood as a crucial requisite of a healthy body, and which includes nutrition and all matters related to hygiene, is the first instrument of the physician – the so-called “primary intention”- before recourses to pharmacological therapy should be implemented. And only in the final instance should surgery be considered¹.

The four aspects of the humours (dry, hot, cold and humid) and their combinations, posited by Galen, and the few differences between nutrition and drugs considered in the times, are also mentioned in the film:

Onions, hot and moist, in small quantities invigorate coitus, of course, only in those who have not taken the vows...

In the western world, the culture of bathing was not subject to the acceptance it had in Antiquity or in the Islamic world. It was continually attacked by moralists. Thus, Severino is also charged with ablutions, which following the above-mentioned Benedictine precepts, were only used for therapeutic purposes. Berenguer (Michael Habeck), the Librarian's assistant (figure 7), appears in one such bath-tub; he had previously stolen a flask of medicinal herbs from the apothecary with a view to remedying his own ailments.

This therapeutic view of hygiene is also seen through its absence from the scenes of daily life. With the exception of the image showing the reception at the abbey, in which the visitors wash their hands, filth is a constant throughout the film, emphasised by the generalised dark backgrounds. The characterisation of the players, the permanently filthy hands, the monks' disgustingly grimy habits, and the consumption of rats



Figure 7: Examination of the Librarian's assistant in the Apotheque

exacerbate this sensation. The wastes from the abbey are thrown out through a trap in the walls, under which the villagers grub for scraps. Fleas and lice, actively sought out and even eaten, are also present in the images (Figure 8), together with the presence of rats all over the abbey, portend an epidemic of plague, as indeed occurred in the fourteenth century, when the Black Death scoured Europe³. One out three Europeans died as a result of this pandemic caused by *Yersinia pestis* and transmitted by the flea (*Xenopsylla cheopis*) of the black rat.

Another interesting aspect that appears in the film is the miniscule difference between drug and poison, depending on the dose administered. Severino the herbalist, when asked about the properties of arsenic - which was often used in mediaeval medicine-, points out this subtle difference:

In small doses arsenic is good for nervous disturbances, but at high doses it kills.

And the difference is so small that this drug-poison becomes the perfect tool with which to commit the murders. Initially, Umberto Eco asked a biologist friend about poisons that would be absorbed through the skin on handling an object. When it seemed that there was no such poison with this char-



Figure 8: "Taking the bugs out"

acteristic, Eco forgot the matter and decided on arsenic, used by therapists down the centuries and often reputedly used in suicides and homicides⁴. He astutely resolved the pharmacological problems of his ideal poison by devising a situation in which the poison would be placed on the pages of a book, to serve as a way-station between the poison and the mouth of the victim, who would lick his fingers to turn the pages. Depending on the dose, acute arsenic poisoning may appear with a picture of severe gastroenteritis, accompanied by vomiting, abdominal pain and diarrhoea, a dry, burning mouth and throat, and dysphagia, all of which would lead to death due to depression of the nervous system in a very short period of time⁵. The characters poisoned in the film show several of these symptoms; in particular, Berenguer, the librarian's assistant, who tries to palliate them by taking a bath in lime-leaves (Figure 9).



Figure 9: The Librarian's assistant with signs of arsenic poisoning

The herbalist participates with Brother William in the observation of the cadavers, but they do not dissect them (Figure 7). After the Greek period, in which even vivisections were performed, the practice of dissection -fundamental for the progress of medicine- was abandoned in medical circles and was proscribed within the three monotheist religions. Corpses passed from being *tremendum* to being *pudendum*; something to be treated with consideration and respect.

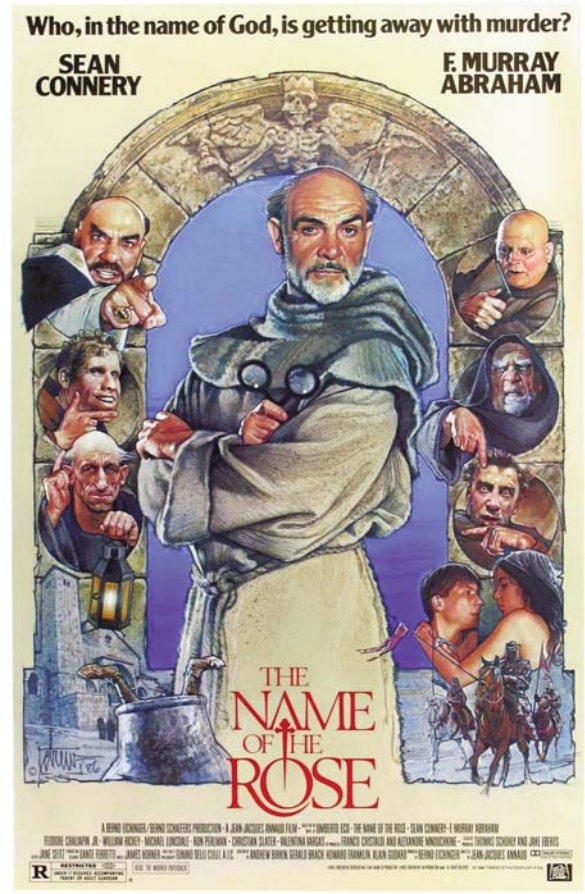
Although the herbalist, as indicated, plays an important number of roles as a health carer of the times, he does not reflect other aspects related to very daily or "unscientific" practices, such as the gathering of medicinal plants on certain days and following certain rituals, or engaging in certain prayers, providing the character with a certain magical aura. The religious facet in the art of curing, so characteristic of mediaeval times, is explicitly absent from the film, although the fanatical and superstitious ambience of some of the scenes readily suggest it to the viewer.

Conclusions

With a fair degree of faithfulness, the film portrays monastic-medical-pharmaceutical practice in early mediaeval times. In our experience, the viewing of the film, when directed by an instructor with respect to the medical aspects of the movie, sparks interest in students about the history of medicine or of pharmacy, and hence of “the sciences”, about historical issues outside the content of their formal training and helps them to appreciate a certain socio-political context as regards the history of medicine. It also improves their overall training and their understanding of a dark period of human history in which the clash between rationality and a magical-religious mentality strongly conditioned the development of the sciences, and in particular of the medical sciences.

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American poster (one sheet) showing the characters (design by Drew Struzan)