lunch on the last day 16 eels in a plastic bag were quietly placed on the floor by my chair—a present from Belfast. Cured and smoked, four found their way back to my hospitable colleagues in Belfast; the others provided a popular starter for dinner parties over the next few months.

The goal was always smoked salmon, and I had seen Archie achieve this and knew it was possible. Consultations were frequent as there was little room for trial and error with such an expensive fish. Now the ultimate delicacy is part of the repertoire. There is, I believe, nothing to compare with one's own crisp bacon cured and smoked to taste or home smoked salmon thinly cut and with a texture and flavour unmatched by the commercial product. Best of all is the feeling that your efforts are appreciated. Friends may be polite, but it is gratifying to see the stocks of bacon diminish rapidly when the grandchildren arrive.

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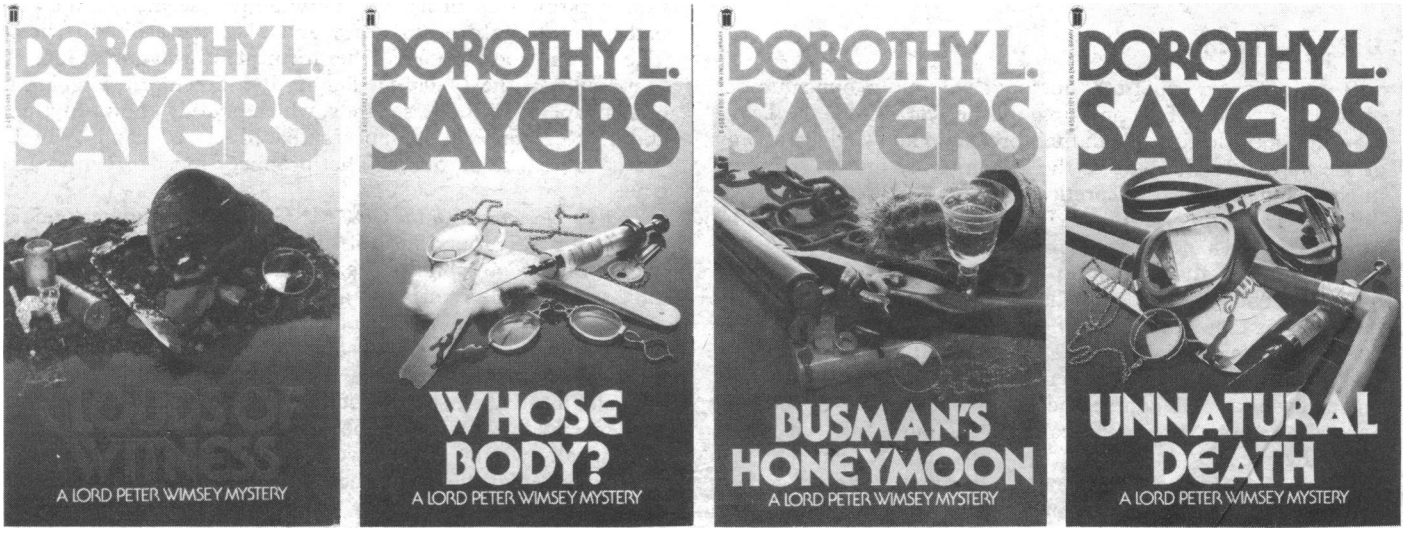
The murderer's vade mecum

L E BÖTTIGER

A bubble of air and a serving of mushrooms, a hanging flowerpot and a piece of Turkish delight—would they have anything in common? Nothing, except that they are examples of the ways of death in Dorothy L Sayers's detective novels. Miss Sayers has varied the way in which her victims meet their end and she has devoted more interest and energy to the "how" in the classical "When, where, how, by whom, and why?" than any of her colleagues in the trade.

During my student days, when the professor of pathology lectured on embolic disease he mentioned that air might kill a person but added, with the characteristic, almost apologetic smile of his, "not in the small amount used by Dorothy Sayers!" This was the first time I had heard about the author, but my interest was awakened. Incidentally, when I later became assistant to my pathology professor, I found out that he liked to take a nap after lunch, and that hidden on a low bookshelf behind his office couch he kept a stock of detective novels, with most of the Sayers books included.

Years later, I read all the novels by Miss Sayers and with the lecture on air embolism in mind, I looked critically at the medical content. In most of the novels medical knowledge plays an important part and I soon realised that Miss Sayers had erred not only in the case of the air bubble but in other instances as well. I found the topic so interesting that I told myself—and others—that, when I grew old, I would write an essay on some of the medical aspects of Dorothy Sayers's novels. Well, I am not old, not even elderly according to the WHO definition—elderly being a person 60-75 years old—and so far I have not found the time to fulfil my youthful idea. It so happened, however, that during a recent visit to London I was taken to lunch at the Athenaeum. Sipping our coffee in the library, my host and I found ourselves surrounded by distinguished-looking gentlemen, probably aged (WHO definition 75-90), sleeping so quietly in their leather armchairs that I was immediately reminded of *The Unpleasantness at the Bellona Club*, in which the young Captain Fentiman quotes "that old thing in *Punch*, you know—'Waiter, take Lord Whatsisname away, he's been dead for two days' " and later his uncle, old General Fentiman, is in fact found dead in his chair. Not only that, but Lord Peter also rapidly discovers that there has been foul play and that the dead general has been carried away from and back to his chair near the fireplace, "the great chair with ears after the Victorian pattern." I mentioned these associations to my host, who not only encouraged me to try my hand at the Sayers murder essay, but generously promised me space in his journal should I succeed. As mentioned by Lord Peter's uncle, Paul Austin Delagardie, "To appear publicly in print is every man's ambition," so here it is.



Most classic murders are committed by a pistol shot or a blunt instrument, so that the way in which the murder is committed plays a less important part than the construction of alibis, the building up of a group of likely suspects, and the finding of a hidden motive. As I have mentioned, Dorothy L Sayers devoted more work than any of her contemporaries to constructing and discussing various ways of killing people. In fact, in *Unnatural Death*, her third book (1927), we already find Lord Peter Wimsey working on his magnum opus, "The Murderer's Vademecum—101 ways of causing sudden death." So what I am doing now is carrying on where Lord Peter left off, though instead of finding 101 ways of killing a person, I propose to discuss the causes of death in Dr Sayers's (she was given an honorary degree) 12 detective novels. In doing so, I do not think that I will be revealing secrets or scaring prospective readers away by mentioning in some instances not only the method of murder but also the identity of the murderer. On the contrary, I hope to attract new proselytes.

Craft of the novelist

Apart from a number of short stories, 12 books constitute Miss Sayers's entire output in crime novels, a small contribution compared with that of the Queen of Crime, Dame Agatha Christie. At the end of the 1930s Dorothy L Sayers abandoned Lord Peter, Harriet Vane, and her other sleuths and devoted the last 20 years of her life to a completely different authorship, of a theological character, which included a translation of Dante's *Divine Comedy*.

Three of the books have no medical interest and might in this context be put aside from the very beginning. The second story, *Clouds of Witness*, in which Lord Peter's prospective brother-in-law shoots himself in the chest, is the only one in which this classic way of killing occurs. In *Five Red Herrings* the victim dies after a brawl, when he strikes his head against the "rounded top of the study stove" (the blunt instrument!). And, of course, there is *Gaudy Night*, which is more of a thriller and lacks a murder. In all the remaining novels, published between 1923 and 1938, medical facts are important, and the mode of death, often ingeniously worked out, is different in all of them.

It is quite evident that Dorothy Sayers must have had a medical adviser and at least one name is known—Dr Eustace Barton, who appeared as co-author of *The Documents in the Case* under his pen name, Robert Eustace. He was a medical man and was known to have given medical advice, especially on poisons, to other writers as well as Miss Sayers. Little is known of his background and of his late years. One of Miss Sayers's biographers, Janet Hitchman, mentions that he seems to have completely disappeared after 1947 and that no record of his death can be found. Mysterious, indeed!

Doctor as criminal

It is a common belief that doctors have unique opportunities of killing people, of committing the perfect crime, the crime that cannot be detected, with their profound knowledge not only of the normal functioning of the human body but also of what might happen to it. Theoretically it may be so—but life is different from theory. I have repeatedly been struck by the remarkable resistance of the human body to all the negative and noxious threats that surround us in increasing numbers and quantity. Thus I would say that such murders were difficult, but it seems that Lord Peter and I disagree: "Murder is easy," says Lord Peter in *Unnatural Death*, "I don't believe that all the heart diseases and gastric enteritis and influenzas are nature's unaided work!" Of course the ways of death in Dorothy L Sayers's novels are theoretical speculations—and what else could they be?

In her very first detective novel, her first book altogether, *Whose Body?* (1923), the criminal is a well-known surgeon and neurologist (interesting combination), Sir Julius Freke, who states in his confession "I struck him heavily with the poker, just over the fourth cervical" (the same vertebra returns fractured in a later book). "It was delicate work, calculating the exact force necessary to kill him without breaking the skin—but *my professional experience was useful to me*" (my italics). I wonder where and how the famous surgeon acquired that experience? During my medical training and life, I have never come upon anything that would help me in such a situation.

Find the murderer

Already in the next book, *Unnatural Death*, it is getting more difficult to realise that murder has in fact been committed and to find the murderer—two corpses and no signs of violence or poison. Detective Inspector Parker and Lord Peter are discussing the problems, when the former says "It is probably something simple and obvious—like the motor cycling imbecile we met that had never heard of an air-lock in the feed." "My God," cries Wimsey, "you've got it." An airlock in the feed was more common in the motor vehicles of bygone days—Miss Sayers herself was fond of riding a motor cycle—but it occurs even today, in overheated cars, returning to town on a hot summer Sunday afternoon. In all likelihood, however, larger quantities of air are necessary to block the heart of a human being than the 1-2 ml contained in the hypodermic syringes used in *Unnatural Death*. The conclusion is indirect, drawn partly from the fact that it takes some 20 ml to kill a rabbit, air embolism being a rapid and merciful way to kill an animal used in experiments.

The traditional detective story did not allow the doctor or the detective to be the criminal. It is perhaps natural or even necessary for the plot by an author using so much medical information to have doctors in the main role. I have already mentioned Sir Julius Freke. In *The Unpleasantness at the Bellona Club* another one appears, also with his practice in Harley Street. "Heart gone at last, I suppose" is the first reaction of the club members, when they hear of the death of the old general. And the heart it was, indeed, but helped to stop by an overdose of "digitalin." It turns out, however, that the victim had not been taking a regular dose of digitalis, but had been given an acute dose of a total of two grains (130 mg) of digitaline—unfortunately it is impossible to be sure of the type and purity of the digitoxin preparation used. It seems highly unlikely, not to say impossible, that a single dose—even if it was large—would have produced death within an hour. And I do not think that Miss Sayers's famous Home Office analyst, the "analytical gentleman" Sir James Lubbock, in the mid-1930s would have been able to discover digitalis in the body tissues in a concentration of $2/10^6$! I am not in a position to tell whether London taxi drivers were so observant as Mr Swain, "a stout man of the older type of driver," as to be able to give the textbook description of cardiac insufficiency: "Very faint, 'e seemed, and a very bad colour, sir, breathin' 'eavy and blue-like abaht the lips." The Bellona book contains other medical information of interest to a reader of the 1980s. Dr Penberthy, the culprit, is going to read a paper on "ductless glands, which nobody knows anything about. Nevertheless, it appears that ductless glands will be 'news' in next to no time." That prophecy most certainly came true.

In *The Documents in the Case* Mr George Harrison, a connoisseur of fungi, is found dead in the shack that he uses as a base for his mushroom-collecting expeditions. In a saucepan on the table is found the remains of a mushroom stew "a black pulpy mess," and it is thought that he had been poisoned by eating deadly mushrooms. The final solution lies in the fact that natural muscarine is dextrorotatory but the synthetic compound optically inactive. It seems ironic that the plot in that book was challenged shortly after the book was published and said to be scientifically wrong. Miss Sayers herself took this humorously and thought that the story stood up pretty well nevertheless. It turned out that her co-author wrote a year later to tell her that

the scientific fact was after all correct. Also, interestingly Dr Barton thought that the muscarine idea was his best medical idea for the perfect murder, not only because of the ingenious plot but mainly because of the "subtle differences between what is produced by life and that artificially produced by man," which touched "upon the most fundamental problems of the phenomena of life itself." Deep thoughts in a murder setting.

A more tasty dish, a sweet omelette, is the central point of interest in *Strong Poison*, in which the first chapter begins: "There were crimson roses on the bench; they looked like splashes of blood" and ends by stating: "There were golden chrysanthemums on the bench—they looked like golden banners," the banners of the justice finally prevailing. Harriet Vane, an author of detective stories, the alter ego of Dorothy L Sayers, is accused of killing her lover, who dies of arsenic poisoning. Arsenic, which has played such an important part in real-life crime—and in detective stories—is given to the victim in a sweet omelette that victim and murderer cook at the table in the murderer's home and partake of together. The final solution is that the murderer has prepared himself to resist arsenic by consuming it in slowly increasing amounts, following the example of the famous arsenic eaters in the mines of Steyrmark in Austria. A cracked egg plays an important part, the arsenic being introduced through the crack. And in the denouement the Turkish delight appears as a crucial piece. I do not know whether enough arsenic could have been introduced into the egg to kill a man and could at the same time have been tolerated by the murderer, but the plot is plausible and fascinating.

Ingenious plots

If blood did not flow in *Strong Poison*, it certainly does in *Have His Carcase*, in which the throat of a haemophiliac man is cut with an open razor and the time of death—and thus the alibis—are misjudged because of the consistency of the blood shed. "Wait a minute," asks Lord Peter, "the blood, was it in red clots or a sort of jelly with red at the bottom?" "No," answers Harriet, "it was liquid. It dripped out of his neck." Many characteristics of the haemophiliac patient are gradually introduced into the novel: the victim was allegedly a descendant of the Russian Tsar's family and was afraid of shaving, of going to the dentist, and of having trouble with his knee joints—devastating for his work as dancing partner and gigolo in the seaside resort hotel. The whole story has a touch of reality and I cannot find anything wrong with it from the medical point of view.

Murder Must Advertise, one of the best known of her books, takes its setting from real life, the advertising agent Benson's, in Kingsway Hall, where Miss Sayers worked for the greater part of the 1920s and evidently did a very good job. The victim is killed by a catapult shot, while walking down a famous spiral staircase, actually photographed in the latest Sayers biography.[1] The murderer had practised his shot using pebbles, one of which was of course found by Lord Peter, secretly employed by the head of the firm to find out what really had happened. The victim is found to have broken his neck—how the practising physician appearing on the scene could say that "His neck was broken at the fourth cervical vertebra" (cf *Whose Body?*) is more than I can understand. Also, "The wound on the head was such as might be caused through pitching upon one of the knobs on the handrail in falling." However ingenious the catapult shot and the scarab may be, I cannot imagine that a small projectile like that would have caused the wound described; if a scarab had killed, I think that it would have penetrated the bone like a bullet. Much is based on the fact that the skull is relatively thin in the temporal region and on the history of a person being killed by a golf ball hitting this same area.

If *Murder Must Advertise* is one of the best-known novels, most critics consider *The Nine Tailors* to be the best. But here again the mode of death is highly unlikely. Tied up in the bell chamber of a church, the victim is killed by the sound of the nine bells, ringing no fewer than 15 840 Kent treble bob majors, which takes more than nine hours. Even if noise today is one of the worst polluters of our environment—and impairment of hearing occurs in disco fans—there is no case on record of a man being killed by sound alone.

Finally, *Busman's Honeymoon*, which figures the blunt instrument in the shape of a hanging cactus pot, turned into a deadly trap by being raised and connected to the lid of a radio and fortified by extra lead. It could certainly kill its victim and the only problem here is that the victim walks around after having been struck down. I really cannot imagine what the medical adviser has been thinking of—a late subdural haemorrhage? The time interval is much too short. Again, a howler?

Snobbish nonsense?

"That's it. There is nothing in it" says Lord Peter when he looks at the syringe being used as a murder weapon in *Unnatural Death*. And it seems that many would say the same of Dorothy L Sayers's detective novels—there is nothing in them. Others go further still and talk of a splendid snobbish piece of nonsense. Of course, Lord Peter is a snob—as Dorothy L Sayers herself was supposed to be. She once got furious because her publisher had left out her middle initial in an advertisement. But is he really a snob? Well, his nephew states that "Uncle is a comic bird, but he isn't a snob, and he is rather decent really" and his creator says "Like all male creatures, he was a simple soul at the bottom." "Or shall I call thee bird" (Wordsworth, quoted in *Strong Poison*)—Miss Sayers describes him once as "a melancholy adjutant stork" and in another situation he is said to "look like a heron brooding by a pond."

Why don't you decide for yourself? Join him on a trip. You might get a seat in his new Daimler twin-six, even if you have to use a shoehorn to get down in it—Bunter will ride in the back. Where to? Well, why don't you start by going up to Scotland to visit a colony of artists, walking, painting, and fighting in Kirkcudbright? Pass through Oxford on your way south, take a look at Balliol and the Bodleian library. In these times of unemployment, you might like to work in an advertising agent's office in London. Exhausted, you might need a rest at a seaside resort, with a chance to ride an unshod mare along the sandy beach. Perhaps you would like to collect a few mushrooms for your supper? Go ahead, but beware of the deadly fly agaric. Or in a more Sunday-like mood, go down to the Fens and take part in the change-ringing—or abruptly thrown back into harsh reality, help to fight the floods, when the dykes are giving in. Don't bother about a few medical inadvertencies. Harriet Vane confesses that she never succeeded in producing a plot without at least six major howlers. "But," she adds, "after all my books are only for fun!" Do join Lord Peter and Harriet Vane. You will find a lot of good reading. For fun!

Dorothy L Sayers's novels are published in hardback by Victor Gollancz and in paperback by the New English Library.

Reference

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