AUTOPSY ON SIR GEORGE DOUGLAS, A.D. 1636¹

by

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ON 12 March 1636, the inhabitants of the town of Demmin in Pomerania were astonished to hear the bells of Saint Bartholomew's Church ringing out. Their astonishment was due to the fact that it was not a Sunday when the church services took place but a Saturday and the time was eight-thirty in the evening when most good people were abed. As the bells continued to ring loud and strong, the governor of the town Colonel Cunningham, summoned the three burgomasters to find out from them the cause of this unusual occurrence, and when they could offer no explanation, he suspected that a traitor was giving a signal to enemies outside the town. He immediately ordered the guard to be increased and sent men with lights to climb up to the belfry of the church and find out if someone was hidden there. To their surprise, the soldiers found the bells hanging motionless in the steeple and giving out no sound, yet for more than one hour and a half the people in the town continued to hear the peals of bells until they stopped suddenly at the third stroke of ten o'clock. This unusual occurrence impressed the citizens and authorities so much that on 28th of the same month, the Burgomaster and Council drew up a declaration describing all the details of the incident and signed it with their seal. By that time, another incident (which will now be described), had happened in their town, and they realized that it was a portent of the death of a man in high position.

Whilst the bells were ringing at Demmin, Sir George Douglas, Charles I's ambassador to the court of Poland,² was staying with Francis Rithwein, the governor of Anklam, a few miles distant. Sir George had been, for some years, a most successful diplomat in Poland, and among his many achievements he had managed to secure cessation of the war between Sweden and Poland. As a result, he stood in high favour with Sigismund III, the Polish king, whose interests he had fostered. Suddenly, however, and for no apparent reason, Sigismund, who had previously described Douglas as his closest friend amongst the ambassadors, attributed all the credit for the truce to the French ambassador, and shortly afterwards for some offence not specified, caused Douglas to be recalled to his own country.

At the very time the bells were ringing at Demmin, Sir George Douglas, "somewhat

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¹ The documents translated here are to be found in Public Record Office, London, State Papers Foreign, 88/89, fos. 238–256. The description of the actual autopsy occurs fos. 241–250r with the following title: $E\pi i\sigma\kappa\epsilon\psi_1\xi$ De Subitanea et Repentina/sed pia ac placida Morte/Viri Generosissimi, Nobilissimi, summe Strenui et Consultissimi/Dni Georgii Douglasii . . . Johanne Schönero, Phil. et Med. D./Academiae Gryphiswaldensis Professore Publico. Demmini, Anno Christi 1636, 22 Martii. It was addressed to the College of Physicians in London.

* Calendar of State Papers, Domestic series, Charles I, 1635-36, p. 147.

staggered in his confidence"³ was on his way home with a retinue of sixteen men. When he called on Rithwein at Anklam, he was suffering from a bout of diarrhoea, but little attention was paid to his sickness and next day he set out for Demmin. He reached it in the evening and was received in solemn state by Robert Cunningham, the governor. He spent the evening happily with his relative, Robert Douglas, who was also there, and after a light meal went to bed.

On the following morning he was taken round the ramparts of the town to see the view and appeared to be in good spirits, but at lunchtime he complained of feeling unwell and got up from the table to go to his room. At four in the afternoon he felt rather worse, so he called in Dr. Matthew Sacchus, a physician and a senator of the town, to ask for his advice. When the doctor learned that Douglas was leaving next day, he considered it unnecessary to suggest any thorough treatment, and merely prescribed an enema, to which Douglas agreed. Shortly afterwards, Douglas changed his mind, for he had heard in the meantime that Johann Schöner was staying in the vicinity with a certain baron, and he gave orders to the soldiers to fetch him. Johann Schöner had just been appointed Professor of Medicine at Greifswald. He was the son of Martin Schöner, a former physician to Queen Anne of Denmark, wife of James I.⁴ He had been born in Edinburgh on 2 July 1597, and had studied there, but after the death of his parents, he returned to Germany. It may have been his connexion with Scotland that caused Douglas to call him to his bedside.

The local doctor, Matthew Sacchus, had noticed that though Douglas had no fever, he complained of great thirst and a feeling of heat in his stomach. He gave him several measures of cool fountain-water to drink, but these were vomited almost immediately. At ten o'clock that evening Douglas went to bed and slept quietly until next morning when he confessed that he felt better. However, as soon as he tried to rise and dress himself, he found that he was unable to walk, and a kind of paralysis had seized his legs and feet so that even when holding on to a table, it was impossible for him to stand. So he returned to bed: the windows were closed, the doors locked, and no one was admitted to see him except a nurse and a companion who sat at his bedside. He appeared to go to sleep quietly, but about eleven o'clock, he became restless and sighed and groaned. The nurse tried to quieten him and asked him how he felt; she could get no intelligible reply. The servants were therefore summoned and told to fetch the other guests in the house, and Dr. Sacchus was sent for. When he arrived, he administered a cordial, Bezoardicum medicamentum, but Douglas could swallow only a little of this. Dr. Sacchus then applied an embrocation or liniment to the patient's elbows, but it had no effect, and his condition gradually deteriorated. Between two and three o'clock in the afternoon of 14 March 1636, he died. Shortly after, when it was too late, Dr. Schöner arrived on the scene. He was of the opinion that, had he come in time, he could have saved Douglas's life by trying various remedies, particularly that of opening a vein, but on the evidence before us it seems extremely doubtful.

Robert Douglas, Sir George's relative, asked Schöner to undertake an autopsy, and embalm the body. Schöner was loth to do this, both because of his fear of fevers,

* Ibid., p. 273.

* Calendar of State Papers, Domestic series, James I, 1603-1610, pp. 99, 205, 233.

malignant and petechial, and of encephalic epidemics which were rife at the time. But because of his devotion to the king of England and to his ministers, he agreed to carry out Robert Douglas's wishes. He therefore brought from Greifswald everything necessary to carry out the procedure. He called in Dr. Matthew Sacchus, and employed two other surgeons to assist him. He then invited the governor, Robert Cunningham, and other noblemen in the town to be present at the autopsy, as well as Sir George Douglas's servants; the former excused themselves on the plea of grief, though a number of the deceased's retinue came, among them being his secretary and his chamberlain, (aulae suae Magister).

After lunch then on 17 March 1636, Schöner offered a prayer for Divine help and exhorted all present to watch every step in the operation attentively, and to write it down in the notebooks they carried with them. First they examined the body from head to foot to convince them what a wonder of wonders the human body is; the sum total of all nature; the greatest work of God's creation; the norm and exemplar of all bodies. They admired the wonderful integration of parts, the aptitude of various members for the tasks imposed on them and so on. Then they noted the colour which, though ordinarily white or creamy, had already changed in parts, particularly on the back, where it seemed suffused with blood—a characteristic, as Schöner pointed out to them, of people who had died of apoplexy, as he had often observed before. It was now the third day after the death of Douglas, so it was not surprising that part of the scrotum was decomposed, though earlier, like the rest of the body, it had been perfectly healthy.

A cut across the abdomen showed that there was copious fat beneath the skin; the peritoneum was strong and thick. After separating the parts, he came to the intestines. He showed them the omentum [epiplaos] stretching almost to the navel, covered with fat: then putting it on one side, he showed the stomach, liver, and intestines, the stomach lying in its natural place in the abdominal cavity [epigastrio], rather white in colour and not quite normal in size, the intestines also in their proper place and covered on the outside with fat, though they had all, together with the stomach, collapsed somewhat more than usual, except the colon which was inflated with gas. On opening the stomach, nothing but mucus was present, yellow in colour and thin and watery; there was little faecal matter in the intestines, and that rather yellow, thin, and like serum. Schöner thought that this arose from the diarrhoea and from the copious draughts of water taken by the deceased before his death, for the stomach and intestines looked as if they had been washed.

Before he took these parts away, he showed the bystanders the liver to examine. It was rather large and healthy, dark red, and without any blemish on the convex side but carrying signs of inflammation on the concave side. The colour here was not so much yellow as black, as if it had been burned, and this, Schöner thought, was an indication that Douglas had already caught a fever in the early days of his journey.

The substance of the liver was soft and bloody but rather dark. The small branches entering the liver were flaccid and empty and contained no "chyle" or chyme but a kind of serum of greenish hue. He found blood in the vena cava but it was thick and slimy. He then showed them the gall-bladder to the right of the liver, and noticed, with some astonishment, the enormous size of it, the largest he had ever seen in any

of his previous anatomical dissections or autopsies. The bottom of it, like a pillar of palm, ended in a neck which was much greater than it would naturally be, and was swollen out, possibly because of the amount of bile; it was not so much yellow in colour as blackish, or black with a yellow tint. The biliary canal and pores were also larger than usual and were full of bile. As soon as he saw the size of these two vessels, he pointed them out to the physician, Matthew Sacchus; to the two surgeons, and to the other assistants present. The spleen, lying towards the back of the body on the left side, was seen, after a certain portion of the intestines had been taken away, to be rather large—larger in fact than was normal, blackish in colour, and of medium consistency. Schöner thought that its size had nothing to do with Douglas's illness, but was its natural size, perhaps because of Douglas's melancholic temperament and the preponderance of melancholic humour in the body.

He then separated the intestines, looked at the mesentery, and in the middle near the navel found a glandulous body covered with fat. But he found no notable collection of humours there. In the pancreas there was nothing unnatural to be seen. Having taken out the intestines, he looked closely at the kidneys because one of the secretaries had told him that a large amount of gravel had been observed in the ambassador's urine. Schöner therefore cut open both the bladder and the kidneys, but could find nothing to substantiate this observation.

He next separated the spermatic vessels and the testicles, all of which, in size, number, and position, conformed to their natural disposition. From the belly he proceeded to the midriff, taking note of the diaphragm before he closed it up. He then opened up the chest, cut through the mediastinum and showed the two lungs, the lobes of which he examined. They were yellowish in colour, loose and thin in texture. On the surface of the right lobes could be seen various pustules full of a watery substance, which, had the ambassador lived, would have caused him much trouble in later life, probably from coughs and asthma, at least so thought Schöner. Schöner then showed through these lungs the arterial vein (vena cava) running from the right side of the heart; the venous artery (pulmonary artery) from the left; the branches of the aorta; and the rough artery (trachea), from which it is, as it were, suspended with many other branches, and he pointed out that it is from these and its own parenchyma or tenuous membrane which they take from the pleura, that the lungs are constituted.

After the lungs, he came to the noblest member of the internal organs, the heart, which is the hearth, the centre, the fount of life-giving heat. He would have examined all the elements of this organ, but time would not allow him to give ocular demonstration of all its details. He therefore restricted himself to noting a few things. Having dissected the hard and thick membrane of the pericardium, he found there a little watery substance which he had found in greater quantities in other dissections he had performed. But when he came to examine the heart itself, he was not a little astonished to see its unusual conformation. Not only was it smaller than usual, but it was full of wrinkles, and formed as it were out of pleats. These wrinkles or pleats were lined with fat from top to bottom. In the middle part of the heart these wrinkles were deeper and more pronounced, but near the lower point they were thinner, four or five in number, with a great many more which were hardly visible. He pointed

these out to the bystanders, and then, when he had opened up the vessels of the heart, he took it out and gave it to the assistants to examine. These wrinkles made the heart dry and flabby to the touch. Schöner excused himself from inquiring into the reasons for this condition of the heart, but he averred that these unusual wrinkles were either natural or adventitious; if natural, then because of their singular rarity they should be carefully noted, but if adventitious (which he considered the more likely opinion), he could give no snap judgment on their cause, other than that they followed the peculiar conformation of the left ventricle, which was the seat of the vital spirits. These vital spirits had been suppressed or suffocated by some occult or malign agency, either violently and suddenly or slowly and by degrees, with the result that the left ventricle had collapsed, and with its collapse, the thick walls had fallen in.

However, Schöner did not wish to press his opinion on others, and he left the final judgment on the matter to the most noble and Royal College of Physicians of London, his friends and patrons, who were by far the most learned and experienced body to consider such a problem.

Nevertheless, in order to find some cause for these wrinkles, Schöner made an incision in the left side of the heart, where the walls of the cavity seemed to come together. In the cavity, he found a few drops of blood, bright red in colour. He then showed the valves and opened up the other side of the heart, but could find nothing that would afford a reasonable explanation for the unusual collapse of the septum. As regards the shape of the heart, its substance, and all the other parts of it, he could find nothing out of the ordinary, and so, as the evening was approaching and there was little time, he cut short this part of his inquiry.

Having put the heart on one side, he opened up the chin inside the lower jaw, extracted the larynx, the oesophagus, and the tongue, and handed them to the assistants for examination. At this point he seems to have forgotten the purpose of his dissection and appears to have treated the whole affair like a lesson in anatomy for his students. For immediately he began to show and explain to the bystanders how the larynx is used to produce the voice, to explain the Adam's apple, and to demonstrate the work of the intercostal muscles.

Finally he came to the head, "the dwelling place of the mind, the senses, the animal faculties", which, because of the sudden death of Douglas with its suspicion of apoplexy, he would have examined first if the great and heavy stench of the lower members had allowed it. Having cut away the skin, the two assistant surgeons opened the skull with a saw. They found the skull very thick. The calvarium of the skull was put on one side and an examination was made of the meninges, the dura and pia mater. The former was found to be strong and robust, the latter was ruddy with all the ducts and *cuniculi* turgid with blood. Having put aside the meninges, Schöner then showed the people present all the parts contained in the brain, dealing with them (as far as time would allow) in the order used in anatomical demonstrations, namely the choroid plexus, the corpus callosum, the external venous sinuses (in which he found serum mixed with blood), the corpus arcuatum or fornix, the third sinus with its different glands, the pineal gland, the cerebellum, the four orbicular prominences, corpora quadrigemina called the *nates et testes*, the ventricle which is called the fourth,

the pituitary gland, and the *rete mirabile*. Then he showed them the optic nerves, and (carried away once more by his enthusiasm beyond the limits of his immediate work), he took out the eyes and showed those present the various humours of these organs; the aqueous, the vitreous, and the crystalline [lens] (taking care to give ocular demonstration of how small letters are enlarged by this latter); then the different membranes, the pupil, the iris, the most important muscles which open, close, and move the eyes, and many other things, though he thought it frivolous to give an account of these in writing on this present occasion.

Furthermore, he found not only a quantity of thick humours, as has already been said, in the first sinus of the meninges, but also in the third sinus he found a liquid mixed with blood which had already begun to flow through the nostrils. Indeed, near the conjunction of the sinuses in the hinder part of the brain, where the third sinus joins up with the others and makes what is called the fourth, or near the torcular, he found not a little thick liquid mixed with blood, as also round the choroides plexus and retiformes, a thing which he had never experienced before in all the anatomical dissections he had made at Greifswald in his position as Professor of Medicine.

His opinion was that this thick, viscous matter round the torcular and the plexus had prevented the access to the brain of the vital spirits, and so, in a very short time, had destroyed all sense and movement, and all animal actions through the deprivation and interception of these vital spirits. This also increased and confirmed his earlier suspicion that Douglas had died of apoplexy. All the same, he was far from asserting that this was the primary and immediate cause of the sudden death. All that he intended to do was to describe, in simple and homely style, the facts that had come before him during the post mortem and which had been seen not by himself alone, but also by the physician Matthew Sacchus, the two surgeons, and their assistants. He therefore left it to the judgment of others to reason and decide what the cause of death may have been.

When, with the help of God, the whole task of eviscerating the body had been completed, all the viscera (with the exception of the heart and the tongue, which, after being lightly dried, were put aside in a metal container), together with the brain (the greater members, the great arteries and venae cavae having been separated from the spine), were placed in an oaken chest lined with pitch. Some salt and aromatic powders were sprinkled on them, The box was closed and sealed and then despatched to the church of St. Bartholomew at Demmin to await the union of soul and body on the day of the Resurrection.

In preparing the body for embalming, first, all the cavities of the body were washed with tepid water, then with strong wine-vinegar, then with wine-spirit, and finally rinsed several times in wine of aloes and myrrh. Next, all the internal fleshy and muscular parts were sprinkled and rubbed with salt and aromatic powders which dried them and made them resistant to putrefaction. Finally all the cavities of the body, the mouth, throat, nostrils, and so on were filled with these and other aromatic powders, no expense being spared, and then all were carefully sewn up. In the places where sewing had taken place, liquid balsam and sweet-smelling ointments were poured and rubbed so that every portion was closed up. In the same way, the cranium

was also filled up, then put in place and fixed, the skin sewn up and the whole covered and anointed with balsam, with the addition of a few pills which kept out worms. At length, the whole body was anointed with the spirit of wine compounded with aloes and myrrh, and the hands and face washed with Damascene water. It was then that very fine linen impregnated with terebinth, resin, and aromatic gums, was swathed round the whole body and round each limb, on which sweet-smelling spices were scattered whilst this was being done, and then all was tightly sewn up.

Afterwards, the body was clothed first in a garment of fine linen and then in purest Damascene silk. A cap made of silk, was fitted on the head, a collar put round the neck, sleeves and gloves over the arms and hands, and everything else disposed in as decent a manner as possible. It was then placed in an oaken coffin, lined with pitch and covered with fine taffeta, with cushions made of taffeta and filled with lavender and other aromatic herbs supporting the body at the head, feet, and sides. The heart and tongue of the deceased man, enclosed in a metal casket, were placed beneath his head. And thus adorned, the corpse of Douglas was left in the coffin for a whole day so that the governor, the colonel, and all others who wished to pay their last respects, might see him.

"So", concluded Schöner, "did I carry out my task without any noticeable nausea or disgust; with how much diligence and industry it is not for me to say. Those who were present, the physician, the surgeons and their assistants, to whose testimony I willingly submit, will be better witnesses of this. For the rest, this my judgment about the constitution of the parts and viscera of the body, and about the reason and cause of the sudden, too sudden death, because it is off the cuff and made during the process of the dissection, I impose on no one." But he hopes that his labours and his examination of the deceased will be acceptable to his friends and patrons, all of which he piously offers to God.

So ends Schöner's account of his dissection or post mortem on Sir George Douglas.

There is just one more document concerning Schöner and this case which is worth mentioning. George Ewin, one of the ambassador's men, had to draw up a list of his expenses after the funeral was over. This account which is headed—"Account of the money disbursed by George Ewin for embalming the body, the mourning and enter-tainment of his servants for 18 days and for transporting the body from Demmin to Hamburg"—has as its first item, the following:

To Dr. John Schöner for embalming the body	••	••	••	205 Rigs dolla	ars
To another Dr. and two surgeons chosen as assistants					
To their servants	••	••	••	4 " "	
For the coffin and for burying the entrails in the Church	••	••	••	9,,,	

I think the comparative amounts of money received by the various partners in the job are very enlightening. Schöner received six times as much as the local physician and two surgeons put together, and, counting the dollar roughly at five shillings, his fee was about fifty pounds.