GOLDSMITH ON HIS TEACHERS

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BEFORE Goldsmith settled down as an author in London, if the word "settled" could ever be used of him, he made a tour which began in Edinburgh and ended in Paris via Leyden.

He is supposed also to have visited Switzerland and Italy, but the evidence for his sojourn in these countries is much more flimsy than for Scotland, Holland and France. Goldsmith possessed in a high degree the art of literary embroidery, so that we are warned by his biographers—and they are many—not to accept as historical fact certain statements he made about visits to well known people. In particular, we are told that his account of a visit to Voltaire in Paris in 1755 is entirely apocryphal.

But he did arrive in Edinburgh, in the guise of a medical student aged 26, in the autumn of 1752—in time to begin the next winter session in the October then, as now, the month for the commencement of the yearly medical studies at the University.

If he did not exactly *study* medicine in the Scottish capital, he certainly attended lectures given by some of the professors in the Medical Faculty, of whom Alexander Monro of the Chair of Anatomy impressed him most. Alexander Monro, M.D., Goldsmith's teacher in Anatomy, was Monro *primus*, as we call him, because there were three Alexander Monros who one after the other held the Chair of Anatomy from 1720 to 1846, a period of 126 years. "Monro" and "Anatomy" had come to be synonyms in the medical circles of eighteenth century Edinburgh. The second Monro occupied the Chair for 50 years, from 1758 to 1808.

The first Monro, whom Goldsmith so greatly admired, was one of the founders of the school of medicine at Edinburgh University, and one of that group of men whose labours were to make Edinburgh the most famous place of training for doctors during the next century and a half. Alexander Monro, first of the name, had been a student under the great Hermann Boerhaave of the Chair of Medicine (and of some other things) at the University of Leyden, then the Mecca of the medical world. Monro had gone there in 1718 whence, returning to Scotland, he introduced the system of teaching both by lectures and by bedside demonstrations which Boerhaave (1668-1738) had introduced at Leyden and which thenceforth became the model for almost every other continental school to copy.

But this was not the first link in the chain which bound Edinburgh to Leyden, for Boerhaave's teacher in physic had been a Scotsman, Archibald Pitcairne, one of the earliest members of the Royal College of Physicians of Edinburgh. Pitcairne was only a year in the Chair at Leyden, but Boerhaave was undoubtedly one of his students. It is believed that it was Pitcairne's having written so ably in defence of Harvey's views on the circulation of the blood which procured for him the invitation to the Leyden Monro returning from Leyden in 1720 was forthwith elected Professor of Anatomy, and for the next 39 years lectured on Anatomy and Surgery from October to May. In 1726 he published the work by which he is best known, a treatise on the bones, although he was the author of as many as 53 papers on various medical subjects. He was one of the first surgeons to notice the presence of foreign bodies in the human appendix, and he made an extensive investigation into the practice of the inoculation of smallpox to ward off epidemic smallpox. Vaccination was not to be introduced by James until 70 years later.

Professor Monro lived through "the '45" and attended the wounded in Prince Charlie's army at the Battle of Prestonpans. He could not know that another famous Scotsman was present at that battle, but merely as a spectator, none other than the Rev. Dr. Carlyle of Inveresk, or "Jupiter Carlyle" as he was called on account of his handsome figure, who was watching the battle from the top of the old tower at Prestonpans.

We must now let Goldsmith give his own impressions of the Edinburgh professors, which he does in a letter to his uncle, the Rev. Thomas Contarine, dated May 8, 1753:

To the Rev. Thomas Contarine

May 8, 1753.

My dear Uncle,

I shall give the professors' names and so far as occurs to me their characters: and first as most deserving, Mr. Munro, professor of Anatomy. This man has brought the science he teaches to as much perfection as it is capable of, and not content with barely teaching Anatomy, he launches out into all the branches of physic when all his remarks are new and useful.

'Tis he, I may venture to say, that draws hither such a number of students from most parts of the world, even from Russia. He is not only a skilful physician but an able orator, and delivers things in their nature obscure in so easy a manner that the most unlearned may understand him.

Plume, Professor of Chemistry, understands his business well, but delivers himself so ill that he is but little regarded.

Alston, professor of Materia Medica, speaks much, but little

to the purpose.

The professors of Theory and Practice (of Physic) say nothing but what we may find in books laid before us, and speak in so drowsy and heavy a manner that their hearers are not many degrees in a better state than their patients.

You see then, dear Sir, that Munro is the only great man among them, so that I intend to hear him another winter and then

go to hear Albinus the great professor at Leyden....

In a second letter to this uncle, written at close of 1753 (evidently not dated):

I shall spend this spring and summer in Paris and the be-

ginning of next winter go to Leyden.

The great Albinus is still alive there, and 'twill be proper to go through only to have it said that we have studied in so famous a University....

From all we can gather, Goldsmith took his medical studies in Edinburgh more seriously than at any of the other schools of medicine that he visited.

He carried out the intention to remain in Edinburgh a second session in order to hear Monro again. The professor's learning and grasp of Anatomy, his pleasant method of teaching it and his personality generally seem to have made a lasting impression on young Oliver. This is in sharp contrast with his opinion of Monro's colleagues. According to Masson, Goldsmith attended the lectures of all the following except the last: Charles Alston, M.D., Professor of Botany and Materia Medica: Robert Whytt, M.D., of the Institute of Medicine; John Rutherford, M.D., of the Practice of Physic; Andrew Plummer, M.D., of the Chair of Chemistry and Robert Smith of that of Midwifery. As we have seen from his letter to his uncle. Goldsmith was not at all impressed by Alston. the Professor of Botany and Materia Medica. Another Englishman in Edinburgh, Charles Darwin some seventy years later, was equally bored with professorial lectures on that same subject. To make Materia Medica interesting to medical undergraduates would seem to be almost beyond human power.

Goldsmith's opinion of Professor Alston is very much at variance with the estimation in which he was held by his contemporaries. In Chambers's Biographical Dictionary of Eminent Sectionary he finds a place and is thus described:

Scotsmen he finds a place and is thus described:

He was exceedingly laborious in his duties as a professor, giving a course of Botany every summer and one on Materia Medica every winter, and never sparing any pains which he

thought could be conducive to the progress of his pupils. Dr. Fothergill described in glowing language the benefit which those who attended them had the means of reaping, his caution in speculation, and how laborious he was in experiment.

The article concludes:

Alston must be considered as one of those who have contributed to the exaltation of the College of Edinburgh as a school of medical science.

Charles Alston, physician and botanist, came from the West of Scotland, and after some study at Glasgow University went over to Leyden in 1716 where he took his doctor's degree in medicine. As King's Botanist at Holyrood, Alston performed probably the earliest experiments in Pharmacology in Scotland when he injected opium into frogs. He wrote on Botany, and his lectures on Materia Medica were published in 1770, ten years after his death. Some at least of the reason for Goldsmith's finding Alston dull must therefore be looked for in Goldsmith himself.

By "the Professors of Theory and Practice of Physic" he must have meant Robert Whytt of the Chair of the Institutes of Medicine (now called Physiology), and John Rutherford of that of the Practice of Physic. According to Goldsmith both were dull lecturers, and told their classes nothing beyond what could be found in the text-books. But he could not know that Whytt was a pioneer in the experimental study of the functions of the central nervous system. As for Professor John Rutherford, the future author of *The Vicar of Wakefield* could not know that Rutherford was the maternal grandfather of Sir Walter Scott, and for the most excellent of reasons, namely that Goldsmith was living in Edinburgh some eighteen years before Scott was born. Such however is the fact; for Scott's mother, Anne Rutherford, was daughter of Professor John Rutherford. Rutherford was another of the great Boerhaave's pupils.

Andrew Plummer, Professor of Chemistry, Goldsmith dismisses with the same faint praise as he does the others; he even spells the name wrongly—Plume—but indeed anything in spelling might have been expected of one who wrote "Munro" more than once instead of "Monro". He almost certainly did not know that Plummer devised a pill containing mercury, still called "Plummer's pill", and was the first chemist to analyse the waters of Moffat, that charming spa in Drumfriesshire. Masson's conjecture that Goldsmith did not attend the lectures on midwifery is probably correct. He saw something of social life outside the University, for in one

of his letters he has left us an account of the assemblies of subscription dances which were so characteristic a feature of eighteenth

century Edinburgh.

On January 13, 1753, Oliver Goldsmith was elected a member of what is now the Royal Medical Society of Edinburgh, said to be the oldest student society in this country. This association, as The Medical Society was founded in 1737 by the medical students of Edinburgh University will next year be able to boast a continuous existence of 200 years. On December 14th, 1778, it was incorporated by royal charter granted by King George III. valuable library and fine hall for meetings are in Melbourne Place. a turning off the High Street of Edinburgh. The names of four students who sat on the same benches as Oliver Goldsmith have come down to us-William Farr, Joseph Fenn Sleigh, Lauchlan Macleane and Joseph Black. The first three in one capacity or another came to his aid later on in England. Joseph Black is none other than the future discoverer of carbonic acid gas and the latency of heat—two cardinal discoveries in chemistry and physics respectively.

In the spring of 1753 Goldsmith made a tour through some parts of the Highlands, but from references to this excursion it

seems to have been by no means a success.

In February 1754, after some delays and adventures, he crossed over to Rotterdam en route for Leyden, the fame of whose medical school was then at its height; for though Boerhaave had died in 1738, the lustre of his name still illuminated the University whose medical chairs were filled by his pupils. Indeed it is not too much to say that for a generation Boerhaave was the University of Leyden. In 1709 he had been made Professor of Medicine and Botany, in 1715 Professor of Practical Medicine as well, and in 1716, to crown all, Professor of Chemistry. But few pluralists have been so efficient, and few have had such distinguished students. Indirectly he may be said to have founded the medical schools of Scotland, Austria, Germany and Switzerland.

On arrival in Leyden, Goldsmith found Gaubius in the Chair of Chemistry and Albinus in that of Anatomy: it was Albinus in particular whom he had told his uncle he wished to hear. In all probability Monro spoke often and admiringly of Albinus, for had they not both been fellow students of the great dictator in

things medical at Leyden?

Bernard Siegfried Albinus, who was of German descent, was born at Frankfort-on-the-Oder in 1697 and died at Leyden in 1770, having occupied the Chair of Anatomy for half a century.

His chief literary work was the editing along with Boerhaave of the works of Vesalius the Father of Anatomy—the famous professor at Padua—"nursery of the Arts". Amongst many other writings Albinus published what has been described as "the most beautiful of all works on muscular anatomy". He had such respect for English physiology that he also edited the writings of our William Harvey, the discoverer of the circulation of the blood.

It was Gaubius the professor of Chemistry whom Goldsmith would seem to have known the most intimately of his teachers at Leyden.

Jerome David Gaubius (1705-1780), also a German, was born at Heidelberg in February, 1705. Having studied medicine under Boerhaave he took his M.D. of Leyden in 1726, and then made a tour which included Paris, Heidelberg, Strassburg, Deventer and Amsterdam.

In 1729 Boerhaave invited Gaubius to occupy the Chair of Chemistry, to the duties of which two years later were added those of the Chair of Medicine. More of a clinician than a chemist, he had a large private practice from which he made a fortune.

Goldsmith and his professor of chemistry had evidently had some conversation on the subject of large salaries not being conducive to activity on the part of professors. Gaubius believed that the less well paid a professor was, the harder would he work, the better would he teach and the more students would he be likely to attract: the richer, the less likely. Some such opinion on the part of Gaubius must have been the reason for Goldsmith writing as he does in Chapter IX of his "Present State of Polite Learning" (1759) as follows:

Among the Universities abroad I have ever observed their riches and their learning in a reciprocal proportion, their stupidity and pride increasing with their opulence. Happening once in conversation with Gaubius of Leyden to mention the College of Edinburgh, he began by complaining that all the English students which formerly came to his University now went entirely there; and the fact surprised him more, as Leyden was now as well as ever furnished with masters excelling in their respective professions. He concluded by asking if the professors of Edinburgh were rich. I replied that the salary of a professor there seldom amounted to more than thirty pounds a year. "Poor men, "says he," I heartily wish they were better provided for; until they become rich, we can have no expectation of English students at Leyden."

In Chapter Twelve of this essay, Goldsmith returns to the subject of Universities and their respective merits, and writes

as though he had lived all his life in an exclusively academic atmosphere. He divides the Universities into three classes. In the first he places Paris, Louvain and Padua, where they talk nothing but Latin and "support every day syllogistical disputations in school philosophy", which training Goldsmith thinks is calculated to make a man a fool.

In the second group he puts Edinburgh, Leyden, Gottingen and Geneva "where the pupils are under few restrictions, where all scholastic jargon is banished, where they take a degree when they think proper and live not in the College but in the city."

The third is a mixture of the two former, where the pupils are restrained but not confined; and where the first degree is taken after four years' matriculation. Such are Oxford, Cambridge and Dublin.

Edinburgh University appears to have impressed Goldsmith very favourably, for in this same chapter (XII) he writes:

The Universities of Edinburgh &c must certainly be most proper for the study of those professions in which men choose to turn their learning to profit as soon as possible Teaching by lecture may make men scholars, if they think proper, but instructing by examination as at Oxford will make them so often against their inclination. Edinburgh only disposes the student to receive learning; Oxford often makes him actually learned. In a word, were I poor, I should send my son to Leyden or Edinburgh, though the annual expense in each, particularly the first, is very great. Were I rich, I would send him to one of our own Universities. By an education received in the first, he has the best chance of becoming great.

There is much more than a grain of truth in these reflections. The characteristics of Universities appear to have genuinely interested Goldsmith, even those of places he had not visited, for his sojourn at Louvain or Padua, if ever actually made, must have been far too short to allow of his coming to any reliable estimate of their salient features. But Goldsmith had the journalist's capacity of appearing much better informed than he was.

As Goldsmith and Gaubius talked of the salaries of Edinburgh professors, it may be of interest to know exactly what these were at the date of Goldsmith's visit to Scotland. Fortunately we can answer this question with accuracy, since it happens that Maitland's "History of Edinburgh" in which these figures are given was published in 1753, the very year Goldsmith was in Edinburgh.

The data are:—the Professor of Anatomy received £50, the Professor of the Theory of Physic and of the Practice of Physic

received, each, £33.6.8. The Professor of Botany, however, was better paid than any of these, for he received £77.15.6½. When we are informed by Maitland that the sum of £2,117.6.6. represented the salaries of Principal, Professors and Librarian we may have some idea of the financial poverty of the University of the Capital of Scotland some 200 years ago.

Goldsmith's last academic phase was when he arrived in Paris at or about the end of 1755 and attended the lectures of Guillaume François Rouelle, the Professor of Chemistry at Paris.

The name Rouelle is a familiar one to all students of the history of organic chemistry, because Hilaire Marin Rouelle, the younger brother of Goldsmith's professor, discovered and first isolated that important animal waste substance, Urea. This was in 1773, long after the date of Goldsmith's visit to Paris.

But G. F. Rouelle—Goldsmith's Rouelle—was much better known than the discoverer of Urea, through his successful lecturing having made chemistry the fashionable craze in Paris just about the time of Goldsmith's visit to that city. Rouelle, an eccentric, petulant, fiery-tempered man, attracted such large audiences to his lecture theatre that it is said the students of his class complained there was no room for them after all the ladies in their hoops had been accommodated.

Goldsmith's own version of the scene in Rouelle's theatre is to be found in Chapter Six of his *Polite Learning*:

The fair sex in France have also not a little contributed to prevent the decline of taste and literature by expecting such qualifications in their admirers...The sprightly pedants are not to be caught by dumb show, by the squeeze of the hand or the ogling of a broad eye, but must be pursued at once through all the labyrinths of the Newtonian System or the Metaphysics of Locke. I have seen as bright a circle of beauty at the chemical lectures of Rouelle as gracing the Court of Versailles, and indeed wisdom never appears so charming as when graced and protected by beauty.

G. F. Rouelle was born near Caen in 1703, and died near Paris in 1770. Probably the greatest of all his students in their after lives was Lavoisier.

Goldsmith has so worded the last sentence that we are allowed to suppose he had seen for himself the Court of Versailles, which is highly improbable. He does not exactly say that he has seen it, but he clearly wishes it to be implied that he has. This may be the journalistic touch again. It will be remembered that he told his uncle that he wanted to go to Leyden so that afterwards he

on a description

might say he had been there. If he was at the Court of France during his visit to Paris in 1755, then his feelings on his return to England in February 1756 must have been painful in the extreme, for he arrived at Dover penniless.

Goldsmith was one of these happy-go-lucky Irishmen who are in reality their own worst enemies. His first failure was to be rejected as a candidate for Holy Orders, his second to be a rejected candidate at Surgeon's Hall for the post of surgeon's mate. For a short time he was an apothecary's assistant, and after that he essayed medical practice amongst the poor of Southwark, but all to no purpose. His nebulous medical degree did not help him to earn a living: those of his countrymen who believed in such things would have said he had been looked on by "the evil eye". But the vera causa of his non-success was in himself. Of Goldsmith it might be said as it was of Reuben of old—

Unstable as water, thou shalt not excel.

And yet, financial failure though he was, his literary capacity could not be suppressed. The Vicar of Wakefield was yet to be written, and no clouds of misfortune can ever dim the brilliance of She Stoops to Conquer. Were The Deserted Village and The Traveller to be withdrawn from the treasure house of English literature, the gaps would be immediately perceived and could never be refilled.

In spite of all his weaknesses, foibles and futility, Oliver Goldsmith has attained by that elusive faculty we call genius to a position in literature from which he will never be displaced.