FIG 2—The Flemish physician Clusius used the copy of the “Colloquios” now in Cambridge University library to prepare a Latin version that was used in European universities for the next two centuries

copy of da Orta’s *Coloquios* in Lisbon the year after its publication in Goa. He translated it into Latin; he also edited, annotated, and abridged it, trimming it of non-medical and anecdotal digressions. The new version, published in Antwerp in 1567, was titled *Aromatum et Simplicium Aliquot Medicamentorum Apud Indios Nascentium Historia*. It achieved great popularity in European universities, ran into five editions in Clusius’s lifetime, and is the form in which da Orta’s original work was chiefly disseminated for the next two centuries. Clusius’s own copy of the da Orta book,

as originally published in Portuguese—autographed, dated (1564), and copiously annotated by the Flemish physician—lies in the Cambridge University library (fig 2).²

Staying on in Goa

Garcia da Orta did not accompany his patron Affonso de Sousa back to Portugal, nor did he retire there to enjoy a prosperous old age, as did most colonials then and since. His decision to remain in Goa may have been due to political or religious exigencies,³ but also perhaps to the fact that the lush verdant beauty of Goa had him in its spell. The picturesque beaches, ancient temples, and cosy villages with their pretty parish churches—all interlaced by drowsy, palm fringed roads—have changed little in the four centuries since my own ancestors inhabited a Goan village across the Mandovi River from where da Orta practised and Portuguese viceroys and inquisitors ruled. Nothing remains of the magnificent city of old Goa but half a dozen huge, empty (but well preserved) sixteenth century churches, one of which contains the mummified body of St Francis Xavier in a massive tomb of incredible splendour.

Garcia da Orta himself has been commemorated in twentieth century Goa (now part of India) not by tomb, bust, or statue but by a small public garden in an unfrequented nook of Panjim, the state’s capital.

1 Behren RH. Cholera. *BMJ* 1991;302:1039-40.

2 Levine MM. South America: the return of cholera. *Lancet* 1991;338:45-6.

3 Boxer CR. *Two pioneers of tropical medicine: Garcia d’Orta and Nicholas Monardes*. London: Wellcome Historical Medical Library, 1963:25. (Lecture series No 1.)

Goya’s living skeleton

Richard H R Park, Maureen P Park

The case of Joseph Merrick, “the elephant man,” publicised the Victorians’ craving for callous entertainment and curiosity.¹ Less well known is a group of emaciated individuals exhibited at shows and circuses under the descriptive term of “living skeleton.” One of the most celebrated was Claude Ambroise Seurat, the subject of a drawing by the Spaniard Francisco Goya (1746-1828) (fig 1). Goya’s lifelong fascination for freaks of nature, demons, and monsters was not diminished by old age. He was 82 years old when, in 1826 at a circus in Bordeaux, he encountered Seurat, “el esquelete viviente.”

The previous year Seurat’s visit to London had aroused much controversy.³ Though he was an instant success with the public who flocked to see him, several members of the medical establishment in London voiced their disgust at the commercial exploitation of Seurat. Because of this publicity there is an extensive, though incomplete, account of Seurat’s life.^{3,4} He was born in Troyes in the department of Champagne, France, on 10 April 1797. At birth, after an uncomplicated pregnancy, he seemed healthy and normal. From early childhood, however, “as the infant grew, the frame gradually wasted away”; at the age of 10 Seurat was “as healthy as other children, except that his chest was depressed, and he was much weaker”; by the age of 14 his frame “dwindled away to the skeleton form.”⁴ There had been no history of inherited disease in his family. In 1825, aged 28, he was 5 feet 7 inches tall (170 cm) and weighed 78 pounds (35.5 kg).

From the summary of the clinical findings (probably by Sir Astley Cooper), recorded fully in Hone’s *Every*

Day Book and from the accompanying drawings by George Cruikshank (fig 2) it is apparent that Seurat had major skeletal abnormalities which were most likely congenital in origin. Firstly, he had very noticeable pectus excavatum: “the sternum is much flattened, as though it had been driven inwards towards the dorsal vertebra, or back-bone... it scarcely leaves more than one and a half inches, or two inches between itself and the opposite vertebra.”⁴ Secondly, the heart was misplaced: “the heart is observed pulsating very low down behind the 7th, 8th and 9th ribs in the situation of the left hypochondrium... Sir Astley Cooper finds his heart is placed so much out of the common region allotted to it, that it is precisely its own length lower than if properly placed.”⁴ Thirdly, Seurat had a bilateral scapular deformity: “the peculiar form and situation of the scapulae, the upper angles of which instead of laying on the posterior portions of the ribs are turned over the shoulder, and pass so far forward as nearly to reach the middle of the clavicles, where their situation may be easily seen from before... the muscles called levatores scapulae pass very much outwards towards the shoulder joint, and from their size and turgidity, have the appearance of bones.”⁴ Lastly, he appeared to have brevicollis: “the neck appears short, flat and broad.”⁴

Contemporary physicians regarded Seurat as a case of “marcores, an early obliteration of the lacteal vessels and mesenteric glands.”³ There is, however, little evidence for malabsorption, and the emaciation would seem to have been as result of a grossly inadequate oral intake of food due to dysphagia: “in eating he masti-

Royal Infirmary, Glasgow
G4 0SF

Richard H R Park, MRCP,
senior registrar in
gastroenterology and general
medicine

Haggs Castle Museum,
Glasgow
Maureen P Park, MA, former
curator

Correspondence to:
Dr R H R Park, 1 Douglas
Gardens, Glasgow G46 6NY

BMJ 1991;303:1594-6

cates his victuals very much, taking small pieces, as the passage to the stomach would not admit of any great repletion, and in drinking the same precaution is required, otherwise suffocation would ensue... an impediment to his swallowing with despatch, or such morsels as are not cut up very small."⁴ His daily intake of food would amount to a "penny French roll" or other food totalling only 2-3 ounces (about 70 g) a day. From the accounts there is no evidence for malabsorption; the writer in Hone's book described his digestion as being "extremely good, and the consequent functions of nature are regularly performed." Pectus excavatum does not usually result in troublesome dysphagia—when Ravitch reviewed 400 cases treated with surgery he found only two or three young children who seemed to feed better after correction of the chest wall deformity.⁵ Seurat, however, had gross sternal depression producing displacement of the heart. It is impossible to speculate on other causes for the dysphagia. Seurat was described as having a normal appearance at birth, but the sternal depression is a congenital abnormality; it is usually progressive and becomes more conspicuous as the child loses baby fat, which may lead to the belief that the child was normal at birth.

The extensive illustrated description of the bilateral scapular abnormalities now known as Sprengel's deformity is remarkable considering that it was 66 years before Sprengel's description.⁶ In 1891 Sprengel, who was working in the Children's Hospital in Dresden, described four cases of children aged between 1 and 7½ years whose left scapulas were raised. He commented that the abnormality had "never been spoken about or mentioned in surgical and orthopaedic textbooks."⁶ Seurat may be the earliest recorded case of Sprengel's deformity, which is due to the failure of the scapula to descend in utero, resulting in the scapula lying higher than usual and the superior angle being rotated upwards and forwards. The scapula can be attached to the cervical spine by bone, cartilage, or fibrous tissue, and can result in limitation of movement of the arm, especially abduction and external rotation.

FIG 1—"Claudio Ambrosio Surar" by Francisco Goya. Black chalk, 1826. Copyright 1973, Office du Livre

FIG 2—"The Living Skeleton" by George Cruikshank. Woodcut, 1825; published in Hone's "Every Day Book," 1826

Seurat was described as having "levator scapulae muscles like bones" and "he could raise his hands and arms from his side, in a lateral direction, to a position nearly horizontal."⁴ Sprengel's deformity is often associated with other skeletal abnormalities, especially of the thorax.⁷ Seurat may have had Klippel-Feil syndrome, a triad of short neck, low posterior hair line, and reduced neck movements. He had a "short neck" and, although his head was shaved (he wore a wig), a "little hair was left on the upper part of the neck," which may have been the remnants of a low posterior hair line.⁴ Eighty seven years later Klippel and Feil described their syndrome.⁸

Seurat was a celebrity, both in his native France and in Britain. At Rouen 1500 people flocked to see him in one day. He arrived in London in the summer of 1825 and was exhibited at the Chinese gallery in Pall Mall as the "Living Skeleton" or "l'Anatomie vivante." The English caricaturists Robert Cruikshank, George Cruikshank, and H Heath were quick to use his skeletal figure to comical effect. The Cruikshanks, Robert (1789-1856) and George (1792-1878), were fine draughtsmen, noted for satirical and often amusing prints of contemporary London society. An engraving by Robert Cruikshank shows Seurat removing his wig in front of a crowd of ladies and saying, "I am de Anatomie Vivante dat is come to Londres to please all de pretty Lady, and give dem all de much satisfaction"—but to Cruikshank the ladies are a far more hideous spectacle than Seurat.

George Cruikshank was commissioned to produce an etching of Seurat for the frontispiece of a pamphlet to accompany the exhibition; Robert produced accurate coloured engravings with three full length views of Seurat's body: front, back and in profile to the left. Seurat stands naked save for a cloth petticoat with apertures for his femurs. Woodcuts by George from these engravings (fig 2) were reproduced in Hone's *Every Day Book*.

Despite the exorbitant entry fee—half a crown—the public rushed to Pall Mall to stare and jeer at the French celebrity. The apparent exploitation by Seurat's minders produced an angry dialogue in the newspapers and medical press. The *Lancet* accused the public of having a "rabid curiosity" and the exploitation of being "one of the most impudent and disgusting attempts to make a profit from the public appetite for novelty, by an indecent exposure of human suffering and degradation, which we have ever witnessed!"¹⁰ Seurat publicly denied the accusation of exploitation and thanked his "protectors" for rendering him "suffi-

ciently independent to return home and live at ease in his native country.”¹

A year later Seurat was back in France but not living “at ease.” He was one of the principal attractions at a travelling circus that arrived in Bordeaux in 1826. His popularity was such that a local artist, Louis Burgade, published an inexpensive lithograph of him.¹¹ More interestingly, he caught the attention of Goya. Francisco Goya was the foremost Spanish artist of his day, employed for much of his life as court painter to the Spanish monarchs. In 1824, disturbed by the political upheavals and the repressive regime in Spain, Goya became a voluntary exile in Bordeaux, where many Spaniards had taken refuge.

Although in his 80s, Goya continued to paint and draw with remarkable skill and subtlety. He was one of the first, and greatest, exponents of lithography, a printing technique invented in 1798. Goya used black chalk and lithographic crayon for his drawing of Seurat, one of six images of circus acts including acrobats, a crocodile, a snake, and a dancing wolf.² This drawing was in the Otto Gerstenberg Collection in Berlin but is now presumed destroyed. Goya’s Seurat is a far more pathetic figure than Cruikshank’s. He stands alone, supporting his feeble frame with a walking stick. His curly wig has been replaced by a simple hat, hiding his baldness but accentuating his drawn, thin face beneath. His elaborate petticoat is now a plain cloth. He stares out at us with deep sunken eyes, a figure to pity rather than to marvel at. Seurat’s isolated, pathetic figure must have struck a chord with Goya, whose personal feelings of isolation were heightened by his severe deafness. This simple but disturbing image is typical of Goya’s reaction to the poverty and distress of the world around him.

There is no record of Seurat after the circus moved on from Bordeaux. Richard Altick claims that he died in London and that after Sir Astley Cooper had performed the necropsy Seurat’s skeleton was placed in the museum at the Royal College of Surgeons in London.³ Regrettably, there is no record of Sir Astley Cooper’s findings nor of Seurat’s skeleton in the college museum. (E Allen, personal communication).

We would like to thank Miss E Allen, George Qvist curator, Hunterian Museum, Royal College of Surgeons of England, London, who confirmed that there is no record of Sir Astley Cooper’s findings or Seurat’s skeleton; A V Griffiths, acting keeper, Department of Prints and Drawings, British Museum, London; the medical illustration department, Glasgow Royal Infirmary; the rare books department, Mitchell Library, Glasgow; and Dr Robert Milroy for translation of Sprengel’s original paper.

- 1 Tibbles JAR, Cohen MM. The proteus syndrome: the elephant man diagnosed. *BMJ* 1986;293:683-5.
- 2 Gassier P. *The drawings of Goya: the complete albums*. London: Thames and Hudson, 1973:616,643.
- 3 Altick R. *The shows of London*. Cambridge, Massachusetts: Harvard University Press, 1975.
- 4 Hone W. *Every day book*. Vol I. London: Hunt and Clarke, 26 July 1826:1017-34.
- 5 Ravitch MM. Disorders of the chest wall. In: Sabiston DC, ed. *The textbook of surgery—the biological basis of modern surgical practice*. Philadelphia: Saunders, 1986, 2080-3.
- 6 Sprengel OGK. Die angeborene Verschiebung des Schulterblattes nach oben. *Archiv Klinische Chirurgie* 1891;42:545-9.
- 7 Jeannopoulos CL. Congenital elevation of the scapula. *J Bone Joint Surg* 1952;A34:883-92.
- 8 Klippel M, Feil A. Anomalie de la colonne vertebrale par absence des vertebres cervicales—cage thoracique remuant jusqu’à la base du crane. *Bulletin Société Anthropologie, Paris* 1912;65:101-5.
- 9 George MD. *Catalogue of personal and political satires preserved in the department of prints and drawings in the British Museum*. Vol X. 1820-1827. London: British Museum, 1952:527.
- 10 Living skeleton. *Lancet* 1825;viii:178-9.
- 11 De Arenas MN. Manojó de noticias—la suerte de Goya en Francia. *Bulletin Hispanique* 1950;52:229-73.

The Keppel Club (1952-74): lessons from the past for the future

John Fry

Beckenham, Kent
BR3 4DG
John Fry, FRCGP, general practitioner

BMJ 1991;303:1596-9

The Keppel Club was a think tank with an influence beyond its size because of its membership and format. It remains an educational model for cross fertilisation of ideas. The club was the brain child of John Brotherston and his colleagues at the London School of Hygiene and Tropical Medicine. Why “Keppel”? Because the school is the only address in Keppel Street—a short street of less than 100 yards facing the Senate House of the University of London and connecting Gower Street with Malet Street.

A radical group of young lecturers came together at the school in the early ‘fifties. It was the aftermath of the second world war and the start of the NHS. It was a time of confidence in a bright future for health care in Britain, and young men and women believed in themselves and in their abilities and opportunities to fashion a new and better health system.

John Brotherston was a senior lecturer at the school and he believed that there was a need for a small group to meet, talk, and plan for the future. The club met for the first time on 20 March 1953, and from then until 1974 it met 140 times.

It was a small and informal club with an average attendance of between 10 and 20. The meetings were monthly, during term time, on a Friday from 5.30 pm to 7.30 pm followed by more informal discussion at a local pub. An invited speaker opened with a 15 to 20 minute introduction, which was followed by a wide ranging discussion. A report was prepared by the secretary and circulated with a notice for the next meeting.

Intentionally small

The club was intentionally small. During its 22 years there were never more than 25 members at any time and in all there were 50 who came and went. The aim was a membership that was wide ranging in ideas and experience. Although members were formally elected at a club meeting, the process of selection was informal. Individuals with original ideas and who were likely to stimulate were suggested; they were invited to one or more meetings as visitors, and then elected. Personal knowledge and quality of publications were much more important than ex-officio appointments by virtue of positions held at the London School of Hygiene elsewhere.

Although most members were originally London based, many continued as less regular attenders as they moved away. The secretary’s reports of each meeting sent to all members were much appreciated by country members as sources of contact, information, and education.

How was influence effected?

Although it is impossible to measure objectively, the influence of the club was most probably through the informal and friendly rubbing of shoulders and the introduction of free wheeling thoughts and ideas promoted by uninhibited discussion. The club’s success was partly due to the climate of opportunity in the evolving NHS, with the opportunities to test and develop new methods and systems, but also to the

Sir John Brotherston