SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

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Editorial

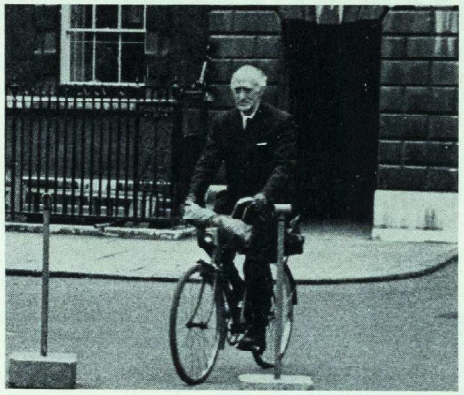
"Likewise, all studious, good and honest men, do never suffer their mind so to be o'erwhelmed with the passions of indignation and envy, but that they will patiently hear what shall be spoken in behalf of the truth or understand any thing which is truly demonstrated to them; nor do they think it base to change their opinion, if truth and open demonstrations so persuade them, and not think it shameful to desert their errors, though they be never no antient, seeing they very well know that all men may erre, and many things are found out by chance, which any one may learn of another, an old man of a child, or an understanding man of a fool."—William Harvey: De Motu Cordis, 1628.

We obviously have more to learn from William Harvey than he gave us in his observations as to the nature of the circulation of the blood.

However useful the ability may be from the therapeutic point of view to give an overpowering impression of self-confidence and omniscience in the presence of doubt, it is a shame that such facility is so frequently acquired at the expense of intellectual honesty. The student busy learning to disguise ignorance by Ward Round Technique, the Bright Young Man who answers every question with a reference rather than a thought, the Aged and Wise Physician who has come to "know" what is right by years of clinical experience; to all these and more did Harvey address himself. How easy it is for us to laugh at the ideas of the Ancients, and the blind faith with which they were accepted by so many subsequent generations, when we are in reality little better ourselves. Indeed, there are few of us who could call themselves the intellectual equal of Galen or Aristotle, or even of their disciples at whose expense we amuse ourselves. The smokescreen of false science that hides complacency is thicker today, but is no more substantial.

Too often one hears a question answered by what is in effect "Because I say so" or the equivalent "So and So says . . . ". No such reply should ever be allowed to pass without rebuke. If the answer to a question is not known, that should be freely admitted. If the answer seems obvious, that is grounds for suspicion; the answer must have seemed as obvious to Fitzroy in his arguments with Darwin as it was to the Royal College of Physicians in theirs with Harvey. The pause for thought may interrupt the steady flow of examination-orientated patter, but don't let that worry you—Charcot never passed an exam first time either.

H. B. STALLARD, M.B.E. - An Obituary



"HBS" retired from the National Health Service at Bart's in 1966 and so was completely unknown to recent generations of Bart's men. However, even before then many Bart's staff did not know him because of his self-effacing disposition, which was in contrast to his world-wide recognition as the greatest technical eye surgeon of his time. As can be seen by the accompanying photograph, "HBS's" demeanour was at times, highly individual and, when combined with his extraordinary high standard of work, it sometimes made him appear inflexible to his colleagues.

On the technical side, he will be best remembered as establishing Bart's as one of the two world centres for the treatment of eye tumours. Secondly, his Textbook is the definitive work on eye surgery and will stay in the forefront for years to come. His pure technical skill was literally something that could only be believed after it had been seen. His ability to cut between two pre-placed sutures with a Graefe knife during a cataract extraction brought observers from all over the world.

On the human side he possessed extraordinary athletic skills, ranging from his well-known Olympic performances to his ability to beat any House Surgeon at Bart's, even when on the outside lane on any of the staircases in the hospital. This was further characterised by the precipitous speed with which he cycled between Bart's and Moorfields and, judging by the stories that he told (always against himself) not passing unnoticed by several generations of local policemen.

In the days when the main operating lists were done at St. Albans, House Surgeons were driven there and back by "HBS" in a faded green Daimler. Successive House Surgeons marvelled at the man who could control his hands to within a fraction of a millimetre in the operating theatre, but who, when placed behind the driving wheel of a car, would invariably take most corners on two wheels, whilst at the same time telling a series of his delightful anecdotes for which he was justly famous.

Such human qualities combined with such technical expertise give the real clue; genius. It is difficult to convey how highly "HBS" was regarded by Eye Surgeons throughout the world, but perhaps it was best summed up recently by a Polish Eye Surgeon who said, whilst standing in the Square, "Ah, Bart's—famous for William Harvey and Mr. Stallard."

M.A.B.

J.R.B. writes: Much has been written of the humility and courage of my old friend, Henry Stallard, with whom I trained and ran for Bart's in the Inter-Hospital Sports.

In my final year, we were determined to win the Shield, and Henry, who normally left the three-mile race to me (in which I invariably came in a third and unscoring competitor), decided to join me in this event, as well as in his normal races. In the penultimate lap, I felt fresh enough to sprint up the finishing straight unchallenged and it was only in the final stretch that Henry ambled up alongside and suggested we finished together. I felt this would be too great an honour so I told him to go on and win which he did. (I must admit I afterwards thought how nice it would have been to have been able to boast that I dead-heated with the great man!)

Much later, when we were both in Egypt in the RAMC, I got an opportunity, after some pretty unpleasant desert fighting, to call on him in Cairo, where he was spending long hours of dull clinics, testing eyes (but still finding time to run around the streets at night!). He was in bed, having insisted on incising a large abscess in his own thigh, "to test his ability to stand pain!" He was most envious of my having been involved in the desert warfare, and would willingly have given up his rank of major to be "up there" as a captain like myself as an RMO. Later, I heard he had got his way, inasmuch as he had gone forward with a field ambulance.

Several of my old patients and friends who happened to be treated by him are sad at his passing, as I am.

ANNOUNCEMENTS

Engagements

LEPARD—LANGRIDGE—The engagement is announced between Mr. Timothy Lepard and Dr. Linda Langridge.

WILKINSON—SUMMERS—The engagement is announced between Mr. Jonathan Mark Wilkinson and Miss Janet Elizabeth Summers.

STOCKS—ROBBS—The engagement is announced between Dr. Richard John Stocks and Miss Phillppa Jane Robbs.

SWEENEY—KENNEDY—The engagement is announced between Mr. Gary A. Sweeney and Miss Mary T. P. Kennedy.

Deaths

BRAITHWAITE—Dr. Robert Fenton Braithwaite M.B.B.S., M.R.C.S., L.R.C.P. Died October 26th, 1973. Qualified 1935.

COUR-PALAIS—On November 15th, 1973, Dr. Anne Judith Cour-Palais. Qualified 1954.

DODD—On October 5th, 1973, William Dodd, M.D., M.R.C.P., F.R.C.G.P., F.F.C.M., D.P.H. Qualified 1931.

HAYWARD-BUTT—On September 18th, 1973, John Terry Hayward-Butt, M.B., B.Chir.

HILTON—On August 1st, 1973, Andrew Martin Blythe Hilton, M.B.B.S. Qualified 1963.

WHITING—On November 3rd, 1973, Dr. John Scott Whiting. Qualified 1929.

Marriage

CLISSOLD—VASEY—The wedding took place on September 21st, 1973, between Dr. Elmer Clissold and Mrs. Jean Vasey (née McMillan).

Change of Address

From January 1st, 1974, MR. ALEXANDER P. ROSS will be living at Hornton Cottage, Martyr Worthy, Hampshire. Telephone number: Itchen Abbas 301.

Appointments

Professor F. W. O'Grady, professor of Bacteriology at Bart's, has been appointed to the foundation chair of Microbiology at Nottingham University.

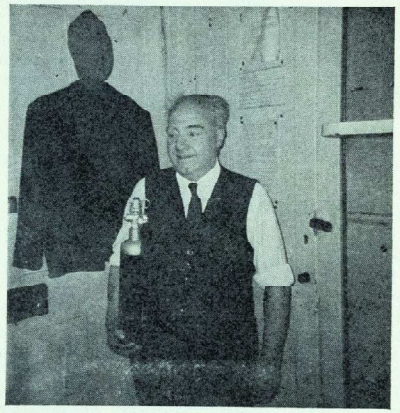
Sir Ronald Bodley Scott, having recently retired as Physician to the Queen, has been honoured by promotion to Knight Grand Cross in the Royal Victorian Order.

Dr. Derek Crowther has been appointed to the new chair of Clinical Oncology at Manchester University. He is at present consultant physician to the Imperial Cancer Research Fund Unit and honorary consultant at Bart's. Dr. Crowther has also been closely involved with the *Journal* in various capacities during his time at Bart's, and, while heartily congratulating him and wishing him every success in Manchester, we will be very sorry to lose him.

Professor J. P. Quilliam, professor of Pharmacology at Bart's, has been elected chairman of Convocation of the University of London, for a term extending to May 1976. Professor Quilliam, with 1,998 votes, defeated the other candidates with a majority of 327.

Mr. Alexander P. Ross has recently been appointed Consultant Surgeon to the Royal Hampshire County Hospital at Winchester.

RETIREMENT



Mr. Mudd, the Hospital Fire Safety Officer, has recently completed twenty-one years of service. He is now aged 65, and came to Bart's in 1952 having served eight years in the Ipswich Fire Brigade and eighteen years in the London Fire Brigade. He is generally responsible for the maintenance of all the Fire Equipment in the hospital and reckons that in his time at Bart's he has given over six hundred lectures to hospital staff. Mr. Mudd told me he has greatly enjoyed his job, and has had very good co-operation with the wide range of people he has to deal with, although he admitted he hadn't always managed to get his advice accepted. He intends to retire in March and we congratulate him on his long service and wish him continuation of the excellent health which has kept him at Bart's for twenty-one years without a single day's sick leave.

Ex-Medical Secretary willing to type papers, theses, etc., at home. Please contact Ann Bell, telephone 0732 58872.

LETTERS

WORK

November 16th, 1973.

The Editor,
Bart's Hospital Journal,
S.B.H.
Dear Sir,

I note with interest the number and nature of the cases seen by Mr. Gilmore over the weekend of September 7th-9th (Bart's *Journal*, November 1973). However, one swallow does not make a summer, and he appears to be countering the students' criticisms of a general state of affairs, that is the lack of acute surgical material, with a single isolated example. The weekend he describes is not characteristic of the experience of myself and my colleagues over the past year.

I would also be interested to know how Mr. Gilmore would have handled his surgical and teaching commitments if all nineteen of his students had been present during the weekend he describes.

Yours faithfully,
P. J. HALE.

STUDENTS' UNION

November 29th, 1973.

The Editor,
St. Bartholomew's Hospital Journal.
Dear Sir,

I should like, through your columns, to re-start the custom, whereby the Chairman or Honorary Secretary of the Students' Union summarises what is happening within the Union.

The S.U. is criticised often by students because it seems ineffectual and inactive. I feel this is generally unfair, as much of the work done is very routine and not of particular interest. For example car parking permits at Charterhouse Square is a perennial problem, about which everybody moans, but nobody is prepared to act. We have now laid down criteria on which permits are issued, and hope we shall be able to prevent some of the abuse of the past.

A major part of the Union's work is liaison with groups within and without the Hospital. This year we intend to improve our relation with Q.M.C., so that Bart's students can use facilities there, and then relieve the congested interaction with regard to facilities at Charterhouse. We have now a representative on the Junior Division of the Hospital, and this may help to improve relations between the Junior Medical Staff and the students. Finally, over the past year there has been a greater participation by nurses and paramedical staff in medical student activities, and this we shall encourage.

Finances are an area where the Union is going to become more active. Up to now there has always been enough money for everybody, but the increase in student activities has caused a close review of Club finances, so that the newer clubs can have their slice of the cake. With luck no serious hardship will ensue, and perhaps "necessity will be the mother of invention", and clubs will find better and cheaper ways of carrying out their activities.

Finally, I hope that by the active participation of students—be it in the Union, sport, dramatic or other fields, rather than passive criticism, 1974 will be a successful year.

Yours faithfully,
TIMOTHY P. FINNEGAN.
Chairman, Students' Union.

C.G.M.C.

Dear Sir or Madam,

The Cambridge Graduates' Medical Club was founded in 1883 with the objects of furthering the interests of the Medical School of the University of Cambridge, promoting good fellowship amongst its medical graduates, and affording an opportunity to its members of meeting and keeping in touch with fellow graduates. The Club, essentially of a social character, now numbers nearly 1,000 members, and holds an Annual Meeting and Dinner at a Cambridge College about the end of June.

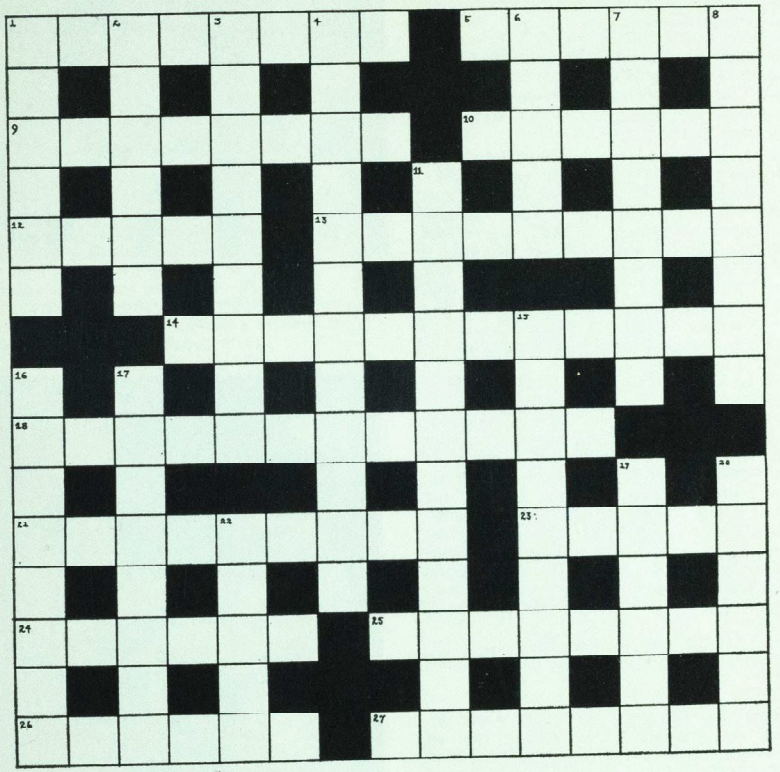
If you wish to join the Club, which we hope you will, please contact me by a letter to James Gibbs House, St. Bartholomew's Hospital, EC1A 7BE.

Yours faithfully,
JAMES O. ROBINSON,
M.D., M.Chir., F.R.C.S.

DECEMBER EDITORIAL

In the third paragraph of the editorial in last month's *Journal* we said "When Honours candidates are being left out in the cold it is time to think again". This was intended to refer to those given extra vivas, who were thus candidates *for* Honours, rather than just those candidates who *obtained* Honours. We apologise for this ambiguity and thank the sub-dean for pointing it out to us.

JOURNAL CROSSWORD - No.10 by DOGSBODY



ACROSS

1. Harvest fruit come again (8)
5. Agree to study the canine (6)
9. Pledge that is cruelty perhaps (8)
10. Verse sounds upright to one (6)
12. Palindromic note (5)
13. Regular successions (9)
14. Leg and trust wrongly constricted (12)
18. Merit in pence? What a nerve! (12)
21. In and about all around because its disingenuous (9)
23. A shot at being put out of countenance (5)
24. Retail banker? (6)
25. Hot air from Westminster? (8)
26. In relaxation is not to give up (6)
27. Its definitely not on with the finisher a culprit (8)

DOWN

1. Recommence the total in corps. (6)
2. Scale as foreign money depicts (6)
3. Fairy met the queen on the way around (9)
4. Change those who belong there for other possibilities (12)
6. A short month and foreign music (5)
7. Study kinds of partners (8)
8. Do Harpy's changes call the tune? (8)
11. Reeled away (9, 3)
15. Cute rival could make it pay off (9)
16. Mr. going about in clerical garb? (8)
17. Carrying a message, it sleeps rough (8)
19. Divers drive one for a change (6)
20. Steeple (or spirit) follower (6)
22. Eden's requirements (5)

Solution on Page 9

NURSES PRIZEGIVING

Right. The medallists, Miss Val Musson, Miss M. J. Kuhler, and Miss Margaret Hodges.
(Photographs courtesy of Photo Reportage Ltd.)

This year's prizegiving ceremony was held in the Great Hall on October 29th, with Sir Keith Joseph and Commander H. Haggard, Master of the Worshipful Company of Clothworkers among those present. The proceedings started with a speech by Miss Jones (Chief Nursing Officer). The last year, she said, had been a memorable one for Bart's Nursing. It marked the first qualification from the S.E.N. course, and from the integrated Bart's-City University course in Nursing and Sociology. Gloucester House was being extended to provide extra accommodation and room for a School of Nursing and for male nurse training.

Bart's still has links with several hospitals for training purposes. Hill End was still closely involved with psychiatric training for nurses, and links with the Maudsley and two other hospitals were in the offing to help out in this field. The increased "farming out" of nurses to Hackney has placed a greater load on the staff here, and a new tutor has been appointed to train the auxiliaries employed to help in this direction. Post-basic training was also advancing, with management training courses and the like now available, and opportunities will widen when St. Mark's Hospital becomes part of the group on April 1st. The Women's Guild were helping to finance candidates for the Diploma of Nursing course.

The Hospital again won the Inter-Hospitals Swimming Gala Shield—as they have done annually since 1968.

Results

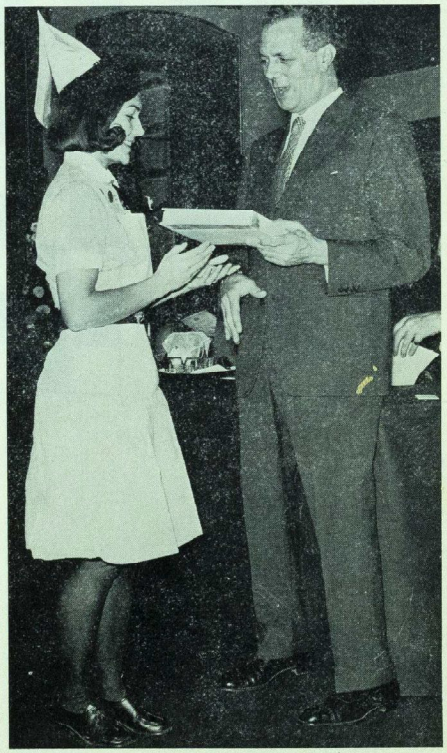
Speaking of this year's results in the final examinations, Miss Collyer—the Principal Nursing Officer, Division of Nursing Education—said that the pass rate had been 100 per cent. at S.R.N. level, and 84-94 per cent. at all levels. There had been four graduates from the integrated degree course. It had been a most satisfactory year academically.

Secretary of State

Looking back over 850 years, Sir Keith Joseph remarked on what a small number of generations that actually represented—a reminder that history is not an impersonal catalogue of dates. For the future, he assured us that nurses would always be indispensable, with their participation in geriatrics, psychiatry and preventative work growing all the time. He congratulated all on their excellent examination results—and felt sure that there were many future Chief Nursing Officers in the illustrious gathering.

Medals

The Clothworkers have had a long association with Bart's, and since 1966 have sponsored the Medals awarded to the Nurses. Commander Hugh Haggard presented the Medals and 1st Year Awards after a few words of congratulation to the Nurses concerned.



Sir Keith Joseph presents a book to Sarah Montgomery.

DEATH IN THE WATER by T. McEWEN

Every doctor should be conversant with the principles of first aid for the apparently dead, who have been retrieved from water. Every year, in this country alone, 1,500 people are "drowned", about 80 per cent. in inland waters, and 20 per cent. in the sea.

Furthermore, there are injuries specific to watersports which any doctor may be called upon to treat. An outline knowledge of these can save a victim from disablement, or death.

Drowning or Apparent Drowning

At autopsy, only 20 per cent. of those who have died by drowning are found to have water in the lungs. Much valuable time is wasted by the well-meaning in inverting the apparently drowned, to allow water to escape from the mouth. In fact, the water so obtained comes from the stomach, since protective reflexes force the victim to swallow large volumes, rather than inhale, when submerged. Thus the problem is usually one of simple asphyxia, with the treatment of which any medically trained person is familiar. In severe cases, where cardiac arrest has occurred, external cardiac massage is mandatory, in addition to expired air respiration. Much unnecessary attention has been paid to the relative merits of inhaling salt water or fresh water, and the ensuing ion exchange across the alveolar membrane. In fact, both cause physical disruption of the alveolar pattern, probably by destruction of surfactant. Some alveoli expand whilst others collapse, and little ionic exchange occurs. The message is, however, that an intense lung reaction follows, and the apparently recovered victim must not therefore be sent home, but admitted to hospital for observation; or he may died from later consequences of such inhalation as occurred at the time of asphyxiation. This article cannot encompass the treatment of this eventuality.

Hypothermia

This is the true cause of "death by drowning" in a very large number of cases. Even in the comparative warmth of British coastal waters, a man can die from hypothermia in well under an hour. Only fat people derive any nett thermal gain from swimming, and even they will succumb gradually as their body core temperature drops, passing through a phase of confusion and disorientation, then a phase of introversion and amnesia, to cardiac irritability and, finally, ventricular fibrillation.

Many an apparently drowned person has been given prolonged and fruitless expired air resuscitation and external cardiac massage, when in need of rewarming. First aid for these victims consists of *rapid* rewarming, in a bath at 40-41 degrees C if naked, or 44-46 degrees C if clothed. Clothes can be cut off later—time counts. Limbs should be kept out of the water, if possible—they will be rigid—since they contain a considerable pool of cold, acidotic, blood. Although not a first aid point, it is worth remembering that any i-v fluids such as bicarbonate solutions should be prewarmed. Of course, circulation and respiration will require attention, as before. The victim must be kept in the warm bath until he is consciously warm, since there exists the phenomenon of "rebound cooling" (an after-drop of about 3 degrees C core temperature), which must be taken into consideration, as must hypotension, on recovery.

Medical Emergencies Peculiar to Scuba Diving

Ninty-five per cent. of diving accidents, contrary to popular belief fostered by Jules Verne, occur at the surface. Nevertheless, in view of Bart's Diving Club's special interest in this subject, I will mention, very briefly, a group of injuries encountered in this growing sport. These fall under the collective heading of "Barotrauma", i.e., injuries due to the increase in ambient pressure at depth.

Pulmonary barotrauma follows ascent if exhalation does not occur. Cerebral air emboli become apparent about 30 seconds after surfacing, symptoms varying with the extent and location of emboli, as in stroke. If this is suspected, first aid consists of recognition of signs of stroke, and prevention of consequent drowning, followed by recompression in a Royal Naval chamber.

Pneumothorax usually requires no treatment, unless tension pneumothorax. Onset of sudden chest pain, cyanosis, increasing dyspnoea and distress are characteristic. A needle must be put in the pleural space to relieve the positive pressure. Hospitalisation must follow. In the emergency situation a syringe is more likely to be available than an under-water seal, and will do the job.

Any Bart's student interested in budget sub-aqua should contact me. Bart's has an active club, and we recently held the first Underwater Medicine symposium at Bart's, for the Underwater Association; and have organised, with the other medical schools in the United London Hospitals Diving Group, successful underwater physiology projects on subjects such as nitrogen narcosis, diver performance, effects of cold, midwater ECGs, and so forth. These three main categories of injury due to water sport are the ones most likely to be encountered "on the beach", which require emergency first aid, as distinct from the far greater number of minor trauma associated with the sea.

I hope the tone of this brief article will not discourage new students and others from joining the Bart's Sub-Aqua Club and thereby learning more about the sea than can ever be imagined from the land. In addition to basic diving training, the club pursues an active programme of underwater physiological projects which have given us a unique position in this fascinating field—and no one has drowned yet.

CROSSWORD SOLUTION

Across		Down	
1.	Reappear	1	Resume
5.	Concur	2.	Ascent
9.	Security	3.	Perimeter
10.	Stanza	4.	Alternatives
12.	Minim	6.	Octet
13.	Rotations	7.	Consorts
14.	Strangulated	8.	Rhapsody
18.	Impertinence	11.	Staggered off
21.	Insincere	15.	Lucrative
23.	Abash	16.	Minister
24.	Teller	17.	Epistles
25.	Politics	19.	Varied
26.	Resist	20.	Chaser
27.	Offender	22.	Needs

EUTHANASIA AND HITLER

by BILL GUTTERIDGE

In the summer of 1941, when the Nazi programme of euthanasia was at its height and had already claimed 70,000 lives, Hitler's special train was held up outside Nuremberg on account of some mental patients being loaded onto a truck bound for one of the killing-stations. The nearby crowd was so incensed that the Führer was actually jeered. No one knows for certain how Hitler was affected by this spontaneous and unique outburst of hostility, but in August of the same year public disquiet was sufficient to make him order the organised killing-programme to cease.

Euthanasia as Ideology

At the root of the Nazi's attraction to euthanasia lay the concept of the survival of the fittest: "Anyone desiring to live must be a fighter, and he who will not strive in this world of eternal conflict . . . does not deserve the right to live." (Hitler, "Mein Kampf".) As with most of Hitler's ideas, the "eternal process of selection", which demanded the sacrifice of the weaker to the stronger, was not his own; instead it emanated from the German Social Darwinist thinking of the late nineteenth century. One highly influential example of the latter was Ploetz's "Outlines of Racial Hygiene" (1895) with its dream of an Aryan Utopia based on "biological", rather than humanitarian, ethical standards, according to which no provision should be made for the sick and the weak.

The First World War served to give further impetus to the euthanasia movement in Germany, and helped to bring it nearer everyday reality. A lawyer and a doctor, Karl Binding and Alfred Hoche, inspired by the bitterness of defeat, expressed the views of many when they compared the sacrifice of strong, healthy young men on the battle-front with the security of existence in institutions for the incurably ill. In a widely read publication, they argued that the Fatherland and public welfare demanded the elimination of "unproductive" lives in order to lighten the burdens of the post-war years. But perhaps the most extreme views were those published in the 'twenties under the pseudonym of Ernst Mann; this writer advocated a Health Police to ferret out the really sick and weak and described the maintenance of mental patients and invalids as against both compassion and good sense: "Thou shalt not kill," he wrote, "was the most unnatural and most life-denying commandment imaginable."

Biological Utilitarianism proved an easy bed-fellow for the racial ideology of National Socialism, according to which Germany stood in danger of "Volkstod" (death of the race) as 20 per cent. of the population were suffering from hereditary biological contamination. Genocide, sterilisation and euthanasia were to be three arms of a campaign to purify and strengthen the nation by removing those elements, who, for reasons of their race, their genetic constitution or their social uselessness, were undermining its vigour. Accordingly, legislation was passed in 1933 affirming the state's authority over life, marriage and family with the eventual aim of eradicating hereditary illness and deformity; and in the same year "Racial Hygiene" became a major subject in the curriculum of medical schools.

The Implementation of Euthanasia

Hitler was well aware that it was far too dangerous to initiate his programme of euthanasia through the normal legislative and bureaucratic channels. Since such a programme, if publicly known, would arouse the indignation of the majority of doctors and lawyers, not to mention the public itself, secrecy was essential.

The outbreak of war provided a suitable diversion, and in October 1939 the order was written on the Führer's personal writing-paper for the initiation of the killing-programme to be undertaken by a department euphemistically entitled the "Organization for the Charitable Transport of the Sick". Killing-stations were set up staffed by SS doctors, and questionnaires were sent out to institutions throughout the country, from which it was clear that the scope of euthanasia was to extend far beyond the hopelessly incurable. Information was required not just of the latter, but also of schizophrenics, epileptics, psychopaths, geriatric cases, the paralysed, those who had been confined to institutions for over five years and those who were not of German blood. Subsequent to these questionnaires, the institutions were told that certain patients were to be evacuated to other premises and that the next of kin should not be informed. Of the killing-stations the most satanic was Hadamar, which had as its motto, "Here we have no sick but only the dead", and whose director marked the destruction by carbon monoxide gas of the ten thousandth victim by presenting every member of the staff with a bottle of beer.

The Growing Public Disquiet

If Hitler thought that the extermination of tens of thousands of Germans could be kept secret, he had seriously miscalculated. Stereotyped letters were sent to the next of kin informing them of their relations' "merciful release" following influenza, pneumonia, stroke and so on, despite painstaking efforts to keep them alive. The next of kin were also advised that on request an urn containing the ashes of the deceased would be sent free of charge—an offer which contrasted strangely with the fact that they had never been told of their relations' altered whereabouts and always refused permission to visit them.

As if this were not sufficient on its own to raise suspicions, identical letters were received by a number of families in the same locality, and one victim reported to have died from appendicitis had in fact had his appendix removed safely years before. Among other bureaucratic blunders, the family of one woman received news of her death while she was living safe and sound at home, and another family received two urns instead of one.

Naturally, questions began to be asked, and people speculated as to where it would all end. What would happen to them and their friends and relations, when they grew old, sick and infirm? Rumours spread that old age pensioners would be next on the list. Party members themselves were often perplexed and wondered if the Führer really knew what was going on. Others, however, took the line that the Führer was infallible, and in the end would be proved right. As embarrassed Nazi officials in Stuttgart put it to a concerned church official, "The Führer is always right, and we small people have the duty of presenting our backs and parrying the blows meant for him."

Direct Opposition

It would be wrong to suppose that public disquiet and indignation were universal. Of those who heard the rumours, many regarded them as too outrageous to be true, while others approved what they viewed as an enlightened attempt to limit suffering. Those, who believed and were shocked at the substance of the rumours, were, however, faced by a moral dilemma: Was uncompromising resistance an absolute moral obligation, or would it only serve to harden the authorities' attitude?

Some maintained that a totalitarian government neither seeks nor wants the people's opinions on such matters, and that interference would achieve nothing but removal to a concentration camp and further erosion of what freedom and security were still left. But some people in positions of public responsibility did take a firm stand on the euthanasia issue, and, as we now know, Hitler was forced to relent. It is impossible in the space of this essay to do justice to the men and women who resisted the Nazi programme of euthanasia. Very briefly one must mention Bodelschwing, the director of the world-famous Bodelschwing colonies for the mentally and physically handicapped, who refused to answer government questionnaires about his patients, and the protestant bishop of Würtenberg, Theophil Wurm, who wrote indignant letters to the Reich Minister for Home Affairs and ended a memorandum prepared for the Army Supreme Command with the remark—"Germany is declining to the level of a primitive nation."

Probably the most influential opponent of euthanasia was Von Galen, the Roman Catholic bishop of Münster. In a sermon in 1941 he vigorously attacked the activities of the "Organization for the Charitable Transport of the Sick" and declared that the extermination of their victims occurred "simply because in the judgment of some medical official or other or in accordance with the verdict of some so-called medical commission they have become unworthy of living, since in their opinion they belong to the 'unproductive members of the community'. They are like an old machine that does not work any more . . . What does one do with an old machine? One breaks it up and destroys it . . . But the present concern is with human beings . . . If the principle becomes established that unproductive fellow human beings may be killed off, woebetide all of us, when we have become old and infirm! Woebetide all individuals who have in the process of productive work sacrificed and used up their bodily strength! . . . Woebetide our gallant soldiers who return home from the battlefield severely wounded, maimed or invalided out! . . . No single one of us is any longer sure of his life . . . Who in the future can have any confidence in a doctor? . . . If this frightful doctrine is tolerated, accepted and put into practice, it is impossible to imagine to what moral depravity it will lead, what universal mistrust will invade the family circle . . ."

Von Galen's sermon created a considerable stir: in particular, the Nazis were alarmed and infuriated by the allusion to what might happen to those at present fighting for the Fatherland. The sermon would almost certainly be read out on the following Sunday in all Roman Catholic churches in the diocese of Westphalia and it would be impossible to arrest all priests as they left the pulpit. Some Nazi officials, including Martin Bormann, suggested that the Bishop should be hanged. However, Goebbels warned that it would be counter-productive to make a martyr of Von Galen as the result might well be the loss of the whole of Westphalia to the war effort. Similarly, any steps taken against Bishop Wurm might have had protestant Würtemburg seething with rebellion. The decision was left to the Führer, who called off the killing-programme, leaving both men unharmed.

Conclusion

The story of Hitler's euthanasia campaign shows that the National Socialist state was not as impregnable as is often supposed. It shows that the Führer, even at the height of military successes, could be restrained by the strength of public opinion fortified by the outspokenness of public figures. But the tragic corollary to this is why there was never a comparable movement in relation to the wholesale slaughter of the Jews. Part of the reason was that the persecution of the Jews did not concern one's own kith and kin but an alien and unpopular people. Consequently, unlike the euthanasia issue, there could never be a strong public opinion behind any outspoken protests against the mass liquidations. In addition, anti-semitism, unlike euthanasia, was of the very essence of Nazi ideology and would, therefore, be pursued with absolute ruthlessness with no concessions made to any criticism.

The aim of the Nazi euthanasia programme was to relieve society from "unproductive" and "expendable" citizens, including the mentally ill with no immediate expectation of agonising death. This, of course, is quite different from the plea of some today for the legally authorised and medically supervised merciful release of the pain-ridden incurable at his or her own request. But it is extremely doubtful how truly free any request for euthanasia could ever be, since as soon as legislation, allowing for euthanasia, is passed, an implicit pressure is placed on the aged, the incurably sick and the invalid to have his or her life ended so as to be no further burden to relatives and society. A further danger is that "legal machinery initially designed to kill those who are a nuisance to themselves may someday engulf those who are a nuisance to others"—a situation not so far removed from that seen in Germany between 1939 and 1941.

BEHAVIOUR THERAPY - Part 1

by ROLAND LITTLEWOOD

An introductory account of some psychological procedures used to modify deviant and neurotic behaviour

Introduction

Medical students are rather suspicious, possibly contemptuous, of psychiatry, largely because of their traditional views and fear of anything which might threaten their future status (conservatism), their prosaic bias to "things seen and theories proved" (empiricism), and their desire for immediate therapeutic gratification. They take one of the two attitudes:

(i) That psychiatry is excessively complicated—a favourable attitude in medical terms but characterised by an unwillingness to proceed further.

(ii) That psychiatry is excessively simple this (majority) view is keen on medical models and laboratory demonstrations. Partially at home with epilepsy and the organic brain disorders, they shy at those psychiatric disorders characterised by statistically determined abnormalities of behaviour.

This essay is intended to deal with these conditions with as much critical rigour as demanded by the study of membrane potentials and describes treatment considerably more intelligible than most pharmacological preparations: behaviour therapy.

Behaviour

In everyday human interactions, criteria of normality and abnormality are based on a person's *behaviour*—their appearance, manner, degree of sociability or associability, the form and content of their speech and their conformity to certain social codes. Subjective experience thoughts, emotions, and sense perceptions, has been subsumed under behaviour by certain authors.

Minor degrees of difference in behaviour between individuals serve to distinguish between the same individuals' moods (vivacity or lethargy for example), the life style, roles, or personality of different individuals (neatness or deshabillé, overalls or suit). A culture may set broad limits of behaviour (the various forms of behaviour in queues in Western Europe) or narrow ones—sexual behaviour may differ greatly in different societies but each characteristically imposes a high degree of conformity based on a childhood of preparation. (1) A mode of behaviour within the culture may be normal in itself but inappropriate to the surroundings (night attire in the street) but the society is conversant with mitigating circumstances (a house on fire at night). Behaviour forbidden at certain times may be mandatory at others (the difference between civilian manslaughter and war).

Western society theoretically tolerates variations in behaviour which may be eccentric, provided that:

(i) The structure of society is not threatened, the laws flouted, or other individuals harmed.

(ii) The aberrant behaviour is not such that the person is considered to be demonstrably ill. A wider latitude is allowed if the individual has a degree of value to the society (political leadership or creativity).

Those who offend against (i) have been the traditional criminals who are punished either punitively, as a deterrant, or with the intention of modifying their future behaviour. The discrepancy between the laws and the actual behaviour permitted is a measure of the liberalization of society at a time within its own framework. (2) Those who are "ill" are treated with the intention of returning them to "normal", more especially for their own sake than society's.

The differentiation between these two groups of aberrant behaviour is arbitrary, has never been clear, and is certainly not at the present time. Before the influence of Pinel and Tuke, hospitalized psychotics were "punished": before Charcot and Freud, hysterics were "malingerers". Conversely, "moral degeneracy" was considered inherited according to the clinical theories of Lombroso. At the current time, much behaviour originally considered criminal is coming into the providence of the psychiatrist, especially that where the personality of the deviant is considered to be primarily involved (homosexuality) and some activities maintain an uneasy place between law and medicine (paedophilia and psychopathic behaviour). I would tentatively suggest that psychiatry deals with the falls from a *statistical* norm, the penal system with falls from an *ideal* norm. Both criminal and psychiatric behaviour have proved amenable to various degrees of explanation by different psychological schools, and both have been judged responsive to psychiatric treatment. In this essay, their origins and treatment are considered together, their differences noted, and the social implications of their equivalence discussed bearing in mind that we cannot draw a clear distinction between the "bad" and the "mad".

Abnormalities of behaviour may be single or multiple, antisocial or symptomatic of an illness and involving either the individual's behaviour or his subjective experiences. Psychologically observed behaviour can occur in a neurotically disturbed individual—one whose personality is basically intact but demonstrates certain symptoms, or a psychotically disturbed person where there is considered to be a basic breakdown in personality. We are only concerned here with the former neurotic behaviour. Explanations of neurotic behaviour may be considered under:

(i) The medical model—due to environmental and genetic influences, the patient suffers a clearly defined illness with oetiology, symptoms, prognosis, and treatment.

(ii) The internal model—the symptoms are only signals of an underlying root cause deep in the individual's psyche, due to a compound of early childhood psychic events and subsequent mental trauma.

(iii) The behavioural model—the symptoms *are* the disease, and they derive from faulty learning or non-learning of patterns of behaviour.

Though not mutually exclusive, the treatment for neurotic behaviour may be largely based on the therapist's inclination. The medical and behavioural models are often used together, the treatment being drug based or behavioural. Treatment allied to the internal model derives from Freud's work on hysteria and consists of psychoanalysis, based on the patient freely associating ideas, and, under the therapist's guidance, resolving for himself his internal conflicts based on insight into their origin. A more common method in this country is psychotherapy based on Freudian tenets but with the therapist taking a more active role and the treatment lasting less than the full rigours of psychoanalysis. The personal inclinations of the psychotherapist may result in one of the varieties of Freudian. Kleinian (emphasizing childhood factors), Jungian (archetypal social patterns), Adlerian (the individual's assertive role), Adolf Meyer's psychobiological approach emphasizing the individual in relation to his environment, or an eclectic approach. Psychotherapy as a whole is characterized by little intervention on the part of the therapist and a great relation to the major social characteristics, such as aggression, suicide, more hypothetical postulates in the case of analysis, such as the life force—Eros, and the death wish—Thanatos. Its critics claim it is intuitive, unscientific, not testable, or indeed refutable. (3) In the twentieth century, psychotherapy has predominated as the major therapeutic influence.

The medical model has been largely used to explain those behavioural disturbances with a clearly delineated underlying cause, biochemical or of grosser pathology. These are termed the organic as opposed to the functional disorders for which a biochemical cause may be suspected, as in schizophrenia. Critics of the medical model, largely drawn from the analysts, those influenced by phenomenological and existential theories maintain that a demonstrable biochemical lesion may be due to pre-existing mental events and treatment should take this into consideration.

The behavioural model is ultimately derived from the laboratory experiments and learning theory of the twentieth century psychologists Pavlov and Skinner, rather than the clinical situation. Divorced from the rigid behaviourism of its origins, it is beginning to accept the importance of covert thoughts but primarily states that behavioural anomalies are due to faulty learning or lack of it. It believes that behaviour can be modified by treatment based on learning theory: this essay is concerned with this treatment. It disagrees with psychoanalytical theories in maintaining outward symptoms *are* the disease: there is no underlying psychic cause. In regard to the medical model, it believes that even if psychiatric illnesses due to biochemical lesions, these are manifest through changes of acquired patterns of behaviour and these can therefore be modified to minimize the changes produced by the underlying disturbance. Behavioural techniques focus on the disturbed behaviour rather than its origin: the therapist takes a more active role with less emphasis on patient-therapist relationships than hereto and often uses more apparatus than the classical analytic couch.

The distinctions between the various theories must not obscure the factors they hold in common. All three believe in the importance of hereditary and other biological variables, psychological, stress, conflict situations, bereavement, and sociocultural factors in the genesis of disturbed behaviour. They differ in the attention paid to each and the therapeutic procedures thereby evolved. The behavioural theories of Eysenck take into account to a considerable degree the genetic loading on various personality dimensions.

Thus we have seen that the complexities of abnormal behaviour have given rise to a multiplicity of theories, usually complex.

Learning Theory and the Theoretical Basis of Behaviour Therapy

The term behaviour therapy was coined in 1958 by Lazarus but the learning theories from which the techniques derived have their origin with the experiments of the Russian physiologist and psychologist Ivan Pavlov. The British nineteenth century school of the associationists (1) produced a viable theoretical basis for the relationship between external events and their mental consequences but Pavlov (2) provided the first strict experimental ground.

Classical Conditioning

Pavlov discovered the (classical or Pavlovian) conditioned reflex with his famous experiments where by after presenting the physiological neutral sound of a bell (conditioned stimulus—CS) with the production of food (unconditioned stimulus—UCS) resulting in salivation, the dog responded by salivation to the bell alone. He found that:

(i) CS must be presented before the UCS: "backward" conditioning had little effect.
(ii) The interval between CS and UCS must be short.
(iii) The repeated presentation of the SC alone resulted in extinction of the conditioning but this returned after a resting interval without trials.
(iv) The conditioned stimulus (CS 1) could be associated with a second (CS 2) resulting in a higher order conditioning.
(v) Generalization occurred—the animal would respond when conditioned to a similar but not identical conditioned stimulus (such as a different bell) but extinction occurred earlier.

Since then, a variety of autonomic reflexes has been used such as cardiac rate, nausea, vomiting and neuromuscular reflexes. Experiments on man have shown that the mechanism may be more complex than this simple S—R (stimulus-response) model, such that S—S learning takes place (the response itself is experienced and that this itself is associated) and a delay may occur in man due to anticipatory goal response. The exact action and degree of central mechanisms in human learning is still, of course, under investigation.

In 1920, Watson, influenced by Pavlov's work, conducted an experiment now known by the name of the subject—"Little Albert". The child experienced fear (R) after a loud noise (UCS) which was associated with the presentation of a rat (CS). He exhibited fear on subsequent exposure to the rat alone and a wide variety of animals and furs.

In 1924, Jones, working with institionalized children, found that fears of the dark did not die out by extinction. In attempting to modify this fear, she found exhortation and ridicule had no effect: the dark—fear was reinforced. Assuming that pleasure and pain were incompatible impulses, she endeavoured to teach the children to associate a sweet (UCS resulting in pleasure) with the dark (CS), resulting in a dark—pleasure association. She found that if they proceeded quickly, the sweet lost its attraction and became associated with a dark—fear (sweet—fear—dark). But, if the darkness was increased slowly during a series of trials, the anxiety was diminished slowly with each trial (dark—sweet—pleasure). From this direct conditioning, we derived the modern techniques of systematic desensitization: if the painful object is presented gradually "each increment of pain is nullified by the overriding pleasure" but the overwhelming presentation of the feared object merely reinforces the phobic reaction and the pleasurable stimulus looses its efficacy. Subsequent work has shown that learning is aided by removal of the anxiety—diminishing stimulus intervals (intermittent reinforcement) and that the gain, in this case, is not lost on stopping treatment.

Instrumental Conditioning

An act performed under the volition of the animal may be reinforced by reward, as, pressing a bar in a Skinner box resulting in food presentation. An avoidance reaction may be reinforced by reward. The administration of pain, stopped on performance of the required action, aids learning if escape is possible; otherwise it generates anxiety and prevents learning. From instrumental conditioning comes our technique of operant conditioning.

Learning Theory and Neurotic Behaviour

Pavlov induced an "experimental neurosis" on increasing the difficulty of the task to be learned: dogs rewarded on distinguishing a circle from an ellipse, became distressed, howling and struggling, as the ellipse presented approached a circle. Maier found a similar reaction when rats had increasing difficulty in distinguishing between the marks on two doors, one of which led to food, the other a shock. The significance of these results to man is debatable but it is apparent that an emotional conflict can give rise to an abnormal mental state. In 1948, Masserman induced a food phobia in a dog by punishment and removed it, gradually bringing it nearer to the food and stroking the animal, equivalent to the method Jones used with the children. Wolpe (4) used an allied method for the removal of normal fears—the Principle of Reciprocal Inhibition—an anxiety provoking cue has no effect if behaviour is elicited which is compatible with anxiety.

A common factor in most neurotic behaviour is anxiety (5). This state, often described as "fear spread out thin" has been described as the inevitable complement of man's freedom of action (Kiekegaard) and is a basic component of Freudian theory. We distinguish between state anxiety—anxiety in the presence of or at the thought of a particular object or concept, and trait anxiety—a personality tendency manifest by anxiety in the face of a wide variety of cues (free floating anxiety). A behavioural hypothesis for human anxiety is conditioning to a cue followed by subsequent stimulus generalization (as Little Albert and the fur). Why isn't the anxiety subject to extinction? There is laboratory evidence to show that a conditioned emotional response (CER) persists either because of the intensity of the emotional response or avoidance behaviour preventing exposure to the aversive stimulus and extinction—or that the autonomic response to the stimulus lasts longer than the voluntary response (thus anxiety persists while the conscious mind has "solved the situation"). The Yerkes-Dobson Law shows that after a limit, anxiety decreases performance, thus limiting avoidance or problem solving behaviour. Anxiety is generated in a situation where behaviour only partially averts the painful situation more than one where no avoidance behaviour is possible (the famous "executive monkeys"). Language allows us symbolic representation of an aversive stimulus and thus greater reinforcement in the physical absence of the stimulus. There is considerable evidence that phobic anxiety reactions may be learnt by imitation from parents (6).

Some authorities maintain that these experiments show psychiatric symptoms can be derived solely through ordinary learning processes, others do not. Eysenck believes that in man, the personality trait of neuroticism must first be present and that then neurosis in a specific learning situation. Thus, free floating anxiety may be due to an inherited trait or to excessive stimulus generalization.

Hypotheses on the origin of behavioural disorders other than phobic reactions may be advanced on the basis of learning theory. Skinner discovered that pigeons, rewarded for a specific action, often associated the reward with some other fortuitous action such as standing in one part of the cage: he termed this "superstitious" behaviour. Obsessions may be due to the chance performance of meaningless rituals with chance reinforcement. They may be due alternatively to unconscious stimulus generalization: "dirt" perceived in a wide variety of situations may lead to repeated hand washing. A pattern of alcoholism may be initiated by learning that alcohol decreases anxiety: after a time this becomes standard response to anxiety provoking situations. Hysteria may be a response to actual trauma as in war or a learned response; an initial episode results in a primary gain and the response is learned. Sexual disorders may be based on a chance construct reinforced by subsequent masturbation. Asocial behaviour in children may be rewarded by attention, and delinquent and psychopathic behaviour, by immediate gratification (stealing) and peer group approval. The Harlowes and Bowlby have shown how isolation from stimuli may lead to impaired sexual and social behaviour. It should be possible to explain the deeper symbolism and Freudian tenets on the basis of classical conditioning, stimulus generalization and higher-order conditioning.

As regards the psychoses, behaviour therapists have tended to prefer the medical model to those theories where the behaviour is based on previous experience (Lidz and Laing.) However it would appear that disturbed modes of communication may lead to a disturbed input and perception (7).

These models of neurosis are only tentative: experimental validity can only come from the obviously unethical experiment of altering individuals' environment in deliberate expectation of producing deviant behaviour. The models largely ignore the complex factors of cognition and social conditioning which would play a large part in neurotic behaviour if produced by normal learning processes.

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(1) Margaret Mead "Male and Female"
C. S. Ford and F. A. Beach—"Patterns of Sexual Behaviour"
(2) Kinsey showed that working class police in the U.S. in the forties did not apply the laws against extramarital intercourse passed by middle class legislators.
(3) Karl Popper and Ernest Nagel
(4) Occam's Razor

Learning Theory
The history of learning theory is covered in "The Penguin History of Psychology" and a summary in Hilgard and Atkinson op. cit. Chapter 8
(1) R. Thomson "Penguin History of Psychology" Chap. I
(2) I. P. Pavlov "Conditioned Reflexes" 1927
(3) H. G. Jones "The elimination of children's fears" J. Exo. Psychol. 1924
(4) J. Wolpe "Psychotherapy by Reciprocal Inhibition" 1957
(5) An interesting summary of ideas on anxiety is M. Loder "The Nature of Anxiety" B. J. Psychiat. 1972
(6) Particularly in the case of mothers and daughters.
(7) As in the Bateson double-blind hypothesis.

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BOOK REVIEWS

CELLS, ORGANS AND ANIMALS: AN APPROACH TO THE BASIC MEDICAL SCIENCES by J. A. Sharp. Blackwells, £2.50.

On the back cover (which seems hardly the best place) it is stated that the book is intended for students who have been accepted for a medical course but have not studied biology in the sixth form. In the Preface the author mentions that he has run the risk of treading on a lot of toes belonging to zoologists, biochemists, physiologists and others.

I am happy to say that he has not damaged mine since in many respects the book is essentially along the lines of the course we have taught at Bart's for a good many years. The only real difference is that of arrangement—we start with basic concepts of cell structure and function, from viruses to metazoan cells, and then move to grades of organisation and more physiological aspects. In this book the arrangement is back to front, as a result of which the author finds it necessary to digress into topics which appear later on. Rather oddly, "The body plan of a fish" is followed by a section entitled "A digression on muscles" under which appear the subheadings "The spinal nerves" and "Excretion and reproduction". The first part (pp. 9-56) is messy as a whole although individual sections are good. The author seems much more at home with the last part (pp. 57-122) where the text moves logically from cells to tissues and then to various physiological processes. A diagram of the fine structure of a cell, however, is, to say the least, abherent.

On the whole a readable book which if planned better would be quite excellent. It can be recommended to anyone with relatively little knowledge of biology but who already knows the route to follow and certainly as an aid to an organised series of lectures.

A SHORT TEXTBOOK OF CHEMICAL PATHOLOGY, 3rd Edition. The English Universities Press. £2.65 Boards Edition. £1.45 Unibook Edition.

Professor Baron has now for many years provided a valuable and readable revision textbook of Chemical Pathology, concentrating on the medical and interpretational aspects of the subject without dwelling on the technicalities of analytical procedures.

Theoretical and practical research work has, as he points out, advanced at an ever-increasing pace over the years, with the result that a modern laboratory has been able to offer both a wider range of investigations and also an enlarged specimen handling capacity.

The new edition has retained the basic structure and flavour of the old, with the insertion of short new sections. So whereas detailed discussion of tests which have long since become obsolete is still retained, often with a note as to their limited value, a number of the newer and more valuable tests, and indeed whole fields of investigation, have been either dismissed with a few words or totally omitted. Valuable guidance is contained in the appendices which could greatly improve understanding between the physician and the laboratory.

The scientific basis of medicine is widening daily, and the author of any textbook in such a field must be prepared to cast out nostalgia and look at the present with an eye to the future.

BASIC CLINICAL SURGERY FOR NURSES AND MEDICAL STUDENTS: EDITED BY JOHN McFARLAND. Pp. 767. Butterworths. Price £2.50.

Sir John Bruce, in his foreword, describes this book as an excellent vade mecum and certainly this is the case. As an introductory course guide, there is much common sense with sound chapters on patient management in the ward both pre and post operatively. There is a useful list of references to which the student can turn if he desires more information. The quality of the diagrams and prints is good, though the anatomical details of the ano-rectal musculature leave something to be desired.

The clinical medical student, however, will not find this work to be comprehensive enough for his Final M.B. examination. For example, in the chapter on herniae, umbilical hernia is not mentioned nor are other less commonly encountered diseases described in other chapters. Despite this, the book remains a valuable introduction to clinical surgery. Mr. McFarland and his co-authors must be congratulated in producing a well written and informative book at a price which most students could well afford.

MICHAEL PERRY.

ESSENTIAL OBSTETRICS

This paperback is a collection of standard lectures given to Pupil Midwives in training. The approach is traditional and somewhat stereotyped, but doubtless for that reason largely covers the approved C.M.B. syllabus. There are, however, some strange inconsistencies and inaccuracies which detract from the overall value of the book. Although approved names for drugs are generally used, the practice is not uniform which is confusing; the labelling of one anatomical diagram is inaccurate; chorionic gonadotrophin is described as being produced by the placenta in increasing quantities until near term, and the arteries of the umbilical cord are described as carrying oxygen and nutrients to the fetus and the umbilical vein as carrying excretion products to the placenta. A term such as inversion is not explained and yet a lengthy description of pelvic shapes is included—hardly essential midwife knowledge.

A very short text book should be very good and very accurate, and is perhaps more difficult to produce than a longer one. This volume will not be a serious rival to its peers.

C. N. HUDSON.

"COMMUNITY HEALTH and SOCIAL SERVICES"
By Brian Meredith Davies, M.D. (London), M.F.C.M., D.P.H.
Director of Social Services City of Liverpool

The second edition of "Community Health and Social Services", the first edition of which was published seven years ago, has been revised and re-edited to take account of the many changes that have taken place during that period and, especially, of the more fundamental changes due to occur on the reform of the United Kingdom Health Services next year. As such, it should prove a useful and informative book for doctors and nurses.

It is, in fact, a comprehensive description and explanation of the workings of the National Health and Social Services in all its aspects and is designed to assist doctors and nurses to understand the new Social Services and how they will assist and support patients in their own homes. It is easy to read and well constructed and has a useful index.

With regard to the paragraphs on prevention of mental illness and effects of bad housing on health, more perhaps could be said on the role of the Social Workers in these matters. The detection of environmental and some emotional factors by the Social Worker can often prevent breakdown of family relationships. I feel doctors and nurses should be encouraged to refer this type of problem to a skilled Social Worker as soon as danger signals are detected.

In addition to its practical use, this book will help the reader to understand the many factors that contribute to a breakdown of functioning when an individual is under stress. It will also facilitate easy reference to the appropriate resources available for specific needs.

I would recommend it as a necessary and useful book of reference to all who are concerned with the care of those affected by illness and its consequent problems.

C

THE ANATOMY OF BART'S JOURNAL

dissected by ALLAN HOUSE

A brief account of the structure and function of the *Journal* in recent years.

The Constitution of the Students' Union is brief and to the point concerning the *Journal*. It says . . .

1. A Publications Committee shall organise all aspects of the *St. Bartholomew's Hospital Journal*, which is the property of the Union and is published monthly.

The Committee shall report annually to the Finance Committee of the Union to determine the sum paid to the *Journal* for such journals as the students receive.

2. Editorial policy is independent of the Hospital, College or the Students' Union.

The Publications Committee

This committee comprises the members of the *Journal* staff and a number of members of staff from the Hospital and College. These are currently:—

Dr. P. Borrie (Chairman)
Dr. D. Crowther
Mr. M. Irving
Mr. P. Cull
Dr. A. Lister
Dr. J. Gamble

Meetings are held monthly to discuss material submitted for publication, the organisation and finances of the *Journal*, and general policy.

New members of the Committee and members of the *Journal* staff are also elected at these monthly meetings.

The Journal Staff

The day-to-day running of the *Journal* is entirely in the hands of those students who work for the Publications Committee. There is a variety of jobs, with no fixed "term of office" for any. As with all publications the final responsibility for what appears in the *Journal* resides with the editor(s).

The Journal Itself

1,850 *Journals* are printed a month and distributed to libraries, subscribers and students, and sold throughout the hospital. There is no fixed policy as to what type of article will or will not be published—each article is considered on its own merits by the Publication Committee. The Bart's *Journal*—as with that of other hospitals—does not suffer from a surfeit of contributions. It is, of course, in no way supposed to be the official organ of the Hospital, College or Students' Union, and has never pretended to be so.

BART'S NEWS AND VIEWS

WHO'S FIRST AGAINST THE WALL?

Whatever has happened to Rote? It fired the first shots in a (minor?) academic revolution some months ago, but has since been in decline. Where are the pseudo-Python cartoons, the signed graffiti, which accompanied its arguments by way of revolutionary art? Perhaps the early momentum has been absorbed by the time-consuming business of actually getting things printed.

While their styles and points of view may differ, the *Journal* and Rote should co-exist (note that I did not say "co-operate"). In fact they do not really aim for different markets, just different aspects and needs of the same market. Community Politics are popular at the moment, and it would be a good thing if Rote could do for Bart's what "Suburban Press" did for Croydon. But for that it needs to be not only punchy but regular, so that the College can be kept fully aware of the notions of its *enfants terribles*.

So who will be first against the wall? The *Journal* because of rising costs and falling interest; the Consultants, pushed there by the "revolutionaries" at gunpoint; or Rote, smothered by the realities of the business? I hope that this is not an obituary.

Editor: We understand that ROTE is looking for a printing press as the publishers are no longer allowed to use the Hospital printing department. It would be a pity if this step prevented ROTE from appearing again.

SCOPE FOR IMPROVEMENT

It's my own fault, I was told to buy a Litmann but, knowing that my Education Authority are a bit mean about paying up for equipment, I decided to buy British. And that's how I ended up with a stethoscope with an aversion to Outpatient Clinics. At least, that is the way it appears, because whenever I approach someone with the benign intention of taking a blood-pressure reading, the B-D thing falls apart.

This is good for neither my confidence nor the patient's, and leaves me looking anything but cool. Still, I console myself that I have not heard of this happening to anyone else. In fact I have a friend who tells me that he bought a B-D and has never looked back. He didn't say whether he had ever looked *down* to see trailing grey tube yards away from his earpiece. So I am left with the question of whether to repair with glue or elastic bands, or appear shamefacedly at the friendly local instrument store and ask their advice.

By the way, don't take this as anti-B-D propaganda, I can't afford to be sued by a multinational firm of stethoscope manufacturers.

CANDID CAMERA

"I don't care if I *am* getting double time—It's somebody else's turn to stand here!"

SOLUTION TO CHRISTMAS PRIZE CROSSWORD

Across		Down	
9.	St Bartholomew	1.	Steel
10.	Vista	2.	Hasty retreat
12.	Mettle	3.	Stream
13.	Duty officers	4.	London Hospital
14.	Prominence	5.	Continental farewell
16	Xylene	6	Nero
18.	Next	7.	Fiscal
19.	Scorned females	8.	Stroring energy
21.	General Practitioner	11.	If expected
22.	West Smithfield	15.	Ends the session
23.	Nigh	17.	Severe quality
24.	Mutton	19.	Slamming it
26.	Large spoon	20.	A round of golf
29	Plastic bowls	25	Tasted
31.	Orgies	27.	Proofs
32.	Stoep	28.	Besom
33.	Title of fellow	30.	Boil

Congratulations to Donald Bain, who sent us the first correct solution to the Prize Crossword.

We apologise for a mistake in the Christmas Quiz. Music-lovers will no doubt have realised that Bach wrote the Christmas Oratorio, and Corelli the Christmas Concerto.

BART'S MUSIC

St. Bartholomew's Hospital Orchestra. Great Hall November 29th, 1973

The Bart's Orchestra gave its third concert in the Great Hall on November 29th. It accompanied Richard Carver in the Oboe Concerto of Mozart. Mr. Carver is exceedingly accomplished. His tone is ravishingly beautiful, rather Roger Lord/L.S.O. than Lother Koch/Berlin Philharmonic. His breath control, style and power are all quite professional, and, had he been playing with a major professional orchestra, he would not have been out of place. His marvellous phrasing in the adagio will remain an indelible memory, and the cadenzas, which he must have composed himself, were lucid, short and totally appropriate. The orchestra accompanied enthusiastically, there being a real concerto feel between soloist and conductor.

The orchestra played Schubert's marvellously lyrical 5th Symphony. John Lumley was the enthusiastic conductor and the last movement went particularly well. It seems wrong to single out anyone specifically for praise, but the flute of Alban Blunt was particularly fine. I would only quarrel with Mr. Lumley's decision over repeats. These are, of course, arbitrary but the slow movement is quite long and the balance is askew unless the 1st movement repeat of the exposition is played—it also contains such marvellous music that it is nice to hear it again. On record, Mr. Lumley has Beecham and Klemperer on his side but I still feel it goes better with the repeat.

In the first half of the concert we heard the dark, brooding intensity of Mozart in his C Minor Serenade given a vital and exhilarating performance by the Rosetti Wind Ensemble. I kept wondering about balance though, too much horn and not enough bassoon. This could be the Great Hall acoustic which favours brass. However, the performance was well characterised and was outstanding in the finale.

Beethoven's early music sextet, ludicrously accorded Op. 71, started the concert. My only memory of this was to wonder if it was composed for valveless horn or not. If so, the country hunting tones of the finale must have caused perspiration.

This concert was attended by a vast audience, who all must have enjoyed the music they heard.

G & S SOCIETY

"Trial by Jury". The Great Hall November 1st, 1973

This short opera was an early flowering of the collaboration of Messrs. Gilbert and Sullivan. What excellent foils they were for each other—Gilbert's outrageously funny words with his biting and sardonic wit were perfectly matched by the skill of Sullivan's music—skits on Verdi, Puccini and Donizetti abound in his scores, all done in such a way as to be entirely acceptable, and, what is more, lasting. If Queen Victoria had understood music in the way she understood politics, perhaps Sir Arthur Sullivan would have suffered the same fate as the untitled W. S. Gilbert! Sullivan was an internationally accepted composer—he wrote "The Irish" Symphony, a pleasantly tuneful work which was extremely popular with world audiences around the beginning of the century and the "di Ballo" overture (all enthusiastically received by G. B. Shaw).

Amateur "G & S" needs great enthusiasm if it is not to appear hack. This Great Hall production really had this quality in great abundance. A vast audience were really involved in the performance. It was well staged—the Great Hall is small for such a performance, yet it didn't seem too cramped for comfort. The delightful range of costumes by the townsmen and women set the scene—I noted a real prime Mrs. Mop with considerable pleasure and a marvellous cricketer. You really believed in this jury—they really might have given a fair trial, but for the judge. John Gamble goes from strength to strength. His vocal acting is a marvel, so essential in "G & S" and his voice has a true star quality—the story of "how I became a judge" is of course a Gilbertian masterpiece and Gamble excelled. The smaller parts too were well characterised—Paul Cooper as the Usher was fullsome and splendid once he overcame nerves and his bass note "Angelina" was exactly reached; Angelina (Charlotte Daniel) herself was a delightful creature—beautiful enough for these handsome suitors and sweet of voice to move all tears. John Cherry has a fine voice and made a case for the plaintiff's cause—as yet he isn't a great actor and perhaps needs firmer direction.

Nobody among the vast audience could have failed to enjoy this fine performance—John Lumley's conducting was taut and direct, so essential for this music—a tendency for fast speeds led to a fine response and did not upset his well-trained chorus. The small orchestra played well; I must mention the bassoon player whose contribution was especially delightful.

The concert had started with some charming medieval dances played on medieval instruments by the Oriana Consort. The borborymic sounds of the tenor crumhorns in quadruple unison were unforgettable. The large audience had also heard a performance of Dvorak's charming op. 44 wind serenade by the Rosetti wind ensemble. Bart's music is really flourishing. I await "The Creation" and "Ruddigore" with great interest; I gather also that John Pritchard may be coming with the Barbican Orchestra in March to conduct Rachmaninov's second symphony.

ALLEGRO.

The G & S Society's major production for 1974 is "Ruddigore", which will be performed in the Golden Lane Theatre on the evenings of February 14th, 15th, and 16th at 7.30 p.m. Tickets price 75p. 50p and 35p can be obtained from the Secretary, G & S Society.

BARTSFILM PREVIEW

My sincere apologies to those readers who went to see the appalling "Comedy of Terrors". It was turgid and largely unfunny, and should never have been "recommended". The moral is, "never trust a trailer".

Jan. 22. The Birds.

Those who have seen this fear-inducing little masterpiece should ensure that the uninitiated attend forthwith. Like most Alfred Hitchcock movies the actors are fairly irrelevant, being mere mobile props told either "Act" or "Cut". Camera angles; trick photography; special sound effects; the subtle build-up of suspense; all are here in abundance, the real stars being, of course, your actual birds. The setting is small-town California, which may put some people on the birds' side straightaway, and Hitchcock never makes the mistake of leaving you certain about anything. The result is an appallingly-acted classic, which may make you think twice next time you start disdainfully tossing scraps at some fat, mean-eyed gull waddling around the remains of Brighton pier. Try to see it.

Jan. 29. Becket. Colour.

Perhaps this should be titled "The great Burton versus O'Toole acting competition", for they do rather overwhelm Anouilh's more thoughtful play from which the film derives. Burton plays Becket, hurling his Churchillian voice around like an angry housewife throwing crockery; O'Toole is more subtle, though no less loquacious, as Henry II. Compared to "The Lion in Winter" which was silly, and "Anne of the 1000 Days" which was vapid this "history-flick" is quite appealing, with some pertinent reminders of the filth and poverty that made life beyond forty a rarity. Personally I find the whole Becket legend somewhat uninteresting and of minimal historical significance. A self-made and worldly man thinks he can suddenly turn holy and tell the king what to do; the king, not surprisingly, knocks him off by sending along four of his least sensitive hit-men. The subsequent repentance was just eyewash to keep the press happy and that's the story we've had handed down to us; full marks to Henry II for good public relations and giving hypocrites what they deserve. This film is the standard "St. Thomas" version, but still makes excellent entertainment.

Feb. 5. The Best House in London. Colour.

Late Victorian times are the setting for this romp about an extremely high-class brothel frequented by the leading lights of the "naughty nineties". The prime entertainment for those with a working knowledge of the period is "spot the allusion", references to many of the famous being hidden amongst script and action. Oscar Wilde is easy, but will you get Swinburne or Rossetti? Write them down on a postcard and send to us; ten or more correct answers means your talent is wasted as a mere film-goer. You should be doing something useful like the crossword.

T.T.

Journal Mathematical Puzzle No. 1 by R. Treharne Jones.

In a perfectly circular field, radius R, is a goat, with a tether attached to his collar. The other end of the tether is attached to a point P on the circumference of the field. How long must the tether be, in terms of R, for the goat to graze over an area equal to half the total area of the field. (Hint: Is a solution possible? If it is, the answer obviously lies between R and 2R.)

Solution next month.

CLOSE YOUR EYES AND THINK OF THE EMPIRE

Britain as we all know is sinking fast. The pound is worthless, strikes proliferate and the Empire has gone.

What is to be done? How can we turn failure into success?

First of all we must establish what drives men on to success. The old wives' tale of necessity being the mother of invention gives us the answer. Successful men are always those that need that success to compensate for their own state of insecurity.

Consider the success of the Jews, a chronically insecure race, or the outstanding artistic achievements of homosexuals. Consider too the fact that one half of all British prime ministers were brought up without a father, or the achievements that so often follow a war (2nd World War 1939-1945, N.H.S. 1948) especially if it is lost (Germany and Japan).

This then is our trouble. We have no necessity for success. We are too happy and content and secure to become successful.

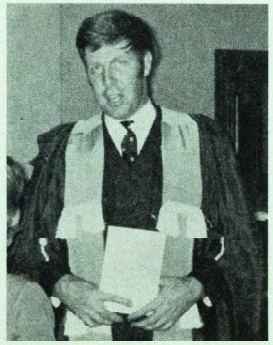
What I therefore suggest as immediate countermeasures is:

(a) Total national conversion to Judaism.
(b) The bringing up of all our children in the homosexual way of life, which will probably be brought about by
(c) The bringing up of all our children by neurotic women whose husbands will all be away
(d) Fighting every country our post office can get a declaration of war to, with the possible exception of Lundy Island whom we might beat.

This is the path to personal insecurity, the path to national glory.

Then we will all be happy.

TERRY KEALEY.



"Can't you lot even remember the caption when it's staring you in the face??"

BART'S DRAMA

A Review by JAMES GRIFFITHS

November 1973.

The Other Judas and an adaption of Alice Through The Looking Glass

The Other Judas: was written by Rob Robertson, performed by him. Jon Frappell and Doug Russell, and directed by Martin Gore.

The play is very violent, both overtly and covertly, is courageous since it involves explicit homosexuality, and is set against a thoroughly researched background of Jewish politics at the time of the Crucifixion.

The three actors were extremely good, conveying all the levels and elements of the play simultaneously with apparent ease. Dialogue and action were gripping throughout and all the hard work of interpretation was borne by the actors, making it easy to watch. The prize for monolgue, of which there was quite a lot, goes to Jon Frappell (hence Victor Ludorum) with his account of his daughter's meeting with Jesus. A combination of his physique and his acting ability made him a totally credible centurion—so polished a performance in fact that you have to imagine someone else doing it to see how good it was. Rob Robertson played Periphanes; firstly by stretching his own acting ability to meet the requirements of the part—a considerable achievement on its own, reaching new levels of concentration and abandoning many old habits. This hard work was rewarded by considerable technical smoothness and co-ordination in the play, but occasionally the delivery was a little precious or perhaps over beautified. Every facet of a very ugly character was however revealed. Judas Iscariot, played by Doug Russell, came across as a simple, spiritual man—and very much the political scape-goat. The part demanded great mental anguish and also physical courage. Doug demands no tricks apparently, preferring to be genuinely kicked over a table than any clever stunt work. I am not sure the pain is necessary or even safe, but the effect is horrific.

I thought the direction of Judas was excellent, especially the action. There was clear planning of the violence, which was economical and explicit, only once or twice out of control (but Doug likes that!) and not lasting too long or too complicated to be effective. Movement was good; nobody hung around too long in one place. Character direction was achieved by excellent co-operation with the actors who must all feel that they did their best work to date in the play. The crucial difference between a good and a bad amateur director is acting experience, and Martin has done a lot of acting.

Alice Through The Looking Glass. An episodic series of imaginative dramatic inventions, in their conception ingenious and economical, in their performance sensitive and enthusiastic. Indeed enthusiasm is the cause of much dramatic success.

The adaption is apparently an almost unaltered text, in that every piece of dialogue comes from the original, which was probably a safe way of sticking to the flavour of the thing, and not suffering from amateur writing.

Some say that the play was too long and that each scene should be cut. This is too simple an answer, however, to a perennial problem (it seems). People will always say that something IS too long and needs cutting. In fact it only SEEMS too long, and this is because of inherent weaknesses in amateur dramatics. A thorough awareness of the weaknesses and strengths of a play, and of its dynamics is usually necessary for a director to manipulate his script so that the end comes as an unwelcome surprise. If you merely cut a play that seems too long at two hours, it will seem too long after only one and a half. A great deal more can be gained by dividing into the think-tank.

Personally I enjoyed Alice and it was never long or boring. Occasionally it was spoiled by oysters between me and the Walrus and Carpenter, or by Tommy Cooper turning a beautiful studied character part, a cameo full of wit, frailty and pathos, into a side-show. Paul is a very good comedian, but on Tuesday night he acted as well as I have ever seen—without knowing it (but why should he?).

And again one may complain that it was bang-bang-bang from startling effect to startling effect, but they were startling . . . um . . . and effective! It would be difficult to do Chekhov in this style of pure imagination, and indeed good productions of more mindy plays hide their imaginative ideas under a cloak of smoothness. Alice might have been EVEN BETTER if some of the scenes had been "quieter", more appealing to the emotions or the mind than to the eye, scenes like the White Knight excellently played by Sam Freegard. It is interesting that he seemed least to notice his props or costume, and won a battle for peace in what was otherwise a hurricane.

In 1968 I had to turn down a nurse for a large part in Bartholomew Fair, because night duty clashed with performances, and it was interesting that Fanny Whitney should be able to take on Alice. I hope this means that nurses will continue to be available for productions. Fanny was excellent. She achieved two aims simultaneously. She was both Alice and a sort of compère. Never did you wonder what it was all about—you knew it was Alice's dream, and yet Alice never upstaged the other parts. It would have been easy to upstage them or perhaps disastrous to try. And though she seemed on a different plane of reality from the other parts, when necessary she fitted perfectly into the action. A performance with synchro-mesh! Very smooth, very sensitive, very un-ostentatious and a great success.

I will only add mention of Sarah Robertson, James Smallwood and Olivia Hudis, for a list of names and eulogies is boring for those who did not see the play, and a waste of time for those who did. I mention them because I liked their performances particularly.

ST. BARTHOLOMEW'S HOSPITAL JOURNAL

The annual Subscription to THE JOURNAL is only £1.50 per year £2.50 post paid anywhere in the world). Perhaps you know someone who would like to become a subscriber.

Further information may be obtained from:

The Assistant Manager (Subscriptions),
St. Bartholomew's Hospital Journal,
St. Bartholomew's Hospital,
London, E.C.1.

The Society. In the last three years there have been 10 original theatrical productions at Bart's, apart from reviews, while five published texts were used in the same period. Not only does this amount to an average of five productions per year, but an incredible two thirds of the Drama Society output is original. Here is the record:—

	Original	Unoriginal
1970	Mirror and the Star	
1971	The Bird Garden	Hotel Paradiso
	Ubu sur la Butte	Inuit
	The Syracuse Myth	
1972	The Coiners of Cudley (?)	Merchant of Venice
	A Group Play—(Peter Bacon, U.L.U. Festival)	Next Time I'll Sing To You
	A Play by Martin Gore	
1973	William Harvey Rev. Circus	Hassan
	The Other Judas	
	Alice Through the Looking Glass	

I believe this amounts to a tradition not only of originality, but also of high standards of production since at least seven of these were highly praised and four were successful exports. This record has been achieved against a background of considerable change within the Society notably in its hierarchy. It has gone through three different leaderships, and seen the departure of many established members. Although perhaps my generation started this particular ball rolling, there is a very refreshing atmosphere to the Society now that we have gone, and it is obvious that there is considerable strength in depth now revealed and far better co-ordinated since the great spring cleaner removed my clique from the scene. The result is, after a year of uncertainty, three hours of very high quality drama in this November production, at least as good as our successes of the past, and meaning I hope that the well is far from dry, but turns out to be a spring. May it gush for ever!

Lastly a paragraph about Rob Robertson. He wrote both plays and acted in one of them, and both of them have been chosen to go to Cardiff for the National Union of Students Drama Festival in January. This is a remarkable achievement on his part, since although he is well supported, it must be admitted that this November he was the Dynamo that provided the power. I think that a year ago he probably knew that he would be in charge of the Society and feared the prospect, perhaps doubting his ability to maintain the standard. Certainly I did not expect anything as good as this, and I am already half-way through my largest hat. I hope Rob will realise that Finals are easy (sic) and that it is essential to act up to the last possible moment since the Society can well use people who write with such understanding of what makes a good and interesting play, and who act and direct with such strength. We have had writers, directors and actors of equal ability before, but what a Diaghilev Robert turns out to be.

TECHNICAL NOTE

by TIM FINNEGAN

It is generally accepted, that a play stands or falls according to the ability and creativity of its author, director and actors; however it may at times be lowered to ignominy or raised to Elysian heights by the skill of the back-stage staff. These are the people who spend their time with hammer, paints, lights, amplifiers, needles and thread, and other flotsam and jetsam out of which finally appears a "set".

Bart's Drama has become very successful over the past few years and this, although primarily due to "directorial drive", has been aided by the technical staff. This term's productions were no exception.

To begin with Judas—technically an easy play about which little can be said. The costumes, props and simple set were very much in keeping with each other, and the theme of the play as a whole, and this was complimented by a suitably harsh, bluish light.

"Alice" was completely different, and the continual inventiveness of the direction was aided by suitable technical interpretation.

The design of the set was good, and the contrasting dark and light areas very effective. Of note were the ramps, with which Mike Rothera can be very pleased.

Dave Craufurd's lighting was poly chromatic and designed to be noticed by the audience. The execution of cues was generally good, and the stage was "covered", so that dead areas were minimised except at the edges. Particularly effective were the full chessboard scenes in red, and the purple spotlighting of the white knight.

It is a shame, that so much working light spilt out of the sound/lighting box, as it tended to distract during the darker moments.

Sound has played an increasing part in Bart's Drama plays, and has continued to improve in quality. The standard of recording and reproduction were very high, especially the wind and Jabberwocky poem sequence.

Costumes and make-up were complimentary, and the effect was always in character with the actor, notably Alice and the Red Queen. It is unfortunate that there was not more cohesion between lighting, and costumes and make-up as this could have been used to highlight certain characters.

Props were very good, and the picnic set of the Hatters' Party was probably the best set of props ever seen at Bart's.

Finally, I think the technical staff can be well pleased, as they made a very worthwhile contribution to the plays.

Photos previous page.

Upper: The Other Judas.

Lower: Alice Through the Looking Glass.

BART'S SPORT - ROWING

The 1973 United Hospitals Rowing Club Winter Regatta
This event, one of the last regattas of the year, took place from the U.L. boathouse at Chiswick on the 21st November 1973, and was a day of mixed results for Bart's.

The pride of our club, the crew which one of the organisers termed, "the amazingly heavy Open IV," was drawn against Guy's in the first round. After a fairly even start Guy's drew ahead to win by 1½ lengths Although John Holmes (stroke), Dave Swithinbank (3), Ted Stannard (2), and John Down (bow/steers), had only been rowing together for a very short time, their effort was passably good, and the Guy's crew, who had a higher overall status, went on to beat Tommy's in the final by ¾ length.

Bart's Junior IV, lacking previous notice of the time of starting of their race, were scratched for absenteeism. While three of this gallant band returned to their "more interesting" Medical Out-Patients, Robert Treharne Jones and cox Pete Bailey formed a so-called Rugger IV with two members of the London Hospital Boat Club. In the face of such opposition, the other four crews in the event could do little else but scratch, and Bart's rowed over (coxed by Helen Fewster) to win the event.

It was the Novice IV which really proved to be our *pièce de resistance*. Tony Williams (stroke), Charles Russell-Smith (3), Nick Millard (2) and Pete Ravenscroft (bow), had had more outings than the 1st IV, and this showed well when they easily beat Royal Vets. and Middlesex in the first round (even gaining a lead with one oar out of the rowlocks!) In the final against Guy's, the rudder broke, and Bart's were disqualified after ramming their opponents broadside. After a successful appeal, the race was rerowed, and Bart's won the race by one length, thus gaining the trophy.

For the first time ever, Bart's entered a crew for the Women's IV event. Helen Fewster (stroke), Celia Brennon (3), Ruth Birch (2), and Sue Zeitlin (bow), coxed by Pete Bailey (who, as even the organiser noticed, was not a woman), had only rowed together once before, and it was therefore not surprising that they lost rather easily to a strong London crew. More success is bound to be forthcoming once the crew realise it is necessary to pull together to achieve forward way on the boat.

In the Novice sculls event, Dave Swithinbank made his third successive bid for victory, but, though he beat the Guy's man by two lengths in the heat, he lost by 1½ lengths to Tommy's in the final. We confidently expect Dave to win the coveted trophy some time during his medical training.

Dave was joined by John Holmes, the well-known, inexperienced sculler and Captain of the Club, for the Double Sculls event, where they lost to Tommy's by three feet in a very tense race during which the lead changed hands six or seven times. In the Pairs event, John Down (bow/steers), and Ted Stannard (stroke) beat Guy's, but lost to Tommy's in the three-boat final by a margin of three lengths.

Winners of events were presented with a kiss from Christine Charlton from Tommy's. Engraved tankards were also awarded. Due tribute must also be paid to Mr. Hudson, who, as President of the United Hospitals Boat Club takes a very personal interest in the running of the club by acting as a competent and fair umpire.

The regatta is an annual event, and many other events are included in the rowing year. The Boat Club is always looking for members including students and nurses. By contacting any member named in this report, the delights of boating on the Thames can be yours

R.T.J.

IF YOU WANT TO HEAR MORE ABOUT ANY SPORT AT BART'S, WRITE TO THE APPROPRIATE CLUB SECRETARY AND ASK WHY HE IS NOT SUBMITTING REPORTS TO THE *JOURNAL*.

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

Founded 1892. Vol. LXXVIII No. 2

Editorial

It would be interesting to know whether medical students at Bart's today consider themselves more or less isolated from their fellow students in London than were their fathers and grandfathers. One would suppose that most people today considered Bart's Medical School to be a College forming part of London University; and when the Chinese Exhibition was in London recently, we all found a use for our University of London student card. But does it ever mean any more than that? London University has always suffered from the geographical dispersal of its institutions and students. Furthermore, the concentrated and time-consuming curriculum of a medical student may make it difficult for him to spend much time with non-medical students. But these are no longer adequate excuses for the isolationism of medical students. The student population of Paris is dispersed among many different University institutions. But there the student has some kind of identity, some fellow-feeling with other students. And medical students featured in, and benefited from, the *événements* of 1968 every bit as much as the students of politics, law or whatever.

At a recent meeting of the Bart's Students' Union, the question of membership of the National Union of Students was raised, and summarily dismissed. One is bound to agree that the NUS has little to offer Bart's students, and most Bart's students would have little in common with the NUS leadership. But what is disturbing is that Bart's students are not even prepared to discuss the pro's and con's of joining an organisation which, like it or not, represents them and their interests. To take an example; the NUS is largely responsible for campaigns for increased grants for students. Medical students, particularly those at Bart's, are generally much better off than their counterparts in other colleges, as the great demand for parking permits for the shiny new cars in College Hall shows. How many people realise that there are students who arrive for their first term at other universities with nowhere to live, and have to sleep on someone's floor for their first month or two until lodgings can be found? How many students have tried living off the current grant with no parental aid? It may indeed be that joining the NUS would be of no benefit to Bart's students, but surely it is worth discussing. Medical students in London are inevitably a little different from other students. They tend to have medical ancestry, to come from the South-East and to feel loyalty towards the Hospital rather than the University. There's no shame in that. But there should be a slight unease about their lack of interest in the affairs of their peers, who are, after all, their future patients and perhaps employers.

The final date for submission of articles for the April *Journal* is March 1st.

ANNOUNCEMENTS

Engagements

ROUTH—ROBERTS—The engagement is announced between Dr. Guy Routh and Miss Mary Roberts.

Appointments

Dr. Henry Archer, who qualified from Bart's in 1920, and had a distinguished career as Senior Biochemist Imp. Canc. Res. Fund has at the age of 84 been made a fellow of the Royal College of Pathologists.

New Address

Mr. and Mrs. JAMES M. ROBINSON, One Hillside, Woollard, nr. Pensford, Bristol. Tel.: Compton Dando 577.
Formerly: 154 Knights Croft, New Ash Green, Dartford, Kent.

PERCIVALL POTT CLUB

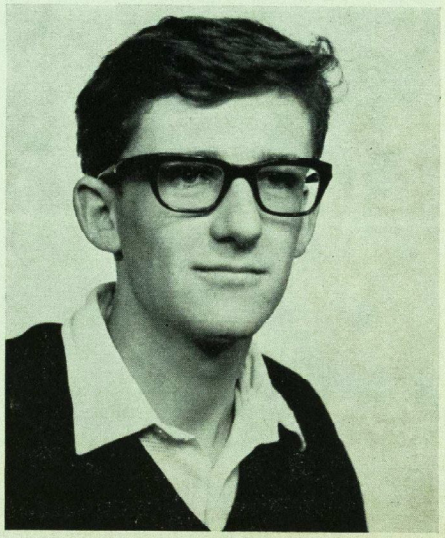
The Inaugural Meeting of the Percivall Pott Club was held in the hospital on November 2nd, 1973, with Mr. Norman Capener, C.B.E., F.R.C.S., as President. The Club consists of Orthopaedic Registrars and Senior Registrars on the St. Bartholomew's Hospital Training Scheme, and those on the scheme who have since become consultants. The Consultant Orthopaedic Surgeons at Bart's and the other hospitals on the scheme are honorary members.

After a business meeting a paper on "The effects of tilting of the lunate on the results of bone grafting of the fractured scaphoid" was read by Mr. Howard Smith; Mr. Hugh Phillips also read a paper titled "An independent review of a series of Wallidius knee replacements". This was followed by a presidential address by Mr. Capener: "Percivall Pott: The Forerunner". Following the meeting an exhibition of Pott's original specimens from the Museum and his original books, was displayed. A dinner was held in the Great Hall.

P. D. MOYNAGH, F.R.C.S.,
Senior Orthopaedic Registrar.

OBITUARY

T. T. MURPHY



Timothy Terence Murphy, 2nd year clinical student.

Tim was a quiet, unassuming person, who you wouldn't at once notice in a crowd of people, and yet the more one got to know him as an individual the more one saw his depth of character. Kindness, thoughtfulness and generosity were always evident in his actions and relationships with other people. One could enjoy the humorous side of life with him and the sound of his laughter is unforgettable.

He was enthusiastic in his work, frequently offering his services outside the normal hours of hospital work, and he studied diligently in order to qualify as a confident and competent doctor.

Squash and sailing were the sports he most enjoyed. The keenness he showed in these activities fired others with enthusiasm but he never showed any selfishness in sharing their enjoyment. It was while sailing off the Kent coast at Broadstairs that the tragic accident occurred that led to the death of Tim together with his two friends. Yet Tim had a simple faith in Jesus Christ and this faith has now been rewarded by the fact that he has gone to be with the Lord forever.

LETTERS TO THE EDITOR

Dear Sir,

May I through your pages thank all those in all parts of the hospital who helped to make the 850th Anniversary Concert, given by the Choral Society, a success.

Although this was not perhaps a great money-spinner, it was enjoyed by all those present, and it was nice to see so many departments represented.

Yours faithfully

I. P. TODD,
Chairman of the Choral Society.
January 1st.
The Abernethian Room.

Dear Sir,

December has been full of the traditional Christmas round of moaning. Everybody feels that they are contributing more than their fair share of the work to student activities. Fortunately, by the time that this is printed, we shall be in the throes of the Hospital Cup, the next Bart's Drama production and Ruddigore and the feeling will have changed to one of mutual self-congratulation.

As usual, the main targets for criticism have been the Sub-Committees of the Union and I think that one or two words about these may not be amiss. Comment is particularly pertinent at this time, as their constitutional standing is to be revised at the General Meeting in February (your attendance would be welcomed).

The Wine Committee in recent years has become increasingly involved in entertainment, which, although very successful, has detracted from their primary aim of running the Bar. Hopefully, the new Entertainments Committee after initial "birth pains" will be able to assimilate much of this work, and "leisure activities" will be split between these two bodies.

The Teaching Committee have hit the headlines recently with their publication ROTE, which unfortunately has been counter-productive to staff-student relationships. When the furore has abated, the Committee will resume its main function of expressing student opinion on the teaching. This aim requires student participation which has been lacking, possibly with good reason.

I shall make little mention of the Finance Committee other than that the SU subscription may be raised from £12 to £15 next year to cover increased expenditure.

Finally, the Publications Committee—the Editors of the *Journal* are constantly appealing for material, which is not forthcoming. Therefore, the *Journal* has become stereotyped with the opinions of a few people. The students then blame the Editors for unfair attitudes but perhaps the root of the trouble is Bart's Apathy.

I have the honour to remain your most humble and obedient servant.

TIMOTHY P. FINNEGAN.
Chairman, SU.

BART'S FILM PREVIEW

February 19th. McKenna's Gold. Colour.
Lovely Arizona scenery, full of rocky outcrops and dusty vistas, provides the main attraction while a motley crew of gun-slingers sweat it out in the foreground. The plot is basal, and goodie-goodie Gregory Peck ends up with both girl AND gold. Still, Western fans will thrill to such standard pieces as "the crossing of the rope-bridge", "the heart-to-heart talk round the fire", etc., as the intrepid gold-hunters trudge on in search of wealth untold. Jose Feliciano adds a haunting song "Old Turkey Buzzard", so entertainment rarely flags.

February 26th. Genghis Khan. Colour.
Hollywood retells the immortal tale of how a wild Mongol chieftain and his horse-riding hordes conquer half the world. The Chinese are rich and fat (Robert Morley especially); the Mongols are tough and wiry; the Great Wall of China is quite clearly made in the local carpentry shop; the horses, looking very bored, go through their mass falling-over routines. Beware, it must be at least 10 years old.

March 5th. Concert for Bangladesh.
George Harrison, Ravi Shankar, Donovan, Paul McCartney, Leon Russell et al., in a straight film of the concert. Good music for those who like it.

March 12th. Spartacus. Colour.
At last, a "Roman epic", massive and violent, with half the Italian army playing their ancient forebears. Such movies are too expensive for today's budgets, which is a pity because they are the ultimate fantasy when well directed. Kirk Douglas uses the strange hole/dimple in his chin to show unyielding determination in the face of overwhelming odds. He plays the title role in a tale of the Great Slave Revolt some 70 years before the B.C. to A.D. changeover. The action sequences are marvellous, particularly the gladiatorial combats and the final fateful battle with the Roman army manoeuvring in glorious symmetry. Unfortunately, there is the usual soggy sentimentality in the quieter scenes, despite Jean Simmons as the lovely slave-girl and "Larry" Olivier as Crassus the rich Roman general. The ending is an all-time eyeball soaker. Bring lots of Kleenex.

T.T.

PERCIVALL POTT: THE FORERUNNER*

(1714 - 1788)

"Let us now praise famous men, and our fathers who begat us."

By NORMAN CAPENER

Percivall Pott stands out as one of the giants of the medical tradition at Bart's. Those of you who wish to know the details of his life and work should refer to the writings of D'Arcy Power. On the present occasion a few details must suffice to "set the stage". He was born in January 1714 where now stands the Bank of England. This was the year of Queen Anne's death and the accession of the first Royal George from Hanover. He lived most of his life in the city, but latterly moved to Hanover Square, and he had a house also at Neasden, Middlesex. At the age of 22 he was admitted as a trained surgeon by the Barber-Surgeons Company. He was appointed assistant surgeon at Barts at the age of 30, and the next year, when the unhappy association of Barbers and Surgeons was dissolved, he became a founder member of the Company of Surgeons (the immediate predecessor of The Royal College of Surgeons of England) and he took an active part in its affairs thereafter; being its Master in 1765. Early on he was recognised as a fine teacher. It appears that he was a kindly man and much opposed to irritant scarifying dressings, and the use of the cautery in the treatment of wounds. This was the common practice then, but it should have long ceased, had the lessons of Amboise Paré, in the 16th century, been learnt. He became senior surgeon at Barts in 1775, retired in 1787, and died the next year at the age of 74. He was buried in the Church of St Mary's Aldermary in Queen Victoria Street.

While the name of Pott is eponymously used for three conditions: a fracture, a vertebral disease, and a puffy *tumor*, it is as a teacher and continuous clinical student that he should be remembered. As such he was a writer of simple style, an examplar of 18th century English. Many of his papers read like lecture notes revised. His first important writing was commenced during enforced idleness, when recovering from the compound fracture of the lower leg, which has generally been regarded, but probably incorrectly, of the type that we call a Pott's Fracture. The subject that he wrote about at that time, however, was not on fractures, but on *Ruptures* and was published in 1756 when he was 42 years old. Amongst other works upon which he wrote with great authority were *Head Injuries*, as well as upon *Fractures and Dislocations*. Papers were also produced on *Hydrocele, Fistula, Cataract, Chimney-Sweep's Cancer, Gangrene, Nasal Polypus* and *Pott's disease of the spine;* the title of the latter as was the custom in his day, was somewhat "long-winded". (*Remarks on that kind of Palsy of the lower Limbs, which is frequently found to accompany a Curvature of the Spine.*) He also contributed to the *Philosophic Transactions* of the Royal Society, of which he was elected Fellow in 1761.

* From the inaugural presidential address to the Percivall Pott Society. November 2nd, 1973.

Pott's Disease

This has been one of my special interests. For more than 30 years his paper has been on my bookshelves, a constant companion. It is a remarkable document because so small and apparently insignificant. That is an object lesson to all of us who look for large works as indications of great minds. I will read to you the first three paragraphs:

> Among the various objects of Physick and Surgery, there are unfortunately some in which all the efforts of both, have hitherto been found absolutely ineffectual, and which therefore have always made a very disagreeable, and melancholy, part of practice.
>
> To remove, or even to relieve any of the miseries, to which mankind are liable, is a very satisfactory employment; but to attend on a distemper from its beginning, through a long and painful course to its last, fatal period, without even the hope of being able to do anything which shall be really serviceable, is, of all tasks, the most unpleasant.
>
> In such cases, any attempts, however hazardous, provided they were rational, would be justifiable; certainly then, whatever is not in itself dangerous, and affords the smallest ray of hope, ought to be embraced.

The pamphlet then gives the history and course of a number of cases and proceeds to outline Pott's method of cure. Before describing this I will quote D'Arcy Power:

> "The influence and importance of this tract may be estimated by the fact that the particular form of spinal disease here described is now almost universally known as 'Pott's Disease'. Although one of the best known of Pott's works, it is one of the least satisfactory," but D'Arcy Power was wise enough to add "according to modern ideas."
>
> He also goes on to say "the clinical description is admirable, but the treatment adopted was unnecessarily severe, and was not founded upon rational principles".

But was this so? Let us go to Percivall Pott himself:

> "The cure for this most dreadful disease consists merely in procuring a large discharge of matter by suppuration from underneath the membrana adiposa on each side of the curvature, and in maintaining such discharge until the patient shall have perfectly recovered the use of his legs."

A brief and beautiful statement of the fundamental idea. He goes on:

> "To accomplish this purpose, I have made use of different means, such as setons, issues made by incision, and issues made by caustic; and although there be no very material difference, I do upon the whole prefer the last."

It is true that by our standards today the methods by which Pott procured his discharge from the carious tissues on each side of the spine seems rather crude. Nevertheless, the basic idea was the important feature.

Three years after the publication of this classic paper Pott produced an amending tract which amplified his views in the light of further experience. Without the help of bacteriology it is a truly remarkable statement.

He remarks that he had felt anxiety about writing his earlier report as a preliminary if not premature publication. He emphasises his greater anxiety to get his views known so that others could benefit from his experience, and confirm or otherwise, his views upon the treatment. In this amending paper, the further development of his ideas is striking and includes an accurate statement of the morbid anatomy. Whereas at the earlier stage he had tended to regard the curvature of the spine as being the prime cause of the paralysis and that it might be the result of some form of dislocation; both ideas he explodes with proof that the cause of the disease, of the deformity and of the paralysis was tuberculous caries: he called it "strumous or scrophulous"; the word tuberculous was not introduced until 1799. This was the added and greater contribution of Pott to the pathology of the paraplegia which his enquiring mind had solved. The statement in his own words is quite dramatic. Pott was weak upon the use of mechanical supportive treatment. He had seen so many ill-effects from mechanical devices used to stimulate movement and for other purposes. His follower and son-in-law James Earle wrote strongly and critically of this apparent failure of Pott to use mechanical controls.

We would do well to recognise that in the advance of surgery, two aspects must be distinguished. First, the idea or principle to be followed; and the second, the technique or practice. For many of us until recently, principles have been vitiated by the evils associated with practice. The idea in Pott's Disease has been to relieve pressure upon the spinal cord, and that, there is no question, is a sound principle. When, however, it has been done by direct surgical approaches, such have, in modern times, certainly been prone to be succeeded by secondary pyogenic infection, resulting in prolonged illness, amyloid disease, nephritis and death. In this century workers such as Gauvain and contemporaries of his on the continent of Europe, overcame some of the difficulties by techniques for the aspiration of the paravertebral and intra-spinal abscesses. At the end of the last century Ménard in France devised the operation of *Costo-transversectomy*, which often was an efficient means of decompressing the vertebral canal. The risk of all these techniques remained the complication of pyogenic infection.

Reading Pott's description of the results of treatment, one wonders whether or not in the mid-18th century pyogenic infection was less prevalent or less virulent than it became in the 20th century. Nevertheless, Pott's basic idea of decompression has only become readily available in this century, by the control of secondary infection with the use of antibiotic drugs. This has made possible the more direct and more complete decompression of the spinal cord, for, it must be recognised, not only is the pressure upon it caused by the extension of the para-vertebral abscess (and with it the rhythmic bombardment of the cord by intra-thoracic vascular and respiratory pressure waves), but also by the presence and pressure upon the front of the spinal cord of vertebral sequestra and other bony debris.

Methods of practice swing backwards and forwards throughout the centuries, and yet basic ideas survive. The principle idea of Pott was correct; its practice may have been correct in his time, and with the technical resources available. In the early part of the 20th century the idea may have become impracticable, but now it is fully practicable and indeed a necessity.

In the development of modern techniques for decompressing the spinal cord in tuberculous paraplegia, I have perhaps played a relatively small part in the surgical approach by what I have called lateral rhachotomy, and which actually was an extension of costo-transversectomy. I owe this originally to a suggestion from my friend Herbert Seddon, and this was recorded in his classic paper on Pott's Disease in 1935 (38 years ago).

Pott's Fracture

It has generally been presumed that this fracture dislocation of the ankle was the one from which Percivall Pott himself suffered during 1756, in the incident described by James Earle in his edition of the complete works.

> "As he was riding in Kent Street, Southwark, he was thrown from his horse, and suffered a compound fracture of the leg, the bone being forced through the integuments. Conscious of the dangers attendant on fractures of this nature, and thoroughly aware how much they may be increased by rough treatment or improper position, he would not suffer himself to be moved until he had made the necessary dispositions. He sent to Westminster, then the nearest place, for two chairmen to bring their poles, and patiently lay on the cold pavement, it being the middle of January, till they arrived. In this situation he purchased a door, to which he made them nail their poles. When all was ready he caused himself to be laid on it, and was carried through Southwark, over London Bridge, to Watling Street, near St. Paul's, where he had lived for some time, a tremendous distance in such a state. At a consultation of surgeons the case was thought so desperate as to require immediate amputation. Mr. Pott, convinced that no one could be a proper judge in his own case, submitted to their opinion, and the proper instruments were actually got ready, when Mr. Nourse (his former master and then colleague at St. Bartholomew's Hospital), who had been prevented from coming sooner, fortunately entered the room. After examining the limb he conceived there was a possibility of preserving it; an attempt to save it was acquiesced in, and succeeded."

It has often been assumed that the fracture which he suffered was at the ankle. Doubt however has been expressed by several authors who regard the injury described as more likely to have been a compound fracture of the tibia and fibula at a higher level, and with a puncture wound of the skin lower down. Certain it is that such open wounds associated with the fracture-dislocation of the ankle are relatively rare. Nevertheless, the remarkable feature of Pott's own book is, that the only fracture which he did illustrate was in fact that of the Pott's Fracture-dislocation as we understand it.

In his treatise on *Fractures and Dislocations* Pott outlines with a certain air of originality, the basic principles of treatment; but first I will read his introductory paragraph:

"No part of Surgery is thought to be so easy to understand as that which relates to Fractures and Dislocations. Every, the most inexpert, and least instructed practitioner, deems himself perfectly qualified to fulfil this part of the chirurgic art, and the majority of these, are affronted by an offer of instruction, on a subject with which they think themselves already so well acquainted.

"This is also the view of a considerable part of the people. They regard bone-setting (as it is called) as no matter of science: as a thing which the most ignorant farrier may, with the utmost ease, become soon and perfectly master of, that he may receive it from his father and family, as a kind of heritage. We all remember the great, though short-lived reputation, of the late Mrs. Mapp; the credulity of all ranks and degrees of people who ran after her, several of whom not only did not hesitate to believe implicitly this ignorant, illiberal, drunken, female savage; but even solicited her company and seemed to enjoy her conversation."

One feature of Pott's methods in the treatment of fractures should be emphasised: for his views on physiological positions, we tend to associate with the names of John Hilton and Hugh Owen Thomas, who elaborated this principle in their application of what became known as *physiological rest*. In an example given by Pott, he stated that surgeons in his day when attempting to set (or as we would say reduce) a fracture of the femoral shaft did so, or tried to do so, by traction and counter-traction with the knee extended. Such he showed was wrong. The muscles on each side of the limb must be relaxed by flexion of both the hip and knee joints—a practice which modern techniques have perfected. And the same principle he applied to dislocations. He exposed the fallacies of trying to press the proximal ends of fractured bones into line with the distal. Instead he rightly argued that by assuming the physiological position it was easier to do the correct manoeuvre of bringing the distal fragment into line with the proximal. He also emphasised the importance of correct immobilisation by splinting the joints above and below a fracture in the physiological positions which he describes.

In his treatment of compound fractures, he makes a surprising statement on the "antiseptic" treatment of the wounds. This I think is almost the first use of the word which means "preventing putrifaction" (from the Greek *sepo*-rot). He objected to the use of such drugs because there was often need to encourage the formation of "gentle", or what other writers in the 18th century called "laudable pus". (One of the great pre-Listerian fallacies.)

Injuries of the Head from External Violence

One of the greatest of Pott's works is that with the long title *"Observations on the Nature and Consequences of those Injuries to which the Head is liable from External Violence"*. It is in this that we find the relatively insignificant reference to a feature which, perhaps because of its alliteration, has in the past captured the imagination of surgeons. I refer to *Pott's Puffy Tumor*. As to the work itself: it is one of the largest sections of his Collected Works. It occupies 171 pages in this elegant printing and is a great improvement on the first edition published 15 years before. This is a most thoughtful paper embellished by 43 clinical case histories. He clearly distinguishes between concussion (*commotion* he tends to call it) and the intracranial compression of the brain by extradural and subdural haemorrhage. The didactic approach is tempered by reasoned, almost colloquial, argument. This is one of the classics of British neurosurgery.

As to the *"puffy tumor"*, it is described thus only in the first edition. He mentions a condition sometimes encountered in which an injury may be associated with a sub-pericranial swelling with fever, restlessness and rigors and "may be related to mischief within the skull" and "causes a puffy tumor of the scalp due to detachment of the pericranium". This tumor, he says, is not a general but a confined, circumscribed swelling of the integuments, produced by a collection of fluid, being small compared with the size of the tumor. There is inflammation of the "erysipelous type". It would seem to me likely that this was an example of an infected haemotoma or osteomyelitis. In later editions Pott referred to it as "a puffy, circumscribed, indolent tumor of the Scalp". "Tumor" (spelt without a "u") was of course being used in a comparable sense to *dolor, rubor* and *calor*—the signs of inflammation: as the latin for a "swelling", not, as we think of it, as a neoplasm.

In his paper on *Chimney-Sweep's Cancer*, he was quite original in drawing attention to the chemical influence of soot as a carcinogen in the scrotal skin of the boys who were employed in climbing and cleaning the interior of the chimneys of those days. He also drew attention to the work of other men on the influences of lead in the diseases of French wine workers, and plumbers.

Conclusion:

Percivall Pott was an educated surgeon of enquiring mind, erudite in the classics of medicine; a kindly and understanding man; he had a splendid command of the English language, in which many of his well measured sentences ring, when spoken, like poetry. In fact, he was *poietic*; a creative genius. With William Chesenden (his older contemporary) they founded modern surgery as a scientific art. Pott was the virtual founder of the Medical School of St. Bartholomew's Hospital as we know it today.

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HOUSEMAN'S CHOICE

by MICHAEL JOHNSON

Medical books constitute a large part of the expenditure of most medical students. Furthermore, many students contemplating finals doubtless regret rash purchase of some books, and equally rash neglect of others. Few departments give very helpful advice about which books to buy. The problem is partly that different students prefer different kinds of books: some want an easy-to-read introduction, some a comprehensive textbook, and some a pre-exam crammer. We decided, therefore, to ask recently qualified doctors to suggest books which they felt were worth using. No distinction was made between buying or borrowing books, since some students have easy access to libraries, while others prefer to buy books. However, the expense of books was borne in mind when recommending them.

We were not able to include pre-clinical subjects as part of the survey, mainly because we felt housemens' recommendations might be out-dated. Similarly, medical periodicals were not covered by the questionnaire, although several housemen did mention the *British Journal of Hospital Medicine* and *Medicine*. The decision whether to subscribe to one of these Journals, or to use the library copy must be left to the individual, although the difficulties experienced by some subscribers to *Medicine*, who seemed to be receiving two copies of every third issue, and finding every issue thinner than the last must have made learning from it an haphazard process.

We can obviously not keep pace with the vast flood of books published each year. The recommendations concentrate therefore on standard textbooks, and we suggest you read the book reviews in the *Journal* for notices of new books.

It was interesting to note that most recommendations covered the same few books. Many housemen felt that it was enough to use textbooks of general medicine and surgery to cover most of the specialties. No doubt if we had canvassed the specialist consultants they would have suggested specific textbooks. This is a difficult point as some students who feel drawn to a particular specialty will obviously wish to read further and perhaps pay for specialist books. However, few students could afford the money to buy or the time to read a standard textbook in every subject in the curriculum.

This is not then a very conclusive investigation. After all, medical students should and need not be spoon-fed, and their diversity should be reflected in their choice of books. The broad recommendations are a shelf full of "best buys" and the advice to examine books in a library before buying them, even though they may be strongly recommended by teachers or colleagues.

Clinical Methods and Medicine

The clear favourite for clinical methods was *Hutchinson's Clinical Methods*, by *Hunter and Bomford*. For medicine most people recommended *Davidson's* textbook, which is also incredibly good value, and the same number recommended the short textbook by *Houston Joiner and Trounce*.

Surgery

Here the most popular book by far was *Bailey and Love's* textbook, with nearly 80 per cent of replies recommending it. *Lecture notes on General Surgery* by *Ellis and Calne* was recommended by over half the housemen.

Pathology

Pathology appears to be a subject which attracts authors, since a great diversity of books was recommended. It is said in surgery that if there are a great number of operations for one condition it usually means that no one of them is much good. I wonder if this applies to Pathology textbooks? Two books stood out however as clear favourites. *Walter and Israels'* and *Lecture notes in Pathology* by *Thompson and Cotton* were each recommended by 10 people. (Since the total number of replies was 18, some people must have recommended both!)

Obstetrics and Gynaecology

The pocket guides to these subjects by *Clayton* were well favoured. The remainder of the recommendations were pretty evenly distributed: in Obstetrics between *Obstetrics Illustrated*, *Ten Teachers*, and *Fundamentals of Obstetrics and Gynaecology Vol. 1* by *Llewellyn Jones*, and in Gynaecology between *Ten Teachers*, *Lecture notes in Gynaecology* by *Barnes*, *Principles of Gynaecology* by *Peel and Brulnel* and *Fundamentals of Obstetrics and Gynaecology Vol. 2* by *Llewellyn Jones*.

Specialities

In most of these subjects only one or two books were mentioned, and the recommendations are probably less reliable because of the small numbers involved. However, *Jolly's* book was very popular for Paediatrics, *Crawford Adams' Outline* books similarly popular for Orthopaedics, and *Anaesthetics for Medical Students* by *Ostlere and Bryce-Smith* was the only book mentioned for Anaesthetics. The *short textbook of Psychiatry* by *Linford-Rees* was slightly more favoured than *Willis' Lecture Notes in Psychiatry*, although the *Lecture Notes* series was recommended for Dermatology, Cardiology, ENT and Ophthalmology. *Brain's Clinical Neurology*, revised by *Bannister* was the most popular neurology book.

In summary, each student will find by trial and error, the kind of books he finds most stimulating and instructive. But this survey does I think show that most students don't need to spent a great deal on books which they may never really read. So resist the temptation to buy every new shiny book that appears in the shops, or is recommended by someone who has already bought it!

PASS LISTS 1973

UNIVERSITY OF OXFORD

Medicine, Surgery and Midwifery

Cook, Mrs. Jennifer M.	Lady Margaret Hall
Cook, Richard J.	St. John's
Heneghan, Christopher P. H.	New College
Madden, Anthony P.	Brasenose
Stoy, Nicholas S.	Balliol

Midwifery

Warren, Mrs. Mary E.	Somerville

UNIVERSITY OF CAMBRIDGE

LIST OF SUCCESSFUL CANDIDATES

PART II: PHYSIC, SURGERY, OBSTETRICS AND GYNAECOLOGY

A = Principles and Practice of Physic
B = Principles and Practice of Surgery
C = Obstetrics and Gynaecology

Brookstein, R.	Selwyn	A B	Richardson, W. W.	Magdalene	A B C
Crimmins, G. J.	King's	C	Sanderson, J. E.	Fitzwilliam	A B C
Dunn, R. J.	Christ's	A B C	Searle, A. J.	Sidney Sussex	A B C
Dunstan, C. J. D.	Jesus	A B C	Sills, M. A.	Queen's	A B C
Harris, J. R.	Selwyn	A C	*Spencer-Jones, Mrs. J. M.	Girton	A B C
McCullagh, A. G.	Queen's	A	Timmis, A. D.	Caius	A B C
Martin, M. F. R.	Jesus	A B C	Turk, E. P.	Queen's	A B C
Moore, S. C.	Pembroke	A B C	†Waterson, Mrs. I. M.	New Hall	A B C
Nethersell, A. B. W.	Queen's	B C	Wong, C.-M.	Queen's	A B C

* Distinction in Physic.

† Distinction in Obstetrics and Gynaecology.

UNIVERSITY OF LONDON

HONOURS

(*a*) *Distinguished in Pathology*
(*b*) *Distinguished in Medicine*
(*c*) *Distinguished in Obstetrics and Gynaecology*

Watkins, John (*b*) (*c*) *University Medal*
Watkins, Ruth Primrose Felicity (*c*)
Watt, Stephen James (*c*)

PASS LIST

Abbott, Richard John
Acres, Peter Francis
Allen, Michael John
Anson, Ann Katharine
Bastard, Oliver George William
Bradstreet, Rosemary Anne
Burley, Terence Kenneth
Burlton, David Aylmer
Burnett, Peter Richard
Caswell, John Douglas
Chapman, Roger William Gibson
Cole, Allan Gordon Halliwell
Cooper, Monica Fricda
Cotton, Brian Richard
Cottrell, Paul William Arnold
Dale, Felicity Mary
Dawe, John Christopher
Dehn, Thomas Clark Bruce
Dinwiddie, Janet Fiona
Eclair-Heath, Cynthia Melita
Edwards, David Roy
Emerson, Thomas Richard
Firmin, Richard Keith
Gabb, Richard John Escott
Gabb, Susan Jones
Gardiner, Gavin Thomas
Grainger, Stephen Leigh
Hackett, Gillian Heather Hamil
Hancock, Trevor Gerald
Harris-Jones, David Richard Lockhart
Heath, Jacqueline Wendy
Hickish, Mary Aileen
Hill, Robert Justin
House, Alison Kathleen
Hull, Peter Jonathan
Hynd, Andrew
Isenberg, David Alan
Jack, Ian Logan
Jakeman, Paul
Jennings, Kevin Patrick
Juckes, Thomas Richard Brodie
Kellett, John Keith
Kemp, David Stuart
King, Christopher John
Kipling, Roger Maitland
Knight, Anthony Overbeck Cureton
Lambert, Pamela Anne
Lindsell, David Roger Mackinnon
Lloyd-Davies, Edward Roderic Vaughan
McNinch, Andrew William
Mansi, Elizabeth Gabrielle
Mathew, Rowena
May, Michael Walter
Monks, Elizabeth Valerie
Moore, Thomas William
Muir, John William
Murphy, Michael Furber
Naunton Morgan, Thomas Clifford
Osmont, Jonathan Mark
Peacock, Andrew John
Phillips, Mark Christopher Read
Prestwich, Gillian Patricia
Purcell, Heather Margaret
Reid, Colin James
Ross, Kenneth Raeburn
Russell, Derrick Ian
Shirehampton, Teresa Ann
Simpson, Hugh Charles Rowell
Sleight, Peter James
Smith, Peter Arthur Forbes
Stocks, Richard John
Thomas, Richard John
Tweedie, James Hamilton
Vandenburg, Malcolm John
Van Heyningen, Charles
Venables, Katherine Margaret
von Bergen, Anne Louise
Walker, Patrick George
Watson, Robert Doré
Wellingham, John Terence
Wells, Richard Douglas William
Whitehead, Miranda Nialla
Young, Ian Douglas

After the tests had been carried out Professor Ellis said: "My first conclusion is that I would not have one under any circumstances, even if I was disabled. It is the only vehicle we have had at this place where we have had to break off the tests because the test-drivers were too frightened about the dangers of overturning. No commercial car manufacturer could put a vehicle like that on the road and stay in business."

The Cranfield tests seem to present quite a damning case against the invalid tricycle and yet it is interesting to note that they were not carried out by disabled drivers, who would surely have found even greater difficulties. Perhaps in the future drivers with different types of disabilities will be asked to test the vehicles so that any difficulties they find can be investigated immediately.

Maintenance

Invalid tricycles are provided, licensed, insured and maintained free of charge by the Department of Health and Social Security. The driver also receives other benefits such as a small subsidy towards running costs. However, some drivers feel that they can have little pride in something which in reality is Government-owned and therefore give the car somewhat less attention than they would to a car which they owned themselves. Repairs can only be carried out at special garages, which tend to be few and far between. Moreover ordinary garages are often loath to touch invalid tricycles and for payment must write to the Social Security offices to claim a refund. The disabled driver does not therefore come into the transaction, which is between the garage and the Government, and may be left unclear as to what exactly has been done to the vehicle.

Another aspect of invalid tricycle design which has attracted a lot of criticism is the absence of a passenger seat. As well as the obvious loneliness and sense of isolation, the single-seated invalid car also creates great difficulties for disabled drivers with a family. Learning to drive the vehicle is made more difficult, since the instructor is unable to sit beside the pupil. It is also worth remembering that the disabled driver is more likely to require assistance than the ordinary motorist, and yet can have no passenger to help him.

As an alternative to the present invalid tricycles, the Disabled Drivers' Action Group has proposed that adapted saloon cars should be made available for the disabled. Preliminary studies suggest that the cost of conversion of small saloon cars for use by disabled drivers would be similar to the current cost of the P.70 invalid tricycle. Those vehicles which could most easily be converted are the Mini 850 Automatic, the DAF 33 and the Renault 4L. At present converted saloon cars are made available to disabled war-pensioners and also to non war-disabled persons under special circumstances. The advantages over the invalid tricycle appear to be enormous, especially in terms of safety and convenience. Perhaps the greatest advantage, however, is that the disabled driver would cease to be labelled as a handicapped person by the vehicle which he drives. It is indeed good news that an independent inquiry under the chairmanship of Baroness Sharp, GBE, is going to be held into the invalid vehicle service, for the Department of Health and Social Security. Hopefully this will help resolve many of the problems currently being voiced about the invalid tricycle.

GILBERT AND SULLIVAN SOCIETY

Bart's "G & S" was formed in the Autumn of 1971, and is already looking forward to its third annual production at the Golden Lane Theatre in February. Over 1,000 people are expected to see "Ruddigore" in the three days of its run, with an assembled cast of over 40 and a competent orchestra of 20 in the orchestra pit. This is some measure of the success of "G & S" at Bart's, as it is one of the youngest of the Hospital's societies.

When the Society was first formed it had just a Producer and Musical Director to steer it, though the increasing body of work undertaken, and the mounting ambition of the Company, have led to division of executive power along classical lines. Thus the musical component of orchestra, soloists and chorus is controlled by the Musical Director, in collaboration with the Conductor, while on-stage activities are the province of the Director and Choreographer. The Stage Manager runs all the essential backstage activities, and others are concerned with scenery, properties, costumes and management and box office. Co-ordination is the task of the Producer, so that the varied individual contributions became a single entity—the Stage Production.

From this it is fairly obvious that "G & S" has something to offer in several ways and is not merely the province of either "G & S" fanatics or aspiring opera singers. It is in fact far more than this—catering for their interests and ambitions, and for those of several other types of enthusiast. This is because of the various skills encompassed by the Theatre, skills such as scenery design, costume design and the carpentry involved in construction of the set. And, of course, there is the social side of things—visits to Sadler's Wells Opera; after-production parties; and an annual Dinner held in conjunction with the Music Society.

In closing, let me remind you of the past productions of Bart's "G & S", all of which were extremely successful:

May 1972, IOLANTHE;
March 1973, THE GONDOLIERS;
November 1973, TRIAL BY JURY;

and remind you of the forthcoming performance of "RUDDIGORE" on February 14th, 15th and 16th, 1974.

H.S.B.

A record of The Gondoliers was made by the cast at the time and copies are available from the Secretary, Gilbert & Sullivan Society, St. Bartholomew's Hospital, London, E.C.1.

MALIGNANT DISEASE IN CHILDHOOD

by N. THATCHER

Neoplastic disease in children, is second only to accidents as the major cause of death. Malignant disease mortality in the West is now about 20 per cent. of all deaths for ages 1-14 years. For all childhood tumours (1961) 27 per cent. were Leukaemias, 72 per cent. of the C.N.S., 8 per cent. Sympathetic Nervous System, 5 per cent. Renal and 5 per cent. Teratomas. In other countries, e.g., Africa, Burkitt's Lymphoma and Hepatoma would be more common.

This article will be confined to a few general remarks with emphasis on three solid tumours. The Leukaemias, Lymphomas, Histiocytoses X and many solid neoplasms will have to be excluded.

Childhood neoplasms can be separated into those arising from embryonic cells, and those arising from "adult-type" cells. The embryonic neoplasms may differentiate into various types of mature cell; activity of organisers, etc., producing a range of differentiation. These embryonic neoplasms may be sub-divided into teratomatous and non-teratomatous groups. The embryonic non-teratomatous tumours will be chiefly discussed—retinoblastomas, neuroblastomas and nephroblastomas.

RETINOBLASTOMA

The retinoblastoma, an embryonic neoplasm of the retina, usually presents in infancy. The classical yellow "cat's eye" light reflex—due to tumour growing into the vitreous, is present at birth in 5 per cent. of cases. Two important points concerning this tumour, are the high curability rates and its familial incidence.

Bilateral retinoblastoma (initially only one eye may be affected) behaves with an autosomal dominant inheritance, either by transmission or as a new mutation. However, incomplete expression results in 5-10 per cent. of the sporadic unilateral cases. Detailed histology may distinguish these potential transmitters from the mass of unilateral tumours with no genetic significance. Recently, cases of retinoblastoma have been associated with deletion of the long arm of the D chromosome.

Treatment relies heavily on radiotherapy, either with external Cobalt^{60} beam or with local Cobalt^{60} applicators. Enucleation is usual only if the optic nerve is involved. Chemotherapy for haematogenous, or C.S.F. metastases is of undefined value. Follow-up as in all cancer patients must be obsessional, with regular fundoscopy of the patient and the patient's relatives, at least to 10 years of age. Retinoblastoma is associated with an increased risk of malignancy elsewhere, both locally (? due to irradiation) and distantly, e.g., osteo-sarcoma. Nevertheless, retinoblastoma has the highest curability (84 per cent.) of any childhood malignancy.

NEUROBLASTOMA

Neuroblastoma is the commonest malignant tumour of infancy, 35 per cent. presenting within the first six months of life, and almost all by four years. The neoplasm arises from the adrenal medulla and other sites of sympathetic nervous tissue. Intra-abdominal sites account for 70 per cent., but multiple loci in the chest, pelvis and abdomen may occur. Foetal neuroblastomas with intruterine metastases are recorded, but although the maternal circulation contains many foetal cells, no secondaries in the mother have been described.

The neuroblastoma has unpleasant features, being highly invasive with major vessel involvement making surgery difficult, and having a tendency to metastasise early to lymph nodes, liver and skeleton. Bone secondaries are especially common after the first year of life. At the time of initial diagnosis, clinical metastases are present in 70 per cent. of cases.

Presenting symptoms are non-specific, vague ill-health, intermittent abdominal and or bone pain lead to a late diagnosis. An abdominal mass (either the primary or secondary hepatomegaly) may be felt by the mother, but clinically the primary may occasionally be impalpable. Mediastinal tumour may collapse a lung, produce S.V.C. obstruction or Horner's syndrome. Whilst extension via an intervertebral foramen will produce neurological features. Release of pressor amines can cause headache, diarrhoea or hypertension. Pepper's syndrome usually results from a right adrenal primary with lymphatic extension to the liver, and Hutchinson's from a left adrenal metastasising to the orbit with periorbital haemorrhage and exopthalmos. The predeliction for the orbital bones is unexplained. Tumour necrosis (rarely complete) may lead to calcification seen on radiography, but more important is the tendency to spontaneous differentiation towards the benign ganglioneuroma. The high dose B_{12} treatment was hoped to encourage such maturation in a similar way as for haematopoiesis, unfortunately early success has not been subsequently confirmed. Histological grading is not of great value therapeutically because of this variable differentiation even in the same tumour. Neuroblastoma may be staged as follows:—

Stage I	Tumour confined to organ or structure of origin.
Stage II	Tumour extending in continuity beyond organ or structure of origin, but not crossing the midline. Regional lymph nodes on homolateral side may be involved.
Stage III	Tumour extending in continuity beyond the midline. Regional lymph nodes bilaterally may be involved.
Stage IV	Remote disease involving the skeleton, parenchymatous organs, soft tissues, distant lymph nodes, etc.
Stage IVS	Patients who would otherwise be I or II, but who have remote disease confined to one or a combination of the following sites—liver, skin or bone marrow (without X-ray evidence of bone metastases or full skeletal survey).

Untreated, the average survival of all stages is four months. Treatment in those without distant metastases gives a 60-70 per cent. 18 months survival if patients are under two years of age. Once extension across the midline occurs, survival diminishes markedly with less than 5 per cent. of Stage IV cases reaching two years. Amazingly, the sub-group IVS has, with treatment, a five years survival greater than 80 per cent.

Another prognostic factor is the age at diagnosis, most spontaneous cures occurring in the neonatal period. Survival (at two years) for all stages is inversely related to age: —

60%	if under 1 year of age
20%	1-2 years
10%	2-7 years
8%	7-19 years

This relationship between age and prognosis is independent of the staging. Other factors include the site of the primary, the abdominal neuroblastoma being most likely to metastasise and the pelvic tumour least. The extra adrenal neuroblastoma, even with advanced local disease, enjoys a much better prognosis than the adrenal tumour, with two year survivals approaching 100 per cent. in infants.

Generally, progressive disease has been associated with an ineffective cellular immunity and the development of "blocking anti-body", and a poorer prognosis is seen if lymphoblasts are scanty in the bone marrow. Neuroblastoma is associated with a tumour specific antigen, which may be of importance in future therapy.

Treatment depends on staging and the other prognostic factors, but different regimes are difficult to evaluate because of varying behaviour patterns. Stage I and II may be treated by surgical removal. Stage III by as complete excision as possible followed by radiotherapy to the tumour bed. Chemotherapy may be given even with localised disease so as to "suppress microscopic metastases", this view is being subjected to trial. In infancy, surgery alone has been advocated because of the better prognosis for all stages. Occasionally, removal of the primary is reasonable in dramatic resolution of secondaries has occurred with radiotherapy and/or chemotherapy. Rarely, regression of tumour (including metastases) follows partial surgical excision of the primary. Chemotherapy, in widespread neuroblastoma, is valuable in producing tumour regression, and for symptomatic relief (e.g., from bone pain), but as yet, long term survivals are few. Most effective seems to be pulsed courses of Cyclophosphamide and Vincristine. After relapse, a further 50 per cent. respond to Daunomycin and Adriamycin. Actinomycin D, corticosteroids and antimetabolites are ineffective at conventional doses. At present, manipulation of immune response is being investigated to promote "spontaneous" cures. Urinary VMA HMMA estimations (raised in 90 per cent. of cases) are useful in diagnosis and in excluding residual disease after treatment. Urinary cystathionine is also raised and selenium-methionine scans are being used to reveal tumour.

Two special situations should be noted. The extra adrenal tumour has a much better prognosis, but it may be difficult to define such a lesion as a primary, and not a metastasis from an occult adrenal neoplasm, treatment may then be given palliatively and not in a radical fashion resulting in poorer results. The substage IVS is important to recognize, as surgery alone results in high survivals. Chemotherapy may be given if the marrow is involved, as it is difficult to decide when clonal growth becomes established. Otherwise radiotherapy and chemotherapy are withheld if the only evidence of spread is to liver and/or skin nodules; but follow-up must be close.

Although treatment has failed to increase significantly, survival rates in neuroblastoma over the last 15 years. A far less gloomy picture is seen with the nephroblastoma or Wilms tumour. This also commonly presents in infancy, being rare after middle childhood. Presentation often includes abdominal swelling, haematuria, pain or vomiting. Hypertension in these tumours has been associated with raised plasma renin levels.

The neoplasm is more common in girls, and may be bilateral. It is surrounded by a pseudocapsule of atrophic normal kidney tissue, through which it may rupture. Haematuria can be caused by thrombosis of the renal vein. Tumour may extend into the I.V.C. and rarely to the right atrium. Necrosis and haemorrhage into the tumour is common and calcification may again be seen on X-ray. Nephrobastoma presenting in the first three years of life carries a better outlook, 80 per cent. surviving if less than one year old, and only 29 per cent. surviving if five years old or more. This is partially explained by the tendency of a more differentiated tumour to be seen in the younger patient. Metastases occur most commonly to the lungs, and less so to the bones, liver and lymph nodes. Only 20 per cent. of children present with clinical metastases (compare neuroblastoma).

In Stage I cases, surgery as a sole treatment gives 80-90 per cent. cure rates. In such cases, Actinomycin and radiotherapy may actually reduce survival, especially where a renal fibrosarcoma has been missed in diagnosis. Massive tumours may be given pre-operative irradiation or chemotherapy to reduce tumour size, allowing more effective surgery. However, the increase in survival with nephroblastoma (not so for neuroblastoma) over the last decade, has been attributed to the incorporation of Actinomycin D and Vincristine into treatment schedules. However, there is conflicting evidence of the efficacy of such chemotherapy, this may be due to differences in case selection, in other components of the treatment, and in dosages given. It would appear that Actinomycin given at and after nephrectomy, and then as pulsed courses later is more beneficial than a single initial course. The usual explanation being suppression of occult metastases. Trials are in progress to determine the place of radiotherapy and chemotherapy in well localised tumours.

After adequate surgery, the commonest site of recurrence is pulmonary, and recurrence is often confined to the lungs. Most pulmonary metastases appear within six months of diagnosis, and recurrences after two years are rare. Thus frequent post-operative follow-up with chest X-rays is very important. Surgical removal of one or two metastases confined to the lungs may well be worthwhile. If pulmonary disease is more extensive, irradiation of both lungs and pulsed Actinomycin for one year can give 50 per cent. cure rates.

Actinomycin has a property of sensitising tumour cells to irradiation, however, Vincristine also gives good results, producing 45 per cent. two year survivals if given with radiotherapy in metastatic disease. In children with unresponsive generalised disease, Adriamycin but not Daunorubicin (although similar to Actinomycin) is of value. An 80 per cent. two year survival is being reported from many special centres employing a combined surgical, radiotherapeutic and chemotherapeutic approach. However, therapy is still far from defined.

The medulloblastoma is responsible for the peak in incidence of C.N.S. tumours occurring at 4-5 years of age, being responsible for 20-35 per cent. of all such tumours. Like most intracranial childhood neoplasms, it is infratentorial, being commoner in boys. Although metastasis via the C.S.F. is the rule, skeletal deposits do occur. Surgery alone is inadequate, but if combined with radiotherapy gives a 20-40 per cent. five years survival. Radiotherapy plays a major role in treatment, and a relatively small dose (2500r in three weeks) is as effective as a larger, due to the extreme radiosensitivity of this tumour. By contrast, the cerebellar astrocytoma is relatively benign, and surgery alone is often curative.

Bone tumours are rare, but like all sarcomas occur in younger people. The most malignant, the osteosarcoma presents as a swelling with or without pain, usually in relation to the knee joint. X-rays show the typical "sun-ray" with bone spicules perpendicular to the shaft. The prognosis is extremely poor, 5 per cent. five years survival often being quoted. Radical radiotherapy at high dose is given to the primary, with delayed amputation if metastases have failed to appear over a 4-5 month period. This policy avoids futile amputation, as 75 per cent. of those who will die develop pulmonary metastases in this period. If radiation fails to control the primary, then amputation to prevent pain, fungation, etc., must be considered. This treatment policy is not unchallenged, viable tumour cells remain in the irradiated area for some time, and are presumably capable of metastasising. However, controlled studies have failed to show benefit from immediate primary amputation.

Chemotherapy is usual for palliation. Cyclophosphamide, 5 FU, Mithramycin, Phenylalanine mustard, Vincristine, Methotrexate, Actinomycin singly or in combination have not been useful, but Daunorubicin, Adriamycin and high dose Methotrexate with Folinic acid rescue seem more promising. Immunological manipulation of the tumour specific antigen may yield results in the future.

Ewing's tumour (a debatable entity) showing the classical onnion skin X-ray, has a much better prognosis, radiotherapy with Vincristine and Cyclophosphamide producing complete regressions in some series with long-term survivors.

Further descriptions of tumours, e.g., embryonic sarcomas, teratomas, etc., would be lengthy and probably tedious. A few closing remarks are perhaps in order. The common childhood malignancies are very rare in the adult, where carcinomas are the villains. In childhood, a high preponderance of neoplasms are of the nervous, urinary and lymphoreticular systems contrasting with the gastro-intestinal, genital and respiratory systems of the adult. The behaviour of the malignancy in early life is different from the adult. Generally, tumours grow more rapidly in the young host, but spontaneous regression is far more common. The much better prognosis for neuroblastoma, nephroblastoma and sacrococcygeal tumours in the early months of life, followed later by increasing malignant behaviour is well worth further study. The aim and effect of treatment in children warrants an article in itself, but if such therapy increases survival in comfort then it ought to be recommended. However, late effects of these treatments have to be considered. Thus radiotherapy and chemotherapy, although initially successful, may result in future oncogenesis, as soon with immuno-suppression in renal transplants. Also disturbances of growth result, e.g., in scoliosis, and genetic damage may affect not only the patient but any progeny. Finally, children who survive may transmit the disease, classically in retinoblastoma but also in Wilms tumour, so although knowledge is accumulating, and treatment improving, there is no room for complacency, and the lines from the Bard could be noted: —

"Since the affairs of men rest still uncertain,
Let's reason with the worst that may befall."

A COMPARISON OF NEPHROBLASTOMA WITH NEUROBLASTOMA

	Age (Yrs.)	Abdominal mass	Orbit	I.V.P.	Marrow	Response to Radiotherapy
NEUROBLASTOMA	0-6	often not felt	proptosis ecchymosis common	extrinsic tumour with calyceal distortion	occas. diagnostic	Immediate
NEPHROBLASTOMA	0-9	invariably large	—	intrinsic tumour	—	Delayed

BART'S NEWS AND VIEWS

IT'S ONLY HERE FOR THE YEAR . . .

Welcome back to the old-style BMSA diary, once again a convenient pocket size after an aberrant year during which we struggled to squeeze our many engagements into miniscule spaces which were somehow bound into a paradoxically oversized diary. The benevolence of Beecham Research Laboratories is much appreciated. The information inside is aimed at a rather special kind of medical student. For example, next time you are overcome by the sight of College Hall meals, and feel inclined to treat yourself, and perhaps your paramour, to a meal in a London restaurant, just consult your little diary for a list of such establishments as Bentley's, the Café Royal, Hatchetts, the Mirabelle, Prunier's, Wheelers . . . ah! the joys of student life!

SQUARE WEAR & TEAR

The use that lorries make of the Henry VIII gateway has recently been drawn to my attention in two ways: firstly, in that a colleague of mine was nearly killed by one the other day; and secondly, because of the damage they are doing to the structure—or more correctly, to the archway in the North Wing which forms part of that exit. It seems a shame that when a large sum of money has so recently been spent cleaning this part of the Hospital, that so much irreversible damage should be allowed to continue to occur. The remedy is simple: there is a large, entirely functional gate at the back of the Square (see this *Journal*, September 1973), and its use should be compulsory for all lorries. I wonder that this is not considered more important than the banning of bicycle-riding in the Square.

IS THE WRITING ON THE WALL FOR BART'S?

Stunned students staggering around the cloakroom; Ken wearing dark glasses to shield his eyes; constipation rife in every thinking male. This and worse followed the wanton and vandalistic action of the hospital authorities in repainting the male students' cloakroom. Graffiti, many dating from pre-Pottian times and of priceless value (cf. "de Toiletis Bartsiensibus" by I. E. Vaquate, *Journal of Excretory Semantics*, Vol. 1, pp. 1-2) were simply wiped out *en masse*. Crucial lists of names, addresses, methods (with detailed diagrams), and mnemonics galore were lost forever in a glut of glutinous semi-white paint. A whole link with the past has been savagely severed, and we, faced now with blank walls and faceless doors, must somehow start afresh the historic process of recording for posterity our thoughts and dreams while enthroned and semi-naked. Let us therefore ungird ourselves to the task ahead. Let each of us only eat his daily bran and soon the sacred writings will once more flourish on those subterranean walls. We dare not fail!

STOP PRESS. The first, germinal scribblings have appeared, according to our own graffitological correspondent. Early leader in the *Journal* 1974 "round the bog race" is the well-known oldie "Here we go again".

JOURNAL MATHEMATICAL PROBLEM No. 2

By R. TREHARNE JONES

Arnold, Basil, Cedric and Daryl are 4 medical students, currently studying in their 2nd year Clinical. Each lives in a different type of accommodation in London: each went to a different type of school; each is going out with a different nurse; and each is at present studying a different subject. Arnold went to Grammar school, Basil lives in a flat, Cedric is going out with Arabella, and Daryl is doing Paediatrics. The privately-educated student is doing Gynaecology; the College Hall resident is going out with Beatrice, and was educated at a Comprehensive school; the Orthopaedics student is going out with Dolores; the public schoolboy lives in digs. If one student is doing Obstetrics, and another lives at home, with whom is Clarissa going out?

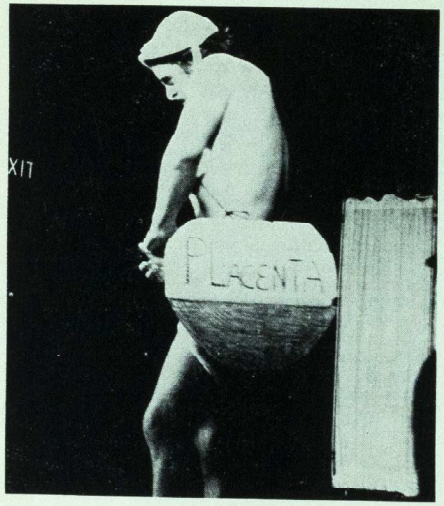
Solution next month.

Answer to last month's problem

While apologising to all those who chewed their fingers to the knuckle trying to solve the puzzle, I have to tell you that it is impossible of solution. The goat's path describes an arc as he walks along at the fullest extent of his tether. The two points at which this arc transects the circumference of the circular field cannot be related to the field's centre. There are two sets of criteria in the problem; firstly, that consisting of the field, with its centre and the goat's peg; the other consists of the two transect points and the peg. Even though the two sets have the peg as a common factor, they can be related in no other way, to render any solution, though I have no doubt that this will give rise to a certain amount of controversy.

P.S.—For real mental torture, spend your next Path. lecture trying the old favourite of attempting to plot the paths, in a solid matrix, of 2 spherical objects in mutual orbit—this, also is impossible!

WARD SHOWS 1973



I have not seen a series of ward shows before, so I cannot make any comparisons with last year's productions. On the whole, I thought that the standard was very good, far better than I had expected. Obviously, those taking part had worked hard in writing and producing their shows, and successfully, I think, as the four that I saw were well-received and enjoyed by both staff and patients.

It seems unfair to pick on individual shows for comment, but I must mention a few points. The Obs. and Gynae. show was, I think the best of those that I saw. The whole production was very slick and smooth-running, the continuity was excellent, and the content hilarious; while the presentation around an "Old Tyme Music Hall" theme was a good idea, and went down well.

It is difficult to choose between the other three shows, put on by the Clerks and Dressers, the Finalists and the Housemen. They all contained some excellent ideas. The housemen's skit on Jesus Christ Superstar was extremely funny, even if the singing was not quite up to West End standard. The finalists' show was also well done, the tiny ventriloquist with the massive dummy smacked a little of Morecambe and Wise, but was carried off brilliantly. The Clerks and Dressers' show suffered a little in that there were long pauses between sketches, but as this was the first show that I saw, and the first production of the show, perhaps I am being over-critical.

All in all, the shows were highly successful, and did much for the patients in brightening a Christmas spent in hospital, and in providing enjoyable light relief for the nursing staff.

B.J.F.

Some celebrations, usually with religious connotations, have occurred at or around December 25th for many centuries, even before the Christian era. I was not, however, until recently aware that it was primarily a water festival. You would think that there was enough rain around in the Christmas season to allow the rain-gods to go unpropitiated for a month or two. But, apparently not. After all, religion is often illogical. Christmas at Bart's has, of course, involved rather macabre rituals for many years: various "priests" and "priestesses" acting in weird mystery plays (or ward-shows), often with a considerable element of Pantomime-like transvestism; pseudo-sacrifices at the altar of the Rain God (or fountain); and, inevitably, massive consumption of a water-like liquid which rapidly renders its imbibers insensitive, and then insensible.

But I digress. The festivals at Christmas this year indicated that the Rain God has moved up to number one in the Heavenly Charts, because all the other celebrations are giving way to apparent appeasement of the water deity by mass baptism. The numbing effects on the intellect of the water-like liquid mentioned above, combined with the deleterious results of massive intermarriage within the Bart's community have caused complete atrophy of students' imaginations so that the only activity they can use to amuse themselves is throwing water at nurses. The decline is clearly spreading to the nurses, because whereas their mothers would have slapped their (fathers?) faces and told them to try something original, today's Florence Nightingales simply throw water back at the students! Any man of observation will know that much if not all of the equipment and apparatus found in hospitals is specifically designed to efficiently collect, disperse, withdraw, expel, propel, inject or discharge liquids.

Imagine then the Spirit of Christmas Present (and Future?). A large crowd of merry nurses are dining to Turkey and accoutrements in the Nurses' Refectory on Christmas Day when they are attacked and assaulted by swarms of drunken strangely-dressed medical students armed with water-charged weapons. Battle is joined! After only a few minutes, the nurses, their meal, their uniforms, and their refectory are all liberally soaked. The scene is reenacted in Gloucester House, and again at the Pot Pourri Party.

M.H.J.

BEHAVIOUR THERAPY - Part 2

by ROLAND LITTLEWOOD

Systematic Desensitisation by Reciprocal Inhibition

In many ways, the paradigmatic example of behaviour therapy is systematic desensitisation developed by Wolpe and based on Jones' work with childhood fears. It is essentially counterconditioning of irrational phobias. The patient explains to the therapist, a psychiatrist or clinical psychologist, his problem, its history and current manifestations. A single theme is looked for such as claustrophobia, hospital phobia, cats or agoraphobia. A thorough investigation is necessary before treatment may commence: the problem may be more complex than initially expected. A single underlying problem such as social inferiority may cause behaviour initially presumed agoraphobic. Wolpe gives patients a printed list of common problems for them to check. The Kelly Repertory Grid, the Willoughby Fear Survey or Self Sufficiency Scaling may be used. Further investigation may include interviews with relatives. As anxiety is an important component,[1] it is avoided when possible in the therapeutic relationship: the technique to be used is explained to the patient: insight into the origin of the phobia may decrease anxiety, as may also direct advice in handling the *in vivo* situation.

Freud found that the better motivated a patient was, the better the prognosis: a patient appearing on a spontaneous out-patient basis should provide better results.

It is important to monitor the degree of anxiety during the reciprocal inhibition. Wolpe constructed a hierarchy of the patients' fears by their imagining maximal (=100) and minimal (=0) degrees of anxiety in various situations. A spectrum of anxiety-evoking cues between 0 and 100 is recorded. This is divided into "jumps" of 5-10 units (termed suds or subjective units of disturbance). With reciprocal inhibition a counter to anxiety is provided for each jump as the situation is presented. If the jump is too large, the anxiety overwhelms the relaxing stimulus. Each step of anxiety is "drained away" in turn, from the minimal to the maximal situation: ideally each jump must be just less than the total counter-anxiety available, for the quickest treatment.

A variety of measures to counter anxiety has been employed. One of the commonest is muscular relaxation which derives from Jacobsen,[2] who found that the subjective experience of emotion is proportional to the muscular contractions associated with it so that if tension could be diminished, the emotion was less likely to be felt. He showed that cardiac rate and blood pressure were reduced during muscular relaxation: Wolpe showed that skin resistance increased with anxiety and decreased with relaxation. After a hierarchy has been constructed, the patient learns relaxation exercises in a quiet room, on a comfortable chair or couch, learning to appreciate muscular feedback and control his various muscle groups. Other techniques of relaxation include short acting barbiturates,[3] instructions for relaxation in the patient's voice on the tape-recorder and the use of a cue word associated with the switching off of an electric shock. Anxiety has also been decreased by terminating an electric shock and by the use of carbon dioxide.[5]

The patient relaxes on a couch and under the therapist's guidance, imagines the lowest item on the hierarchy which produces anxiety. The scene is presented for 5-15 seconds, there is a pause, relaxation again and then an interval. There are four or five presentations in a session of 45 minutes. The sessions may occur daily or weekly. Difficulty in the imaginative powers of the patient have been countered by dramatisation on a tape recorder, hypnosis or presentation of the situation *in vivo*. Cooke found that for rat phobias, imaginal and real presentation of the aversive stimulus produced similar results. In imaginal desensitisation, there is an average 80 per cent immediate transfer to the real life situation. Lazarus, working with reciprocal inhibition in a group of patients, found that the results were better than "group interpretive therapy" but the treatment assumed that all became desensitised at a similar rate and it was difficult to keep an individual eye on individuals generating excessive anxiety.

Similar techniques may be used in more definite neurotic illness, including phobias, depression, difficulty in personal relationships, free floating anxiety, compulsions, acting out and sex problems. Wolpe found that a large component of all of these was subcortical anxiety for which intellectual action was of no use. It is more difficult to account for the origin of neurosis than simple phobias. There is doubt as to whether there is a simple conditioning model of neurosis but, clinically, the results of treatment are better than the spontaneous recovery rate (taken as 66 per cent). Gelder and Marks found that in neurosis a main phobia was diminished, others less. Overall, the results of behaviour therapy for neurosis are poorer than in a pure phobia but the predominating symptom is diminished: this is in accordance with the defined narrow interests of behavioural techniques. Reciprocal inhibition is suitable both for phobic objects (proximation phobias) and those where the phobia increases in distance from a safe point (as in agoraphobia).[4]

From experiments with dogs, it has been found that anxiety and sexual arousal are incompatible. Reciprocal inhibition has been used in sexual situations when attempt at intercourse in the male aroused anxiety, thus decreasing his sexual aptitude, the situation perpetuating itself. Impotence of this kind can be treated by gradually increasing contact *in vivo* without terminal intercourse or by imaginal reciprocal inhibition. There are difficulties about transferring to the real life situation: surrogate therapy has been used but the difficulties of this treatment will be dealt with in the next section.

Flooding

Flooding, apparently at varience with systematic

desensitisation, is the extinction of anxiety by non-reinforcing practice. The anxiety producing cue is presented or postulated, and escape prevented or delayed: extinction is theoretically hastened. Meyer evoked the phobia and prevented obsessive rituals from occurring: this verges into a type of reality testing. Flooding requires a shorter time than systematic desensitisation but is difficult, the phobia possibly being worsened. The theoretical model for blocking a conditioned avoidance response alone, resulting in extinction, is uncertain.[6]

Assertive Training

To the lay eye, behaviour therapy often appears little more than the application of normal social pressures: an example is, in therapy, treatment for those people whose self control and restraint are displayed to an unadaptive extreme, resulting in nervousness in queues, barbers' shops or restaurants. The behaviour therapist teaches a new response to be used in these social situations. This is somewhat different from other behavioural modifications—a new personality dimension as a whole is taught. After defining the problem, the therapist points out the frustrating results of the patient's weakness in social life and his job. This is similar to insight psychotherapy but the difficult social situation may be discussed at length and dramatised, with the patient playing a new, more aggressive role. Lazarus termed this "behaviour rehearsal." He distinguished between two types of assertive training:

(i) Direct advice
(ii) Reflective—interpretive, merging into rational psychotherapy.

Enuresis

On the assumption of a basis of faulty conditioning, behaviour therapy has successfully attempted a variety of modifications. In the 1930s. Mowrer devised an approach to enable the child to associate a full bladder with waking (micturition completed the circuit, ringing a bell). Lovibond disagreed with the theoretical basis and said success was achieved in this case by associating micturition with a noxious stimulous: he demonstrated this himself with a similar device, a buzzer sounding on micturition on intermittent trials (intermittent reinforcement) It became rewarding to wake when the bladder was full and avoid the buzzer. Success in treatment depends largely on the rate of conditioning and the sustained interest of the parents. It has been found that dexedrine and methedrine help the learning process.[7]

Control of Behaviour with Feedback

Conscious modification of behaviour in urinary frequency, stuttering, writer's cramp, can be helped by increased sensory feedback. For instance, a bladder catheter containing saline connected to a manometer may help a woman with frequency attain higher and higher "scores" as the bladder pressure rises, before micturition is allowed to occur.

Negative Practice

Seldom used alone, this treatment is suitable for neuromuscular symptoms such as muscular tics, tooth grinding and writer's cramp. Dunlop, in 1932, deliberately repeated the non-reinforcement of the response. The patient consciously practices the tic without stopping, exhaustively. In the Gilles de la Tourette syndrome (tics, muscular jerks of limbs, and involuntary vocalisation of, especially, obscenities) Clark has used continuous practice of the shout: failure may occur due to voluntary pauses in between.

Aversion Therapy

Possibly the most well known of behavioural techniques is aversion therapy: it appears to be a universal and ancient idea (see Appendix 2) that an action, followed by pain leads to avoidance of the action, and that this can be successfully used by societies to train their members. It has been used by behaviour therapists largely to modify the behavioural anomalies of alcoholism and various sexual disorders.

In a simulated bar, the taking of an alcoholic drink is followed by an electric shock (Blake) or administration of apomorphine (Voegtlin). The technique may be improved by only punishing the undesirable action at intervals and the consumption of soft drinks (not punished) in between. There is an overall 50 per cent success rate of total abstinence at six months: possibly the recovery rate would be higher with more trials or greater shocks and the concomitant use of disulfiram which produces nausea on ingestion of alcohol. Sanderson has used scoline, a muscular paralyser producing respiratory arrest as the aversive stimulus. An electric shock is better than a chemical aversive stimulus because it is more exact, simpler and there are no side effects. The time sequence of behaviour and punishment is important: past failures are possibly due to an inexactitude here. It has been found however that a UCS of nausea conditions taste better than an electric UCS which is better for auditory, visual and tactile stimuli.

Sexual anomalies in males are probably due to an initial contact reinforced by subsequent masturbation but the nature often suggests an unclear stimulus generalisation (boots). Aversion therapy has been used in modification of homosexual behaviour. Originally, the presentation of a slide of a nude male was accompanied with an electric shock. A modification is a button for the patient to remove the shock, accompanied by a change of slide to a female. Results depend on whether this outlet has been provided (really an operant technique), the age of the patient, Kinsey rating, the duration of the habits and whether the new sociosexual role is assisted. Similar modification has been used in transvesticism, shocks being administered as the male dresses in female clothes, fetishism and exhibitionism. There has been surprisingly little work in paedophilia considering how socially serious it is.

Aversion therapy has also been experimentally used in the treatment of obesity and to prevent self-injury in psychotic children (the shock is perceived as more immediate than the self-injuring pain which does not act as an aversive stimulus). This too merges into operative conditioning.

Difficulties arise in aversion therapy with the degree of (i) imagination the patient is capable of and (ii) his arousal—a penile plethysmograph is now commonly used (iii) the degree of nausea or aversion—commonly a shock level just above that found to be unpleasant is used.

Treatment must provide a means of acquiring a whole new adaptive response and not simply conditioning: the conditioning may be viable in the laboratory situation but not necessarily in the external world. For example, a homosexual, learns in the laboratory situation to avoid shocks but in everyday life he may avoid the social humiliation (real or imagined) of unsuccessful heterosexual intercouse and prefer the gratification of homosexual behaviour in a microcultural situation whose ways and customs he knows and where no anxiety is provoked during his performance. Surrogate therapy—the use of trained and sympathetic women engaging in heterosexual intercourse with the patients may be the solution but provokes difficult ethical problems.[8] Anxiety reducing drugs may also be used. Possibly an ideal situation would be where the social and sexual aspects of homosexual behaviour could be accompanied by aversive stimuli in an *in vivo* situation but this would provoke experimental difficulties of control and assessing the individual subjective experiences.

A possible solution to ethical objections to the use of punishment at all in a critical situation is covert imagination of unpleasant stimuli: an obese person is encouraged to imagine vomiting every time food is taken. So far imagined aversive stimuli have proved less successful than actual ones.

Operant Conditioning

Operant conditioning is elicitation of a response already in the person's repertoire: appearance of the response is awaited before rewarding, not contrived by the clinician as in classical conditioning. Social approval reinforces and perpetuates social behaviour: the consequences following an act under the volition of the individual influence the future occurrence of that behaviour. Vocalisation has been encouraged in mute psychotics (Isaacs 1960) by progressively rewarding with gum any tendency to communicate. Pulling a lever may deliver cigarettes in a specially constructed machine and, by increasing the difficulty of the task for reward, a series of more complex acts may be built up. Operant techniques can be used for specific problems in subnormals such as vocalisation difficulties and encopresis. If the patient is very withdrawn, there may be problems about the choice of a suitable reward. The reward may be more symbolic in the case of suitable patients—in anorexia nervosa a counter economy may be instituted (counters distributed for eating, may be later exchanged in return for television time, magazines or other suitable reward). Operant conditioning may be performed with negative incentives, as in ignoring a psychotic child who punishes himself—success depends on the vigour of application. Normally there is positive reinforcement for the desired action as well: negative incentives are seldom used alone. Punishment of writer's cramp by shock did little to modify the behaviour, possibly due to high level anxiety.

Delinquent, Psychopathic and Criminal Behaviour

Legal, psychiatric and sociological definitions of antisocial behaviour differ widely but they may be characterised by the fact that they are more related to the whole culture of society and the personality of the individual than the behavioural anomalies described above, with the possible exception of male sexual anomalies.

In the case of psychopathic behaviour it has been considered as a clinical entity, in the province of the psychiatrist, characterised by a lack of normal emotional responsiveness and a tendency to act on impulse, resulting in secondary aggression and a failure to be influenced by punishment.

Different theories of delinquency have been put forward:

(i) Biological—studies on identical twins reared apart (Lange)
(ii) Dynamic—studies on different individuals in a particular family environment (why one of a single genetic and environmental group is delinquent) (Healy and Bonner)
(iii) Sociological—the influence of the subculture (Cohen) and the effect on it of the general culture (the effect, for example, of the Protestant ethic of equating material success with moral success)
(iv) Behavioural—this is exemplified by Eysenck's General Theory of Socialisation.[9] He distinguished between the teaching by a society of skills such as walking which bring their own rewards and the training to inhibit antisocial behaviour, resulting in the establishment of values. Values are generated by initially (a) the commencement of antisocial acts being punished by withdrawal of approval or physical punishment, resulting in anxiety when the act is contemplated on a later occasion and (b) the development later of cognition and internalisation, that is, conscience. Eysenck found variables in training were personality (extroverts were more difficult to condition and hence were less socialised), the degree and type of training and the social class (middle class parents used physical punishment less and their children developed more generalised inhibitions).

A psychopath may theoretically be considered as high on neuroticism and extroversion personality dimensions and resistant to socialisation training: he would engage in solitary delinquency and be resistant to sub-cultural influences. A delinquent, however, would exhibit below average socialisation and engage in individual or group delinquency depending upon his exposure to a delinquent subgroup.

Experimentally it appears that psychopaths have a poor fear condition ability and less generalisation of avoidance reaction. They prefer delayed to immediate shock and exhibit a low emotional lability. They may have a high IQ but do not pay heed to delayed aversive consequences of their actions. For this reason, behaviour therapy has not as yet proved successful.

Delinquents are psychologically normal: their behaviour should be changeable by altered group values and social conditions. Quay considers the criminal population to consist of three groups, the subcultural socialised, the psychopathic and the acting out neurotics. The actual criminal population is a mixture and treatment should be appropriate to individual cases. It is apparent that psychotherapy is of no use but behaviour therapy has been experimentally employed for some time. Contingency is important—institutionalisation may often increase delinquent peer group influence. The most suitable is operant conditioning: at present, observation in institutions has shown that the peer group rewards deviant behaviour whilst the staff punish all behaviour indiscriminately, depending on whether the child is "bad" or "good". Reward has been based on conscious actions (such as correct behaviour) or presumed unconscious ones (rewarding a drop in antisocial statements in conversation).

Behaviour Therapy and Normals

Behavioural techniques have been applied in those not demonstrably neurotic or deviant, in "difficulties"

rather than "disorders". These may however give rise to secondary anxiety (smoking—fear of cancer). In the treatment of smoking, classical aversive, aversion-relief, negative practice and covert sensitisation have been employed. Compulsive gambling on "one-armed bandits" has been modified by adjusting the machine so as to give a shock on pulling the lever. Social anxieties can be decreased by systemation desensitisation, insight and role rehearsal. Positive operative conditioning has been successful in childhood problems such as tantrums, sibling rivalry and fire setting behaviour. Children backward in general skills such as reading have also been taught by positive operant conditioning.

Other

Behaviour therapy has as yet been little employed in drug dependence, and then only in milder cases. Aversion therapy is used in pethidine and morphine addiction. For psychotics, behavioural techniques have been used in cases of self mutilation, to reinforce verbal behaviour and reality testing has, on occasion, been employed.

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THE CHARTERHOUSE SQUARE FIRE

BY OUR FIRE CORRESPONDENT

The facts published below are done so with the full permission of Andy Saywood and Dave Craufurd.

It is a little known fact that on Christmas night there was a fire at Charterhouse Square so serious that it required the combined efforts of 25 firemen and four fire engines including a special turntable engine to extinguish it.

In the interests of public safety these facts ought to be widely publicised so that the grave risk to life that occurred on Christmas night can be prevented in future.

I take it upon myself to do this.

The facts are these:

I was returning from the Nurses' party at about one in the morning when I met Andy Saywood who told me that College Hall was ablaze. He led a group of us through the bar, which smelled strongly of smoke, through the back entrance where we could see flames flickering behind a basement window.

After a hurried conference Saywood attempted to smash in the window, when the dangers of letting in air were pointed out. Another hurried conference was convened after which Saywood attempted to smash in the door, when it was then pointed out that that window always flickered anyway, as it was the window of the boiler room.

Yet another hurried conference was called, and the assembled company withdrew to the Bar.

Saywood then went to fetch Mr. Spalding, the Maintenance Engineer. He could smell nothing, attributed the smell (which he couldn't smell) to the fluorescent light bulbs and wished us goodnight.

In the interests of Public Safety we felt compelled to stay in the Bar (where the smell was strongest) to monitor the progress of the still undiscovered fire.

Saywood, accompanied by his henchman Dave Craufurd, toured repeatedly, turned fluorescent bulbs on and off continuously and discovered the reassuring fact that the Bar stood directly over the oil tank.

Two hours later, after much exploration and with the smell getting unbearable, I went to bed.

As I was looking for my toothbrush I heard sirens and bells and I looked out over the Square to see four fire engines roaring around.

Saywood had called the fire brigade.

Clutching my mother's Christmas present I hurried downstairs to watch the entry of the firemen.

Some 25 huge men, with enormous helmets and vast axes came rushing in.

"Close the windows!"

"Close the doors!"

Under the guidance of Saywood and Craufurd the men fanned out over the ground floor, alert for danger.

After a search lasting at least half a minute the source of the conflagration was discovered.

"I've found it!"

We all rushed to look at the life threatening inferno as it was picked up out of a chair and extinguished with a pint of beer.

Someone had left a fag end on a rubber cushion.

Saywood, surrounded by a cohort of axe carrying giants, rushed to open the Bar and free drinks were handed out all round.

Secure in the knowledge that my safety was in the hands of such men as Saywood I left them to it and went to bed.

TERENCE KEALEY.

JOURNAL INTERVIEW

The Student's Union does not exist either symbolically or in reality as a union of the Students of Bart's. Its significance lies solely in what it does, and what it does is spend money provided by Local Education Authorities, and in some cases by students themselves. Where that money goes and how it is disposed of is therefore of interest to many people, so the *Journal* recently interviewed the current Financial Secretary of the Union.

J. Could you give us some idea of the money involved in the running of the Student's Union and its committees?

This year the Union had an expenditure of £10,500. Six thousand pounds of this was spent by the clubs, £2,000 by the Union and a further thousand as subscriptions, half to the Journal and half to the Medical College for the upkeep of Foxbury. This leaves a balance excess of £2,500.

The Union expenditure was spent as follows:—

(a) Maintenance. (Newspapers, Piano tuning, Clock repairs, Insurance, upkeep of Union property and stock.) £650
(b) Secretarial. (Printing, typing costs, telephone, salaries to College Office, Auditors' fee.) £600
(c) Subscriptions. (BMSA, Choral society, social club, and travel.) £200
(d) Entertaining. (Teas for visiting prospective students and to speakers at LMG Lectures, refreshments at Union and General meetings, the cocktail parties and most of all in covering the loss of the Beggar's Banquet.) £550

The Wine Committee does not receive a set allowance from us but their accounts are under our control and audit, we being liable for their debts. In brief they had a turnover of nearly £19,000, which gave them a profit of just under £3,000. This was spent on financing bar maintenance and student social functions such as the Barbeque Ball, the Smoker, the Boat Trip and some of the hops, giving a net loss for the year of approximately £600.

J. What is the position of SU finances in relationship to the law and the Government? We understand that the SU is registered as a charity; what does this mean?

Any body with an annual turnover of greater than £5,000 is obliged to pay VAT. We are at present granted charitable tax concessions, being an integral part of the college. We are also able to claim back VAT on essential items which are bought for the maintenance of the Union and its clubs. However this has been put in jeopardy by the NUS's desire to be classed as an autonomous body. If we are considered a separate corporate body, we might lose our VAT benefit and be liable to corporation tax, and would also have to shoulder the full costs of Foxbury of which we at present only pay a fraction.

J. How does the £12 annual Union subscription compare with that of other Colleges and Hospitals in London?

Three other hospital unions have a greater subscription of £15, which they have recently raised from 12 guineas. The majority of the remainder of the colleges have a similar sum to us at present or just below, and a few such as the LSE are only about £6. This is because they charge for their clubs separately.

J. Your own recent investigations add weight to criticisms that money has been spent too freely and inappropriately in the past. Last year large amounts were spent on subsidising social events, and yet the SU had a balance excess of over £2,000 for the year. What do you think of suggestions that the SU subscription should be raised to £15 p.a.?

As will be seen from the above figures we have a healthy balance which is also supplemented from a further £12,000 which is invested to give us an additional income. However this next year could radically alter this, subject to the above taxes and the increases in day to day running costs.

We could, I am advised, manage for the next two years by restrictions on some capital expenditure and possibly with an end to such a liberal club allowance. But this is so limiting to the clubs and would only stave off the evil hour for a further two years. The Union must decide whether it wishes to retain its prior state of relative wealth and its ability to support most of its functions, thus keeping down the entry price to the student: or whether to stay firm which will curtail some of its activity. The constitution outlines the aim of the Union as one providing, promoting and fostering social, athletic and cultural activities. While in some respects this is fullfilled there are many people at Bart's who would say that we lag behind other colleges in our facilities. If we restrict our income we are in danger of reducing and not expanding our activities. What is needed however is a redistribution of our spending to modern trends.

J. It is often said that those who are not interested in sport or beer get poor value for their £12; this is especially true for the increasing female population of Bart's. Do you think it is time to reconsider the Union's function, as far as adjusting its expenditure to meet the interests of more people goes? I am thinking, for example, of sponsorship of expensive minority sports and limited-appeal social functions.

In the past there were only a few clubs at Bart's and a tradition has been established that their every need should be satisfied within reason. Now, as you point out, there are other interests in the hospital. They have and always have had the right to a fair share, but have not always been seen to have that equality. With the formation of the new constitution, there is now an increased change for such minority clubs to apply for funds. This does not mean that the traditional clubs will have their grant cut without regard. All their expenses will receive an equal degree of cover. What the student body should now consider is whether it is able to afford to fully sponsor a club's tour or whether the touring members should contribute towards this expensive luxury of our time.

We are trying to let it be seen that the Union's funds are allocated to all clubs by the same principles and to any club, providing it shows no partisan or political basis. This is written into the college charter. There are few clubs which do not have feminine participation now and for the non-sporting members of the student body the Union offers quite a few social and cultural activities as well as the general facilities mentioned already, giving a reasonable return for thier subscription. However should anyone feel hard done by, they are at liberty to offer an alternative *and* back it up with some positive action.

J. How will SU finances be dealt with when we move to QMC?

At the moment we are unsure as this depends on the formation of new and joint college charters with both the London and QMC. There may even be separate pre-clinical and clinical unions sharing facilities with the London.

RETROSPECT ON 1973 ON RECORD

by ALLEGRO

1973 was a strange year on records as in many other respects. Its most unhappy effect was the death of so many conductors whose recordings were famous. This will not mean the end of their total contributions because in most cases there are many unissued recordings but it may cause radical revisions in the recording company schedules. The unissued material includes many Mozart symphonies from Kertesz for Decca, the Brahms piano concertos from Phillips conducted by Schmidt-Issestedt (with Alfred Brendel), a little new Klemperer material. One company, Unicorn, are trying to issue on record as much as possible of a complete live Mahler cycle from Horenstein, whose loss was all the greater because his modern recordings were so few and his interpretations were often revelationary. How sad that no major company had used that great man for a series of recordings with a world class orchestra.

One major event of a happy nature has been the reissue of a vast quantity of historic material—these include orchestras and instrumentalists. The qualities that can be extracted from the old masters and tapes never ceases to amaze. I was staggered by the sound of Pablo Cassals's 'cello in the 1937 record of the Dvorak 'cello concerto—this record is a wonderful feat and the 'cello tone is the equal of any modern recording (EMI HLM 7013: £1.35) a fitting memorial to another great musician who died in 1973. Another side of Cassals' art is represented by the recording (1927) of Schubert's B flat trio with Cortot and Thibaud—an extraordinary warm record (EMI HLM 7017: £1.35). Other famous reissues include a Caruso box (RCA), a Rubinstein Chopin box (RCA), Arthur Nikisch in the Beethoven 5th Symphony (1913 recording, and sounding it!), and Gustav Holst conducting his own "Planets" (EMI). Other vocalists honoured include Patti, Chaliapin and Callas (EMI).

It was the year of the Rachmaninov centenary—I gather RCA plans to release all the records he ever made in his many guises—conductor, pianist, composer. A foretaste is a remarkable record of his 3rd Symphony recorded in 1937 (RCA VIC 6057: £1.19). Two more conventional Rachmaninov choices were the 2nd symphony under Previn (ASD 2889: £2.28) and a record of the opera, badly named "The Covetous Knight" from Melodya (ASD 2890: £2.28), a marvellously rich work, rather like richer Mussorgsky.

DGG released a series of sets of symphonies to celebrate their 75th birthday but their imagination was small—they stopped short of some obvious symphonists such as Elgar, Nielsen, Rachmaninov, Berlioz, and much of their cycle was reissue material. However, Karajan's new Mendelssohn cycle was revelationary to me, revealing great power in the music.

Phillips won the prize for the quietest pressings of 1973 and their new recording of Berlioz' "Benvenuto Cellini" was the operatic feat of the year (6707019: £9.16). Their recordings of Mozart's wind concertos with the Academy of St. Martins, conductor Neville Marriner was the most enjoyable concerto set (6/07020: £7.00). I especially love Jack Brymer in the Clarinet concerto.

The biggest scare of the year has been the shortage of cardboard, paper and plastic—this could well mean the end of box sets and a great shortage of individual pressings—this latter point is already fact, as anyone awaiting an out of stock recording will know. It could be that 1974 will be a big crisis year in the record industry, rather than the year a complete Schoenberg or Ives anniversary cycle appeared (both born 100 years ago).

BART'S SPORTS

RUGBY REPORT

The club this season has had to follow on from last season's misfortunes to build sides which are representative of the rugby strength of the hospital. At the end of last season we were left without a lot of experience, other than of losing, and poor results. The team needs to get a stable start to this season.

We were lucky to be able to call on the experience of Lambert, Smith and McIntyre for the first game against Glyneath at Chislehurst. Unfortunately we had no recognised kicker in the side and we missed numerous penalties including two in front of the posts. Thomas and Hobman scored tries with the final score 8—11 to Glyneath.

On the next Saturday we played Beckenham at home. This game was once again a repetition of what happened last season, affecting a side which has no confidence. For threequarters of the game it was a very even affair with no score then in the last 20 minutes they scored 22 points, most of them through our stupid errors.

Against Reading at last we had more bite to our play. Reading were a good side and we did well to keep them from crossing our line more than once. Rick Thomas scored a try after a clever kick ahead by John Powell and Powell landed a penalty goal. The match ended in a draw when with the line at our mercy a handling mistake prevented us from winning our first game.

Next Saturday against Southend we fielded our strongest side of the season. It was the first Saturday of term and we were strengthened by the inclusion of our pre-clinical members Hugh Maurice, John Goddard and Brian Marion. Murray Porter, who had been playing well up until this game, was injured and so Chris Milford was brought straight into the team after the Fresher's trial. Simon Bonn, Richard Miller, John Chapman, Martyn Davies, Robin Barrett and David Crabbe also played well in the trial and were in the 2nd XV.

Southend, last year's Kent Cup holders had an unbeaten record when they came to play us. Coupled with this Mike Debenham hurt his knee after 20 minutes and left the field, with Julian Allen moving up into the front row. For the rest of the game it was fairly even. Both sides had their chances to score but a fair result was achieved with one penalty goal each, John Goddard scoring for Bart's.

Still waiting for our first victory we travelled down to the Trojans ground in Southampton. Dave Badenoch returned to the side and Simon Bonn played his first game for the 1st XV. Later that week he also played for the Sussex county side. He made an impressive debut kicking 5 penalty goals and 1 conversion as well as adding a degree of pace to our centre which has been lacking over the last few seasons. The whole side played with much more authority than before and we duly recorded a convincing victory by 29-10. Chris Milford scored a fine individualistic try from a set scrum on the opponents' line. John Goddard scored from the wing after a good handling movement. Shane Sullivan provided the highlight of the game by intercepting with 35 yards to run. Although to everyone's delight he made the line he was not awarded the try for some mysterious reason. Julian Allen scored a fine try minutes from the end when the Trojans paid so much attention to the rest of the back row that he was able to run in almost unimpeded from a set scrum.

On Wednesday, October 17th, we played Cambridge XV at Cambridge. We were beset with problems. Firstly John Capper was ill and unable to play, Keith McIntyre was on duty, Simon Bonn was playing for Sussex and Martin Busk was getting married. Then during the game Dave Badenoch had to leave the field with a broken rib. Playing against the wind in the first-half a lot of the ball was dropped at fly-half and the ball was not properly controlled by the back row in the set scrum. This combined with a certain disjointedness about the side's play meant that justice was not done to the side's ability. Jeremy Kaye injured his leg and was unable to kick goals, although Nigel Findlay-Shirras landed a penalty from 35 yards in the first-half, it was not until the last few minutes that Goddard scored under the posts and converted it himself to bring the final score to 21—9.

Against Old Millhillians the most notable events were respectively that 4 of our sides managed not to get a game at all although turning up at the supposedly correct grounds and that Nick Fairhurst made an impressive comeback to the 1st XV for the first-half. Bart's were by far the better side in the first half playing on a very wet and muddy pitch but were unable to score more than 1 penalty goal by Simon Bonn. In the second-half Bart's managed to give away 17 points. This habit of relaxing at vital moments and giving away points when it was unnecessary kept with us for the next few games.

On the next Saturday against Ealing, the team started to play together much more successfully. John Chapman came in to play on the wing and John Powell came in at full-back in place of Hugh Maurice. John Goddard scored two tries, Simon Bonn and John Mann one each with John Powell kicking a 40-yard penalty goal.

After coming back from tour the team played a first round Middlesex Cup game versus Old Grammarians. The side was not at full strength with Cooper, Badenoch, Allen and McIntyre unavailable. In the first five minutes Bart's scored two tries and looked set for an easy victory. Jeremy Kaye touched down after the full-back had fumbled behind his own line and Martin Busk scored in the corner after a good move involving the whole three-quarter line and a fine individual run-in. Simon Bonn was having an off-day with his kicking and could not score with any of five attempts. From then on

Bart's made more problems than existed, only scoring once more by a penalty from Jerry Kaye. Old Grammarians never looked like scoring a try due to our very solid defence but with our side disagreeing so much with the referee they pulled back 9 points from penalty goals and could have won with the last kick of the match.

The next game was at home against the University Hospital of Wales which is a new fixture. Bart's scored a glut of tries with Hugh Maurice, Martin Busk, John Goddard, John Mann, Chris Milford, Jeremy Kaye and John Capper scoring tries with 2 conversions from John Goddard. John Mann's try was a fine individual break and run-in.

On the Wednesday against MSS another 6 tries were scored without reply. Simon Bonn, Nigel Dunn, Murray Porter, Dave Badenoch and John Capper (2) all scored in a very free-moving game which Bart's dominated in every phase against what should have been fairly reasonable opposition. The forwards played very well as a unit with Julian Allen playing very well in the back row and Dave Badenoch celebrating his comeback with a try. The backs showed good penetration although sharing the tries equally with the forwards.

On the Saturday against Winchester a further 6 tries were scored by Maurice, Goddard, Chapman, Badenoch, Aitken and Capper. Once again the club played very well in all departments and completely controlled the game.

On the Sunday we played St. Mary's Hospital in the Middlesex Cup at Chislehurst. We lost by one point in 35 scoring two tries by Goddard and Bonn with 2 penalty goals by Powell and a conversion by Bonn. The side played fairly well but with more faith in ourselves could have easily won. Mary's only drew ahead in the closing minutes with a penalty goal from the touchline. One of their tries was a direct result of a very bad clearance kick and the other due to one missed tackle. However, Bart's worked well for their positions and cleverly contrived our tries. For all this it gave a promising idea of how the same game could result with more application in the Hospitals' Cup.

Against Old Askeans Bart's probably played better than all season in recording a fine win 13—3. There was a distinct urgency of the pack from the kick-off and there was a good "fighting" spirit kept up throughout the game. A lot of good ball was gained by the pack and several good scoring positions were set up. The only try of the game was set up by Simon Bonn carried on by Chris Milford and Brian Marion with Shane Sullivan crashing over in the corner for the first try of the season. John Powell kicked 3 penalty goals.

Against the Law Society, Bart's scored an easy victory although by a margin that flattered the opponents. Martin Busk scored 2 tries in 15 minutes before injuring his ankle, and Simon Bonn scored the only other try. Bart's were far too busy trying to sort out the deficiencies of the opposition rather than scoring tries.

RESULTS

			TRIES
Glyneath	Lost	8—11	Thomas, Hobman
Beckenham	Lost	0—22	
Reading	Drawn	7— 7	Thomas
Southend	Drawn	3— 3	
Trojans	Won	29—10	Goddard, Milford, Allen
Cambridge XL Club	Lost	9—21	Goddard
O. Millhillians	Lost	3—17	
Ealing	Won	19— 7	Goddard (2), Bonn, Mann
Middx. Cup			
O. Grammarians	Won	11— 9	Busk, Kaye
Univ. Hosp. of Wales	Won	32—10	Maurice, Busk, Goddard, Mann, Milford, Kaye, Capper
MSS	Won	35— 0	Bonn, Dunn, Porter, Badenoch, Capper (2)
Winchester	Won	28— 3	Maurice, Goddard, Chapman, Badenoch, Aitken, Capper
Middx. Cup			
St. Mary's Hosp.	Lost	17—16	Bonn, Capper
O. Askeans	Won	13— 3	Sullivan
Law Society	Won	20— 7	Busk (2), Bonn

CHRISTMAS TERM CROSS-COUNTRY CLUB REPORT

As Ripples pound again along the Embankment stone and distended alveoli engulf the Southbank smog, it seems that Bart's Cross-Country masochists are bound for dizzy heights this year—not at Sussex Downs, however, where the season reluctantly began with a friendly match against the University. Despite an ignoble attempt by Middlesex and Sussex RFC's to steal the afternoon's glory and our tea, the day was undoubtedly not ours as Sussex A snatched victory, although we convincingly sabotaged their "B" team somewhere in Stanmer Woods.

Match 2, the annual 6-legged UC relay at Parliament Hill, proved an exciting afternoon in a muddy manner of speaking, our team finishing 15th in a field of 34. A significant aetiological factor was the leading leg of Bruce, who apparently, in a great hurry to continue with other Saturday extracurricula pastimes, only stopped running finally on reaching the local girls' school changing rooms. Our two new superstars, "Flash" Fulford (from a college club near the Fens) and Martin Reader, also both secured remarkable legs and will obviously soon be household names.

The first London colleges match at Richmond Park at last unveiled Bart's in full splendour, as we beat all other teams to finish top of the League in this scenic 6-miler.

Position	*Name*	*Time*	
17th	S. Mann	30.13	Distance 5¼ miles
18th	B. Campbell	30.18	Team results:
30th	W. Fulford	31.11	Div. I—12 teams
35th	D. Wainstead	31.20	Bart's I 1st
38th	M. Reader	31.30	
50th	R. Miller	32.10	II—24 teams
58th	T. Hunt	32.36	Bart's II 11th
84th	M. Page	34.30	
105th	M. Wall	35.40	
118th	P. Leech	38.01	
137th	J. Deady	46.30	

The second league match at Bushey Park was great for deerstalkers and St. Mary's College who impudently won the day, although our aggregate scores maintained our overall lead.

Position	*Name*	*Time*	
18th	W. Fulford	30.34	Distance 5½ miles
24th	M. Reader	31.03	Team results:
25th	S. Mann	31.05	Div. I—Bart's I 2nd
39th	R. Miller	32.12	II—Bart's II 11th
44th	D. Wainstead	32.43	
78th	T. Hunt	35.23	After 2 races:
88th	M. Page	36.18	Div. I—Bart's I 1st
93rd	P. Leech	36.51	II—Bart's II 10th
100th	M. Wall	37.17	

The annual Bart's-against-the-world runabout at Hyde Park proved a reasonable training run, and despite Mary's desperate tactics to impede us with snowstorms our 5A team runner finished in the first 6 to regain the Porritt Cup. Guest appearances by Mikes Curry and "Waistcoat" Lean provided some glorious technicolour in the midfield, while Daveth Gaylard was obviously jogging a long way from his native hills.

The University colleges championship demanded the last major effort of the term, but our strength was somewhat sapped by the Rugger Ball a few hours previously. Mike Page had grossed misjudged his liver's regeneration powers, but encouraging presidential support from Dan Tunstall-Pedoe helped save the day, and the Roehampton (small colleges) Cup was won—largely due to Mighty Mann and Tread Miller, who had greatly benefited from his recent stay in a Dartmoor mental hospital.

Position	*Name*	*Time*	Championship:
10th	S. Mann	29.15	1st LSE 42 Points
12th	W. Fulford	29.24	Colleges Cup
19th	R. Miller	30.19	
23rd	M. Reader	30.48	2nd Bart's 60 Points
27th	D. Wainstead	31.30	Roehampton Trophy
57th	M. Page	36.27	

The term has been astonishingly encouraging as not only is the Club now strong in star performers, but also an increased availability of runners has enabled two Bart's teams to compete successfully in the league.

After the Hares and Hounds autumn show, the committee has selected a rather dashing loosely fitting anti-weather sweat-absorbing black tracksuit top fitted with adjustable Bartholomew crests for maximum intimidating effect these are available for a mere pound to any country lovers who would enjoy some exercise on Wednesday afternoons.

DAVE WAINSTEAD.

BOOK REVIEWS

A COUNTRY CAMERA 1844-1914 by Gordon Winter. Penguin, 75p.

This collection of early English photographs, with suitable and intelligent comments appended, is a pure and simple pleasure. Here in black and white can be seen the world of Thomas Hardy and George Eliot, a world of wood and horses and rough leather and strange hats. It is a little unreal in that you had to have both time and money to spare in order to be a photographer, and so tended to miss out on the harsher aspects of rural poverty which were driving people to the far more healthy towns. (This mass movement was largely responsible for the phenomenal population increase of the last century.) But for sheer nostalgic indulgence, as a flight away from the concrete and the glass, it could not be bettered. I would welcome another fifty such collections.

T.T.

A MELON FOR ECSTASY by John Fortune and John Wells. Penguin, 35p.

The title is derived from an old Turkish proverb which begins, "A Woman for Duty", but the book is really more to do with Humphrey Mackevoy, a gentle arboriphile, and his tribulations amidst the good folk of Mundham. Essentially an expanded fantasy from the Private Eye menagerie, it abounds in a sardonic black humour interlaced with all the banalities of modern English nowhere-town life. But as you smile at the multiple absurdities of Mummy (an invalid who also practises weight-lifting underwater), Rose Hopkins, the 14-year-old nympho', and Councillor Strangeways with his wine-making plant and "Italian" connection, what emerges is a real doubt as to who and what is abnormal. Like all the best humour, this book has a sharp satirical cutting edge and uses a single situation from which to develop; it makes delightful reading.

T.T.

DOCTOR AT LARGE 30p. **DOCTOR AT SEA** 35p. By Richard Gordon. Penguin.

If you find these stalwarts of the "doctor" series still as funny as you first thought then you will probably be reading them for the rest of your life. If, like me, you find they have aged considerably they will only be of interest in the portrait they give of medicine in the early fifties. Life was much harder for aspiring young doctors when jobs were short and Chem. Path. still in its infancy; perhaps it was a good thing to jolt those determined philistines out of their beery idyll. But now most of the humour seems rather prankish and obvious and the circumstances rather remote from present-day experience. You may regret the passing of such hearty times but the fact is they have indeed passed even though the image lingers on. The sooner that image joins its reality in the metaphorical scrapbook the better it will be for those of us who have to bear its highly embarrassing burden.

T.T.

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

Founded 1892. Vol. LXXVIII No. 3

Editorial

The student-/-poverty relationship has been a staple of popular history since the dawn of university life. The romantic picture is of a starving young genius reading by candlelight in some Parisian or Paduan garret, living off the pittance from a measly uncle. The modern American myth is less colourful but substantially the same, the hero now working his way through college via the local hamburger joint. With the introduction of a grant system the student population veered away from the wealthy or brilliant few to a more egalitarian mean; no longer the tyranny of dividing the night between washing up and reading up. But 1974, with its economic chaos and the looming ogre of mass unemployment, has brought things back to earlier times. Many students are having to work crazy hours in order to remain solvent and partially fed; and their case is being severely hindered by their union's ridiculous contortions.

For in terms of figures the student case is watertight. In London the maximum grant is £520 (£640 or more for clinical students), which works out at £17 per week for three terms of ten weeks. This is assuming that a job or parental help is available during vacations, and the unemployment figures make the former a distinct impossibility. Once more a university education is becoming the haven of the better-off. Anyway, the means test is based upon an outdated estimate of the value of money, so many students get neither a full grant nor parental assistance. With hall of residence fees running at between £9 to £12 a week (which includes all meals except weekday lunch) there is little left for much more than running repairs. Yet those in halls are the lucky minority for flats and their concomitant overheads are much more expensive. As for the poor old clinical student, with no vacation work, he's got a mere £14 a week to live on, so it's back to the parents for him, or else.

Yet despite an unanswerable case the real student tragedy lies in the total inadequacy of the present N.U.S. grants campaign. It is based upon a serious error in the estimation of public opinion about students, and an even more serious error on the part of N.U.S. leaders as to the student attitudes with regard to them. Most students are essentially apolitical, in the sense that their work is a plentiful enough fascination; this particularly applies in most science faculties. Thus the absurd idea of boycotting lectures can only hurt the student, since he is the only possible benefactor in the first place. As for mass demonstration with slogans and banners, this merely reinforces the entrenched attitudes of anti-student prejudice. People do not like seeing their values rejected while their money is accepted; people stuck in routine manual jobs, who were unable to go to university (for whatever reason) yet pay taxes to support the grant system, become jealous when they hear tales of free-living, much-holidayed, pot-smoking students. No matter how false these ideas may be, they must be eradicated by an intelligent and tactful use of the media and a clear exposition of the facts. Ranting will be disastrous, as will any form of extremism. For though parasites now we are the potential of the future, and we can ensure that future by ensuring respect for ourselves today.

ANNOUNCEMENTS

Deaths
We regret to announce the sudden death on Christmas Eve of Dr. EDWARD DERYK MARSH, who qualified at Bart's from Cambridge in 1947. He was the grandson of Dr. Nicholas Percy Marsh, who qualified at Bart's in 1882, and became a consultant in Paediatrics at the Children's Infirmary, Liverpool.

BACON—On 30th November, 1973, Dr. Edward Bacon, M.B.B.S. Qualified 1925.

ELLIS—On 11th November, 1973, George Edmund Ellis, M.B.B.S., M.R.C.S., L.R.C.P. Qualified 1925.

Engagement
FRAME—BRYANT—The engagement is announced between Mr. Alan G. Frame and Miss Sally E. Bryant.

Change of Address
DR. A. R. T. and DR. S. P. KENYON are now living at 2 Victoria Place, Stirling, FK8 2QX. Telephone: Stirling 4777.

Appointment
Dr. A. V. Hoffbrand has been appointed to the newly established chair of haematology at the Royal Free Hospital School of Medicine.
John Lumley will be conducting "A German Requiem" Pluto verbalisation.

Hospital Concert
John Lumley will be conducting "A German Requiem" by Brahms towards the end of March. The time and place will be announced in the Hospital nearer the date.

Prizes
Miss P. Poulton has been awarded a £20 prize in the 1973 B.M.A. Medical Students' Competition for her essay, "Cigarette Smoking among Grammar School Girls".

A once only surgical essay prize, donated by Dr. D. C. Garratt, has been awarded jointly to Miss P. A. Ashton and Mr. A. F. Colver.

XIth Decennial Club
The XIth Decennial Club, which now includes members of the Xth Decennial Club, will hold the Annual Dinner in the Great Hall on Friday, May 3rd. Dr. R. C. Bennett, F.R.C.G.P., will be in the chair. Notices will be sent to all members during March. Will any Bart's men who entered the medical school between 1905 and 1925, who are not members but would like to join and attend the dinner please notify the Secretary:
Dr. K. W. D. Hartley, Hayes Meadow, Sarsens Close, Cobham, Gravesend, Kent, DA12 3DA.

Awards for Commonwealth University Staff
This handbook has been completely revised and substantially enlarged; it now contains over 400 entries describing fellowships, visiting professorships and lectureships, travel grants and other forms of financial assistance that are available to teachers and administrators at Commonwealth universities who wish to carry out research, make study visits or teach for a while at a university in another Commonwealth country. An appendix provides a brief outline of the services offered by certain organisations which encourage the movement of university staff between Commonwealth countries.

A copy of this handbook has been placed in the medical college library, and it is available price £1, from the Association of Commonwealth Universities, 36 Gordon Square, London, WC1H 0PF.

LETTERS TO THE EDITOR

Abernethian Room,
January 24th, 1974.

Dear Sir,

Whilst appreciating the space devoted to Bartsfilm in recent editions of the Journal, I would like to point out that the reviews were not submitted by a member of the Bartsfilm committee. I would be grateful if future articles could be attributed to the author, or if it could be stated that the views expressed were not those of anyone connected with Bartsfilm.

Yours sincerely,
A. J. MUNRO
Secretary/Treasurer Bartsfilm.

Editor's Note
It was never intended that the recommendations (or otherwise) for Bartsfilm programmes should be taken to be the views of the Bartsfilm Committee. They are, indeed, entirely independent of any vested interest, and are always postscripted T.T., being the initials of Trevor Turnerama, veteran patron of the Brixton Gaumont and acknowledged authority on early Pluto verb lisation.

Abernethian Room,
30th January 1974.

Dear Sir,

I think your implied criticism of Club Secretaries on page 32 of the January edition of the *Journal* was a little unfair to the Cricket Club. A glance at the index for 1973 in the same issue would have shown no fewer than nine references to the Cricket Club for last year.

However, I would like to take the opportunity to welcome any cricketers to Bart's and to let them know that we will be pleased to see them at our pre-season practices. The Finance Committee recently allocated the Cricket Club sufficient funds to erect a net at Charterhouse Square and this should be completed in the near future. The wicket will be constructed of matting on concrete and so will be available for use in any weather; cricketers of any standard are encouraged to come along.

Yours sincerely,
A. J. MUNRO,
Secretary, Cricket Club.

STUDENT'S UNION LETTER

January 28th, 1974.

Dear Sir,

I should like to make a few remarks regarding the clubs at Bart's, and I preface these with an extract from the Constitution: —

> Under the heading "Aims and Objects" it states "The Union shall provide, promote and control social and athletic amenities and activities."

The past few years have seen a decline in the major team Sports Clubs—e.g. Rugby, Boat and Cricket while, at the same time, there has been a rise in the non-team Sports Clubs and the non-sporting Clubs—e.g. Sailing, Drama and Ballroom Dancing. Many would probably say that this trend is due to the increased number of women being accepted as students. However, as can be seen from the table set out below, the total number of men has remained relatively constant. It must be remembered that the figures for the clinical years are increased by the Oxbridge entry.

Proportion of Men & Women Students at Bart's, 1974

Year	Men	Women	Total	% Women
1st M.B.	14	6	20	30%
2nd M.B. (1)	78	34	112	30%
(2)	91	27	118	23%
B.Sc.	21	6	27	22%
Clinical (1)	111	29	140	21%
(2)	122	24	146	17%
(3)	97	16	116	16%

It is reasonable to suggest that a more important factor for the changing trend in clubs is the type of male student being selected.

The point that I should like to make is that the rise and fall of clubs is not dictated by the financial backing which a club receives, but by the determination, or lack of it, of its members.

The attitude of the Union should be to encourage any new venture, with monetary backing if necessary, but be prepared to remove its support if the venture is a "flash in the pan", or if a group of people are using Union money to subsidise personal activities to the disadvantage of other clubs. The Union should also support the old established clubs through any transient decline, but should be prepared to reduce its help if the decline is permanent.

* * *

The Union facilities within the Hospital are being redecorated and altered. The large Billiard Room is being divided—the Billiard Table taking one third of the area, and a Mixed Lounge in the remaining two thirds. The newspapers and magazines, currently available in the Abernethian Room and the Ladies' Sitting Room, will all be put downstairs in the Lounge.

The Ladies' Sitting Room will remain as such, although the ultimate fate of the Abernethian Room is undecided.

The aim of these changes is to increase the negligible communal facilities in the Hospital. Your comments would be appreciated.

* * *

The Bart's Students Union is a member of the B.M.S.A., which is the only national group representative of medical students' interests. The B.M.S.A. is financed primarily by the B.M.A. Unfortunately, the B.M.A. is having to withdraw its support owing to its own financial difficulties. The B.M.S.A. will cease then to be able to exist as a separate body. It is likely that it will be absorbed by the National Association of Health Students. The N.A.H.S. may then apply for membership of N.U.S.

The position of Bart's Students Union with regard to N.A.H.S. and N.U.S. will be discussed at a General Meeting in March.

Yours faithfully,
TIM FINNEGAN,
Chairman, Students' Union.

BART'S FILM PREVIEW

The Boyfriend—March 19th
The film of the stage musical, starring Twiggy, and directed by Ken Russell, the maker of "Women in Love", "The Music Lovers", "The Devils", etc. Apparently it's all about the bright young things of the 20's, with lots of songs and no violence. Should be sugary.

Mutiny on the Bounty March 26th
Much publicized by the backscreen feuding inevitable in any movie starring the one and only Marlon Brando, this also has Trevor Howard, multiple Polynesian ladies, and creaky sailing-boat scenes.

Tales from the Crypt—April 2nd
All I know is that Vincent Price leads, and that it's a "horror pic" of recent vintage.

Zulu—April 9th
Stanley Baker (he also produced it) and Michael Caine (his first big role) star in a really solid piece of red-coated action, about the amazing "battle" of Rorke's Drift during the Zulu wars. A company of Welsh engineers hold off the whole Zulu army, earn eight V.C's. and get themselves into the Guinness book of records. Forget the fact that spears against breech-loading rifles is really no contest; forget the nasty colonial aspect and the ominous Boer "pastor" played by Jack Hawkins; just thrill to the Zulu war chant, Men of Harlech, the crackle of rifles and the bellowed orders to fire them. It's spectacular, heroic, beautifully filmed, and Caine makes a stunning debut as a foppish young officer. Worth an umpteenth visit.

THE VIRAL AETIOLOGY OF CANCER

By R. B. HEATH
Department of Virology,
St. Bartholomew's Hospital

As far back as 1908, Ellerman and Bang demonstrated that fowl leukaemia could be transmitted by filtered extracts of leukaemic cells. Although it is now appreciated that this work was first the demonstration of the oncogenic effect of a virus, it was for the most part ignored by oncologists of that era. Revival of interest in the possible viral aetiology of cancer started just over 20 years ago and since that time has increased at an explosive rate. The Table, which is by no means complete, shows a large number of viruses which have now been shown to induce tumours. The disappointing feature of this table is that it only includes one human virus which does no more than induce warts. It would be unwise, and perhaps arrogant, to infer from this that man is unique amongst the vertebrates in not having cancers that are viral induced. The more probable explanation for the deficit of human viruses on such a list, is that attempted demonstration of viral oncogenicity in man is at present frustrated by apparently insuperable problems particularly those of an ethical nature. There are some who would perhaps have added Epstein Barr Virus (EBV) or even the type II (genital) strain of herpes simplex virus to those listed in the Table, because of their respective associations with Burkitt's lymphoma and carcinoma of the cervix. However, in both instances cause and oncogenic effect has not been unequivocally established. Another human virus which might have got 3 18527 BART'S (March) 10 Times by 20 I F itself on the list is the BK polomavirus, which has recently been isolated from a renal transplant patient at St. Mary's Hospital. This virus has not been associated with any tumour, but it is of interest because nearly all members of this family of viruses have been shown to be oncogenic.

To understand present day concepts of viral oncogenesis it is essential to be familiar with the properties and behaviour of some of the more important viruses that are listed in the Table (particularly Bittner agent, Gross leukaemia virus, adenoviruses types 12 and 18, SV40 and polyoma virus). Since this information can be obtained from standard and even student textbooks of virology it will not be reproduced in this short review. Instead a selection of more general and basic aspects of the subject will be discussed.

What is an oncogenic virus?

Here we will consider aspects, beyond the obvious answer that it is a virus which produces tumours.

Structure

The important concept which has emerged in recent years is that widely different viruses can induce neoplastic changes. Thus an oncogenic virus may be either a DNA or an RNA virus, its nucleocapsid may have either a cubical symmetry (adenoviruses) possibly a helical symmetry (leukoviruses) or be complex (Yaba virus). Further, it may be enveloped (Marek's disease virus) or non-enveloped (polyoma virus). In fact it appears that the picornaviridae and the togaviridae are the only major families of viruses that do not have a representative that has so far been shown to be oncogenic. It seems, therefore, that there is no gross structural feature which is essential for oncogenicity.

Latency

One of the most constant characteristics of an oncogenic virus, is its ability to produce latent infection. The term latency is used rather loosely here to describe infections in which the host is unable to rid itself of virus after primary infection. This type of infection is undoubtedly much more common than we suspect but is not inevitably associated with tumour formation. What exactly happens to the virus after the initial stage is not well understood but what is observed is a prolonged interlude of silent infection before the virus again manifests itself. The recurrent infection that follows may be asymptomatic (e.g. the recovery of herpes simplex virus from the stools of healthy children) or pathogenic (e.g. herpes zoster). Sometimes the recurrence has to be induced by laboratory procedures such as the preparation of adenoid tissue cultures which will frequently unmask the presence of adenoviruses.

Many of the oncogenic viruses appear to behave in a similar fashion, in that after a latent interval there is recurrent infection which may be asymtomatic or may manifest as tumour formation. To discuss this in more detail it is necessary to consider the RNA and DNA viruses separately because of certain fundamental differences in their behaviour.

The RNA viruses are oncogenic in their natural state and primary infection occurs in early life. For example, Gross leukaemia virus is thought to be acquired *in utero* and the Bittner agent during suckling. Leukaemia or breast cancer does not inevitably result from these infections but when it does, the tumours develop late in the animals' life and virus can always be isolated from them. The behaviour of the avian leucosis viruses is similar, so that all these can be regarded as examples of latent virus infection.

In contrast to this many of the DNA viruses, such as the adenoviruses, polyomaviruses and SV40 do not appear to be oncogenic in their natural hosts. They are, however, known to produce latent infections in these hosts. The evidence for adenoviruses has been given above and the fact that SV40 virus can be recovered from 70% of kidney cultures prepared from rhesus monkeys is indicative of latent infection in these animals. The oncogenic effects of these DNA viruses has to be demonstrated by inoculation of young hampsters. As with the RNA viruses, tumour formation does not occur until late in the animal's life which is again indicative of latent infection. At this point it should perhaps be mentioned that, in contrast to what is found with the RNA viruses, infectious virus cannot be recovered from these DNA virus induced tumours, although the tumours contain virus specific antigens (see below).

Latent infection has been discussed at some length because it is considered that for it to occur, there must be some close association between viral genome and cell genome. It is now thought that a virus produces its oncogenic defect by integration of some of its own "genetic information" in to the cell genome. How we believe this is accomplished will be discussed below.

Transformation

Most of the viruses we are familiar with can be propagated in tissue culture cells. Replication of viruses in these cultures usually results in characteristics degenerative changes in the cells (known as the *cytopathic effect* (CPE) of the virus) and ultimately in death (the so called *cytocidal effect*). The characteristic adenovirus CPE is shown in Figure 1. Some viruses are able to propagate in tissue cultures without causing overt damage; rubella and parainfluenze virus replication in monkey kidney tissue cultures are the best known examples of non-cytocidal virus infection.

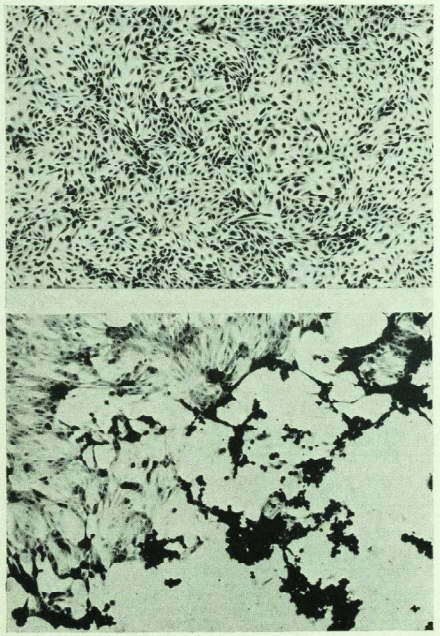


Fig. 1.
(a) normal human kidney tissue culture cells. (b) the same showing the characteristic degenerative changes caused by adenovirus infection.

A few of the oncogenic viruses produce degenerative changes in certain tissue cultures but their unique property is that many of them induce transformation of tissue culture cells. This term is used to describe a fundamental non-degenerative change that occurs, in usually only a small proportion of the infected cells. The main characteristics which distinguish a transformed tissue culture cell from its normal parent are: —

(1) Altered morphology
(2) Loss of contact inhibition, which results in the cells heaping up on themselves instead of lying neatly alongside each other as occurs with normal cells (see figure 2).
(3) Increased growth rate.
(4) Chromosomal abnormalities.
(5) Ability to replicate indefinitely in serial culture.
(6) Appearance of new cell antigens.
(7) Production of tumours when inoculated into animals.

These features strongly suggest that transformation of tissue culture cells by viruses is analogous to neoplastic change *in vivo* and it is for this reason that the process is at present being so intensely studied.

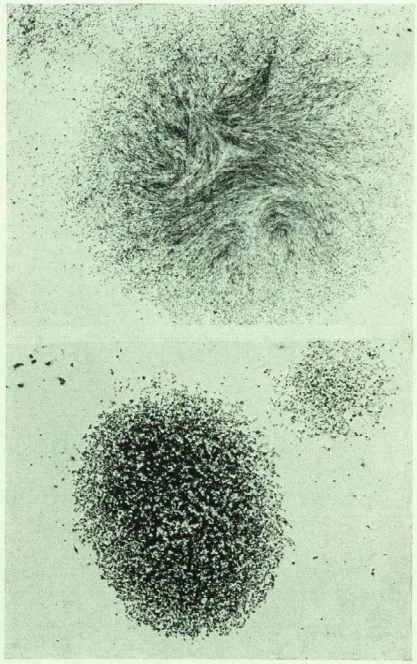


Fig. 2.
(a) normal BHK (hamster) fibroblast cells. (b) the same transformed by polyomavirus. (Photomicrographs by Dr. I. A. Macpherson, Imperial Cancer Research Fund.)

How does a virus induce cancer?

It is, I believe, fair to say that we know more about the mechanisms of viral oncogenesis than we do about

tumour induction by other carcinogens. This is the result of the recent application of the techniques of molecular biology to the problem.

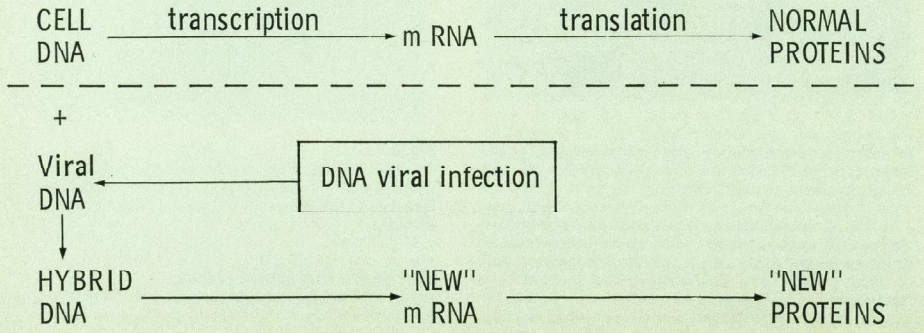
As discussed above, for a virus to induce a neoplastic change it seems that it must integrate part of its genome with the genome of the cell. This can best be understood by considering the action of a DNA oncogenic virus and this is shown in figure 3. The upper line of this figure outlines the now well established mechanism whereby a cell produces its specific proteins, be these functional or structural. The genetic information required for this process is contained in the cell's DNA. This is transcribed by the formation of messenger RNA molecules which proceed to the ribosomes where the original information is translated by the production of the specific proteins. The lower part of this figure shows what happens if an infecting virus is able to integrate part of its DNA into the cell DNA. It can be seen that the cell ends up with what must be regarded as a new genome. A different code will be transcribed by the cell's messenger RNA molecules and these in turn will be translated into a new set of proteins. A cell affected in this way is now an entirely new genetic entity and will be regarded as foreign by the host in which it arises. This important aspect of viral oncogenesis will be discussed in more detail below.

This sequence of events in DNA viral oncogenesis has now been directly demonstrated and some of the most elegant studies of this kind are those carried out by Green and his colleagues of St. Louis University, Missouri. This group has used hybridization methods to study the nucleic acids of cells transformed by adenoviruses. They have shown that the DNA of cells transformed by adenovirus 12 contains part of the viral DNA and that the cell:viral DNA ratio in these cells is 7,500:1. They have further shown that some of the mRNA molecules in these cells are transcribing viral DNA and that the cell:viral mRNA ratio is 50:1. These experiments are of interest in that they not only directly demonstrate the presence of viral genes in transformed cells but that these genes are preferentially transcribed by the cell's mRNA. Similar experiments have been carried out with the other oncogenic adenoviruses, the SV40 and polyomaviruses.

It is thus fairly easy to understand the initial stage of DNA viral oncogenesis but until recently, how an RNA virus accomplished this same feat was a complete mystery. The cells of tumours induced by RNA viruses show the kind of genetic change as those induced by DNA viruses. However, the initial mechanism used by an RNA virus to achieve this must be different for the obvious reason that RNA nucleotides will not incorporate into a DNA chain. An apparent solution to this mystery was provided by the discovery that most of the RNA tumour viruses contain an enzyme called "reverse transcriptase". This enzyme permits the single stranded viral RNA to be used as the template for the synthesis of a double stranded DNA. Reverse transcriptase thus provides the virus with a machinery for making a DNA copy of its RNA code and this new DNA is then incorporated into the cell chromosome in the same way as the nucleotides from a DNA virus. The discovery of "reverse transcriptase" was a startling event since it pointed to a "protein → RNA → DNA" flow of information in the cell which is the exact reverse of what normally occurs (c.f. upper line of fig. 3). It is of interest that this concept was suggested before the discovery of reverse transcriptase but was at that time considered heretical.

Remarkable as these discoveries are, all they do is indicate that a tumour virus integrates part of its genome into the cell genome thereby creating a genetically new cellular entity. Why this genetically altered cell is cancerous (i.e. is no longer susceptible to the host's growth control mechanisms) remains a complete mystery. There is much ingenious speculation on this subject but this will not be discussed further in this short review.

Fig. 3 The effect of integration of viral DNA into the cell genome on protein synthesis



Viruses that have been shown to induce tumours

	Natural host	*Tumours*
DNA viruses		
ADENOVIRUSES		
types 12, 18 and others	man *	sarcomas in hamsters
PAPOVAVIRUSES		
polyoma	mouse *	many types in hamsters
SV40	rhesus monkey *	sarcomas in hamsters
human papilloma	man	warts
HERPESVIRUSES		
H. saimiri	squirrel monkey *	lymphomas in marmosets
H. ateles	spider monkey *	lymphomas in marmosets
Lucke virus	frog	renal carcinoma
Marek's disease virus	chicken	leukosis
POXVIRUSES		
Yaba virus	rhesus monkey	? histiocytoma
RNA viruses		
LEUKOVIRUSES		
"leukosis" viruses	of mice, birds and cats	various types of leukaemia leukosis lymphosarcoma and sarcoma
Bittner agent	mouse	mammary carcinoma

* these viruses are not known to be oncogenic in their natural host.

The immunology of virus induced tumours

In the preceding section we have seen that the viral induction of either transformation or neoplastic changes results in the appearance of new antigens in the altered cell and these are referred to as *virus specific* antigens. The term *specific* is used here in the sense that the new antigens induced by say polyomavirus are quite distinct from those produced by SV40 or indeed any other virus. The virus specific antigens are not only different from the normal cell antigens but they are also different from the antigens of the virus particle, which in this context are referred to as *viral or virion antigens*. This already confusing terminology is further aggravated by the names given to the two kinds of virus specific antigens. These are the intracellular *T antigens* which are usually found on the nuclear membrane and the *transplantation antigens* which are formed on the cell membrane. The latter are clearly of interest to enthusiasts of the immunotherapeutic approach to cancer.

It is of further interest to note that the virus specific antigens induced by a single virus such as polyoma are always the same irrespective of whether they appear in a cell transformed in tissue culture or in any of the many histological types of tumour that appear in an infected hamster. This is in marked contrast to what happens with a chemical carcinogen. If, for example, a compound of this kind is rubbed on to a number of different sites of an animal then it is usual to find that all the tumours that develop have different tumour specific antigens.

These observations indicate that the mode of action of chemical carcinogens must be different from that of viruses but the possibility has been raised that all the former are doing is unmasking a latent viral effect.

Marek's disease

The complex of diseases known as avian leucosis (see Table) are mainly caused by RNA viruses of the leukovirus family but Marek's disease is an exception to this rule in that it has now been shown to be caused by a DNA virus of the herpes group. Uncontrolled Marek's disease is a serious problem in the poultry industry.

Marek's disease has been selected for special mention because in recent years attenuated strains of both the causative and antigenically related viruses have been successfully used as vaccines. From the other articles in this series it will be apparent that in spite of intensive and ingenious efforts, achievement in cancer therapy cannot be said to be outstanding. Because of this, it has long been the hope that these diseases could be as effectively dealt with as say poliomyelitis or smallpox and it looks as if our veterinary colleagues have achieved this with Marek's disease.

There are, of course, formidable problems to be overcome before a similar approach can be made in man. A human virus causatively associated with an important tumour has yet to be discovered, such a virus would have to be easily grown and attenuated, and any vaccine made from it would have to meet the most stringent safety requirements. Nevertheless, it is my belief that the Marek's disease story is the brightest light on the murky cancer horizon.

CATERING AT BARTS

In April 1970, the resident Nurses and Domestics, the largest group of staff, joined the happy band of Pay as You Eaters. This fact changed the whole concept of staff meal service, our Dining Rooms became restaurants. Crystal ball gazing became fashionable, how do you forecast daily in 6 Food Service areas how many hot foods, salads, sandwiches, sweets, etc., will be required at any given meal. The majority of staff make their mind up walking along the service counter and can change it three times before they reach the payout point. Cash control became a problem, how to find 18 qualified cashiers, English speaking an advantage. Just to make life more interesting, decimalisation, separation of Patients costing and two-tier meal prices were added for good measure. Meal prices and portion sizes can from time to time be the subject of strong debate.

It might be helpful to shed some light on the two-tier meal price. The DHSS instructions in HM(67)10 are simple: —

1. All staff should have the opportunity to have a fixed charge meal, the price to be determined by the Whitley Council for Ancillary Staff when they negotiated pay awards. This year for example, the Main Meal price is now 19½p plus VAT. In that price there should be two elements agreed
   (a) Percentage contributions by staff to general overheads and
   (b) the cost of the ingredients supplied. Both together must not cost more or less than 19½p. (The VAT charge goes to the Department of Internal Revenue and plays no part in Staff meal costings.)
2. All other foods sold, except sweets and chocolates, should have in the selling price the cost of the ingredients used plus a fixed, but higher, contribution by staff to general overheads.

It therefore follows that if the percentage contribution by staff is fixed and food prices increase, i.e. cost of ingredients, the result must be an increase in the selling price.

Because of the adoption of Pay as You Eat for staff, the need to improve the service of meals to patients at Ward Level and the future needs of the Hospital with the ever increasing demands on resources, it is imperative that rationalisation of Catering services takes place.

A major Catering Scheme has now been approved by the Board of Governors and is awaiting approval by the Department of Health.

1. Individual trayed meals from a choice of menu to patients.
2. Centralisation of Dining Room Services, with modern service counter and with fast back up cooking equipment behind the service counter to ensure freshly cooked food on demand.
3. Central wash up for crockery, away from Wards and Dining Rooms.

The problems related to Catering at "Barts" might best be illustrated by some facts and figures.

The number of meals served per day total 4,000.

At Lunch time we prepare the following: —

750 Main meals plus 120 Special Diets from the Dietetic Department for the patients in 38 Wards.

1,700 Staff meals for the 6 Dining Rooms.

Quantities of food used per midday meal, can be as follows: —

12 cwts. Potatoes
15 sacks of Vegetables
20 gals. Soup
250 lbs. Roasting Meat
120 lbs. Sausages
100 heads of Lettuce
12 boxes Tomatoes
250 lbs. Fruit
200 lbs. Pastry
10 gals. Custard
800 Eggs
40 gals. Milk

Food service in the Main Dining Room will be greatly improved by the allocation of money to provide a modern Back Bar, up-to-date Service Counters and three separate Cash Control Points. Utopia in food service is 300 yards of Food Counter staffed by 300 qualified Angels, with 300 Einsteins to calculate the bills reality is somewhat different.

The need to find easier, quicker and cheaper means of providing food service throughout a 7-day 24-hour cycle, will constantly demand change. The number of qualified staff needed to provide this service is rapidly declining. It is not readily appreciated that there are over 50,000 catering vacancies in London alone. The shorter working week and the increase in leisure time becomes the norm, hospitals, because of the 24-hour demands, will find it increasingly more difficult to recruit and hold staff, especially in the unglamorous service departments.

May I close this article with my grateful thanks to the Catering experts who were kind enough in a previous edition to show us how to plan a Dining Room service counter and cash control points. I am now planning for my next article a layout design plan for a speedier outpatients clinic followed by a more up-to-date layout of a Operating Theatre, guaranteed to get more patients through it than the conventional Theatres in general use at the moment.

B. A. O'MALLEY,
Group Catering Manager.

Justin de Gourmet

We hear so much nowadays of chic little places in South Kensington and Chelsea that it is interesting to note two well-established rendezvous, of a different nature, both in the City, and each with a character all their own.

Just off Charterhouse Square, and adjacent to delightful buildings that once housed a Carthusian monastery, is the easily found "College Hall" (01-253 1100/1161) an establishment dating from the middle of the present century. The Grill Room is inside the main entrance and to the left. Booking is not possible, but seating is for sufficiently large numbers to make reservations superfluous. The service is as fast and efficient as you yourself make it.

The menu is laid out in the normal three courses, but one is encouraged to order a snack, rather than a full-blown meal, by the very nature of the food. The room comes close to some Continental feeling; it is sparsely but agreeably decorated, and each table is set at an angle to offset the somewhat severe geometry of the room itself, which looks out on to a pleasant tree-rimmed lawn.

We started with the Beef and Tomato soup, the flavour of which was extraordinarily good, though "Tomato" had been translated very freely. Other choices in the first course are unadventurous and non existent; thankfully, there was none of the ubiquitous Avocado Pear and Prawn Cocktail. It would be refreshing and befitting to see some enterprising charcuterie here.

Of the main courses, the Shanghai Special gave us all a surprise. But if that was a revelation, the Chili con carne, recommended by a member of the staff ("that's Chili, dear, it's luvly 'an 'ot") is the story you've heard many times before. However, there is clearly a reasonably talented chef in the kitchen. The vegetables we chose were chips and peas, which suffer far less from imprisonment than some.

The desserts owe much to the Ski Corporation of Zurich. Orange squash was 4p for a generously filled glass, and drinking that, two people could lunch or dine for 50p before service and tax.

* * *

A few minutes' walk away across West Smithfield is the Nurses Dining Room of the Royal and Ancient Hospital of St. Bartholomew (01-606 7777). The building in which it stands dates from the pre-war era, but the restaurant itself has only recently been modernised, and devotees of this rendezvous will be only too willing to explain how this is the place which won the Bart's Journal Architectural Award for 1973—a truly remarkable achievement.

One approaches the Dining Room via a T-junction on to a narrow passage separating the two main dining areas. It is to the right that the Servery lies but the sight of food should not be anticipated too early as one must take one's place in the queue of locals who have forfeited much of their valuable time to sample and enjoy the bill of fare. While jostling about in true native fashion, one may share a joke with one or two of these white-coated individuals, and compare, as they do, the Main Course with the contents of glass jars that may normally only be seen in the Path. Museum.

While waiting in the queue, we were confused and tended to be even carried away by a stream of "confrères" of one sort and another who were passing by on the other side. There were those who had collected their meals, passing in one direction, while, opposing them, were those intending to join the queue further ahead, a custom we had not previously seen in S.W.7.

We chose the Fried Fish, with French Fried Potatoes and sliced green beans; the fish (generic term, rather than species specific) was well bread-crumbed but slightly dry, and the beans contained a quantity of what we supposed was a fibrous collagenous matrix, with a marked fraction of hydroxyproline residues. The establishment is unlicensed, so orange squash is once again the order of the day; overall cost of the meal was comparable with that of College Hall at 45p for two, before service.

R.T.J.

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(Further details available from Postgraduate Assistant Dean, The Medical College of St. Bartholomew's Hospital, West Smithfield, London EC1A 7BE.)

A FATAL CASE OF LANCEFIELD GROUP G STREPTOCOCCAL ENDOCARDITIS

By

H. BERRY, M. BARNHAM, JANE STEVENSON Department of Medicine, St. Bartholomew's Hospital, London.

Group A streptococci are responsible for the majority of human streptococcal infections, and group D is also quite commonly pathogenic. Groups B, C and G have only occasionally been incriminated in human infection, while the other groups are non pathogenic. These groups are, however, widely distributed as commensals, and pathogens in other animals. In subacute bacterial endocarditis, streptococci are frequently isolated as the causative organism, from blood culture, and from valve vegetations. Streptococcus viridans is most frequently isolated, while enterococci, non haemolytic, micro-aerophilic β haemolytic and anaerobic streptococci, as well as a wide range of non streptococcal organisms can be isolated.

Recently, Bullock *et al* (1970) described a case of group C streptococcal endocarditis; only three such cases had previously been described. Group G streptococci rarely act as human pathogens, occasionally causing throat (Hill *et al*, 1969) and uro-genital infections (Rantz, 1942).

In this paper, we describe a fatal case of subacute bacterial endocarditis, with evidence of a group G β haemolytic streptococcus as the causative organism. An extensive search of the literature has failed to reveal another such case.

Case History

A 72 year old white male clerical worker was admitted to hospital in October, 1972. At the age of eleven years, he had been hit on the leg by a cricket ball, sustaining a fractured tibia. He subsequently developed chronic lymphoedema in this leg, with gross trophic changes (Fig. 1) and recurrent ulceration and infection over many years. The patient had on many occasions refused amputation and was in the habit of keeping the limb in a cellophane wrapper. On the morning of the day of admission, he suddenly developed severe pain on the left arm, which became cold, weak and numb. No history of pharyngitis, rheumatic fever or previous heart disease could be elicited, and the only surgical treatment he had experienced was an unsuccessful attempt to control the oedema in his leg in 1914.

Physical Examination

He was a thin, ill looking man, clinically dehydrated, with a pyrexia of 39°C. He had a collapsing pulse of 120 per minute and a blood pressure of 145/55. He exhibited the physical signs of aortic incompetence and mitral stenosis. No pulses could be felt in the left arm and a line of heat demarcation was noted proximal to the elbow. There was no hepato-splenomegaly and no splinter haemorrhages were observed. His lymphoedematous right leg showed an area of ulceration on the medial aspect, with local cellulitis.

Two sets of blood cultures yielded a β haemolytic streptococcus of Lancefield group G and the identical organism was isolated from a swab of the leg ulcer. No microscopic haematuria could be demonstrated.

General resuscitative measures were instituted and Ampicillin, 500 mg. i.v., q.i.d. was commenced immediately. A 2 cm. pale red thrombus was removed from the brachial artery. Radial artery pulsation was restored by this procedure, but infarction of the biceps muscle had occurred.

Within two days, the patient's general state was much improved. i.v. Benzylpenicillin, 2 mega units q.i.d. was administered with the Ampicillin.

Bacteriological Findings

In vitro disc antibiotic sensitivity testing of the streptococcus indicated that it was sensitive to Penicillin, Ampicillin, Erythromycin, Tetracycline, Cephaloridine, Clindamycin, Rifampicin, Vancomycin and Gortimoxazole, moderately resistant to Gentamicin and Fucidin and resistant to Streptomycin. It did not grow on MacConkey's agar medium. Difficulty was experienced in attempting to find satisfactory culture methods which would provide predictable and reproducible *in vitro* growth characteristics for the organism. Minimum bactericidal and inhibitory con-

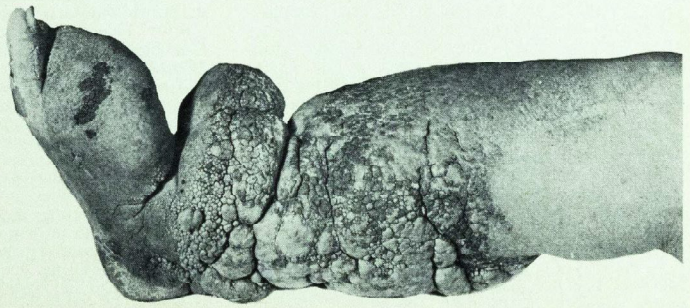

Fig 1. The right leg.

centrations of a wide variety of antibacterial agents were investigated, including many combinations of agents, and with few exceptions these seemed to indicate that unacceptably high levels of agents would be required. Back titrations using dilutions of the patient's serum to inactivate and kill the isolated organism appearing to indicate that inadequate serum levels were being reached, in spite of heavy administration of agents to the patient. Often, repeated tests showed inconsistent results, though the overall impression was of an unusually resistant organism. This contrasted with the preliminary optimistic disc sensitivity results.

Subsequent Clinical Progress

Penicillin with Ampicillin was continued for eleven days when, based on *in vitro* studies which indicated that Gentamicin with Penicillin would give more satisfactory antibacterial activity, i.v. Gentamicin 80 mg. q.i.d. was used to replace Ampicillin. Further *in vitro* work suggested that the addition of Lincomycin to this regime would be advantageous, and this was commenced on the fifteenth day.

Although there had been good improvement in the patient's condition in the early days after admission, this progress was not sustained. Ten days after admission he exhibited recurrent small haemoptyses. After eighteen days splinter haemorrhages were seen in the nail beds and haematuria was observed. His fingers became markedly clubbed and there was intermittent pyrexia. In view of the poor response to the chosen antibiotics and the apparently inadequate serum levels achieved judged by back titrations it was decided to substitute Rifampicin for Lincomycin. *In vitro* studies indicated good antibacterial activity for this combination. However the patient's condition continued to deteriorate and he became dyspnoeic, icteric, and died thirty-two days after admission.

Post Mortem Findings

The heart was enlarged (490G). The aortic valve showed rheumatic changes, with thickening of the cusps and some basal calcification; similar changes to those described by Steiner *et al* (1973). The posterior cusp had a few small adherent vegetations and there was an erosion in the sinus of Valsalva towards the base of the left atrium. No perforation had occurred. Histological examination of the valves did not reveal bacteria. The mitral valve also showed rheumatic changes, but no vegetations were seen. Both lungs were oedematous and there was a peripheral infarction in the right lower lobe. There was a right pleural effusion. The spleen was enlarged (375G) and congested, but showed no evidence of infarction or perisplenitis. There was some hepatic congestion, but no other gross abnormalities were detected in liver or bile ducts. There were a few small thrombi in veins of the right calf muscles. Infarction of the biceps muscle was confirmed histologically. The patient's death was ascribed to heart failure. Culture of a piece of aortic valve, including vegetations, taken at post mortem did not yield bacterial growth. However, three days had elapsed between the patient's death and post mortem examination.

Discussion

A wide variety of different bacteria has been shown to be capable of colonising an anatomically abnormal heart and many of them are rarely found in infective lesions elsewhere in the body. The group G streptococcus described in this paper is an unusual human pathogen. Despite encouraging preliminary antibiotic sensitivity testing, the *in vivo* response to administration of large quantities of apparently suitable antibiotics was not satisfactory and several combinations of drugs were attempted without achieving successful control of infection. The laboratory experienced unusual problems in growing the organism and this led to conflicting results in bactericidal and inhibitory testing of drugs and back titrations. These tests rely on predictable growth characteristics *in vitro* and the inability to produce consistent results was a considerable handicap to the satisfactory clinical management of the case. Subacute bacterial endocarditis is a condition for which accurate laboratory information on bacterial sensitivity and help in assessment of adequate antibiotic treatment is essential.

The lack of satisfactory clinical response to the agents administered may in part be ascribed to the special problem of treatment of subacute bacterial endocarditis, when prolonged treatment with large doses of suitable agents is required for eradication of even highly sensitive organisms. The results of back titrations suggested that inadequate serum levels were being achieved in spite of heavy drug administration and the choice of more suitable agents could not be adequately based on reliable laboratory findings. There is no firm evidence to suggest that the antibiotic sensitivity of the organism changed during the patient's illness and it is unlikely that this occurred.

Subacute bacterial endocarditis is principally a disease of middle age, though Hughes and Gauld (1966) emphasised the importance of the disease occurring in the elderly and that the signs may differ from the classical descriptions. The classical signs in this patient were evident only in the final stages of life.

Various portals of entry for the organism in subacute bacterial endocarditis have been described. Quinn (1968) lists tonsillectomy, parturition, dental or urinary tract surgery, venous and cardiac catheterisation, burns, insect bites, trauma, narcotic addiction and abscess. In this patient it is suggested that the sources of the organism was the acutely inflamed, ulcerated and lymphoedematous leg. The identical organism was culture from a swab of this ulcer and from repeated blood cultures. His swollen leg had been the site of recurrent infection and ulceration over many years and he had admitted to two episodes of local myiasis which resolved without treatment. It is suggested that his rheumatic carditis occurred as a result of repeated group A streptococcal infections in this abnormal leg. Amputation of the leg had been advised on many occasions.

No bacteria were demonstrated on the valves at post mortem. Culture also failed to reveal a growth of streptococci. These findings could suggest that the infection had been adequately treated, but against this view was the deterioration in clinical state, with pyrexia and late emergence of the signs of subacute bacterial endocarditis.

This case illustrates the lack of success in treatment of a patient with subacute bacterial endocarditis when satisfactory laboratory control was not available. The laboratory problems encountered may have been largely due to the nature of this unusual group G streptococcal pathogen.

Summary

A patient whose fatal illness was subacute bacterial endocarditis caused by a β haemolytic streptococcus of Lancefield group G is described. Considerable difficulty was experienced in finding suitable bactericidal chemotherapy. The organism was thought to have originated from an ulcer, superimposed on an area of chronic lymphoedema.

Acknowledgements

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BMSA EDUCATION CONFERENCE

By GERARD BULGER

The Conference was a failure and that was no surprise to me. Nick Hutt, Tim Packer, Joe Wilton and Kambiz Boomla are no longer speaking to me as I conned them to come along and make sure Bart's was well represented.

The setting was bleak; a weekend in January at Birmingham University in a deserted campus saturated with the driving rain. The heating was turned very low to save fuel, and ASLEF was non-co-operating; the disco was cancelled and the beer was at "conference prices". Too few students turned up; they appeared to number a hundred as against a planned two hundred strong. The atmosphere was chilling and gave many people an irresistible desire to go home.

The opening session was delayed until enough people had arrived. When it did start it became clear that nobody had any idea why we had come together in the first place. It appeared as if the BMSA executive had lost its steam, indeed, its eloquent spearhead Dave Wood was absent. I looked inside every blue polo neck sweater, but he could not be found. The aims of the conference were exasperating and loaded. "Determine the environmental, economic, political, and behavioural factors which contribute to health problems". One may be forgiven for thinking that that is a monumental task, but consider our despair when reading eight other similar aims such as "identity areas where resources are not used efficiently or effectively and determine the roles of individuals in a health team responsible for the delivery of health care".

A booklet had been prepared to give background information to help us achieve these aims. This document was a disgrace, if anything it showed a complete failure in the science teaching of those who prepared it. It was a jumble of quotations, statements and statistics taken out of context and carefully chosen to defend a pre-determined political stance. The conference had expert advisors, invited because of their known revolutionary fervour, who were to help the workshops in their discussions. The students' naïve politics, boredom and lack of experience (most were preclinicals) allowed the advisors to dominate the discussion at the plenary sessions. However, Julian Tudor Hart was one of the few who was not in cloud Cuckoo Land during the conference. A Marxist who appreciates that politics is the art of the possible.

The Workshops and plenary sessions slogged on. There was no gripping debate as there was at the last education conference in Nottingham. Surely the main function of a conference is to educate those present and instil new ideas; we learnt absolutely nothing. Some students may have learnt how bad student politics can be.

The final session was beyond belief. "In the light of the Conference conclusions", motions were prepared to direct BMSA education policy. This was criticised as the motions must have been prepared in too much of a hurry. "Not at all," replied the executive, "we prepared the motions some time BEFORE the conference." There was not a murmur of disapproval; everyone was anxious to catch the last trains home. Edinburgh and Bart's now showed their true colours (egged on by one from the Royal Free) and we argued these motions were unconstitutional; only an EGM or AGM could determine BMSA policy. Furthermore the motions referred to the National Association of Health Students and what they had decided. NAHS is no more than a collection of keen medics, radiographers, physios, osteopaths and the like who meet from time to time. The motion was passed handing the BMSA education project over to these un-elected people. The other motions that were passed are to perpetuate the aims and policies that have demonstrably failed.

BMSA does not mind the fact that it is unrepresentative of the medical students in this country. It even recognised this at the last AGM. What the Association does not realise is that if it carries on with its present policies it will become such a minority group as to be invisible. If BMSA wants to influence people and change their attitudes it must not remain a forum for discussion amongst a group of revolutionaries. Medical students are basically selfish. Only when the BMSA has a strong base, that is built on an endeavour to fulfil students' selfish needs can it have a limited political role. Bart's is one of the few "reactionary" medical schools that sends students along to these meetings. If Glasgow, St. George's, St. Thomas's and the like would do the same BMSA would be profoundly different. We get the representation we deserve.

BEHAVIOUR THERAPY - Part 3

By ROLAND LITTLEWOOD

Is Behaviour Therapy Just Common Sense?
This, a common criticism of the psychotherapists, may be answered by saying that although society has used behavioural techniques, modern behaviour therapy differs in its vigour of application and defined narrow limits of behavioural modification.

Some Theoretical Objections
The behavioural concept of the symptoms being the illness is criticised by exponents of the medical model (emphasising genetic factors) and psychoanalytical observations that it is only a "surface cure"—that if the symptoms are removed, the underlying disturbance causes others to appear (symptom substitution). Clinical data does not suggest that this occurs.

Psychoanalysis has provided for its adherents a basis for social and aesthetic insights into society (particularly Fromm, Reich and the later Freud) and behaviour therapy should therefore, if valid, provide a standpoint for our views of society and human destiny. Behaviour therapists have traditionally rejected any role outside the immediate clinical situation but more recently some have turned to the social implications of their theories.[1]

How behavioural is behaviour therapy? It is apparent that many behaviour therapists now accept that suggestion may play a large part in the success of a particular case[2] and that the patient-therapist relationship may be more complex than originally supposed, especially if the therapist has not determined any underlying problem. Undue emphasis on behavioural aspects may lead to the missing of the basis of the trouble. Therapists differ in the emphasis they place on symbolisation and generalisation. Is it reasonable for a woman excessively dominated by her husband to feel "closed in" and present with claustraphobia? How much more complex is the S-R model in the genesis of human neurosis?

How scientific is behaviour therapy? Does the strictness of the earlier laboratory experiments continue in modern clinical papers? What do we know of the actual situation when we read that a psychiatrist takes an agoraphobic patient for a walk? How scientific are terms of "stimulus", "reward" and "punishment" in a clinical setting? There has been little empirical evaluation, and that done by workers in the field and hence more sympathetic, as the history of psychiatry shows. Ultimately the extent of reward and punishment must be based upon observations on hypothalamic centers.

Is neurosis merely unlucky conditioning or a specific sensitivity to adversive conditioning?
Wolpe says in his description of reciprocal inhibition that there are two incompatible impulses but often in systematic desensitisation, slight anxiety is felt even though improvement occurs. This would appear to contradict Wolpe's theory: possibly both may be active at the same time or anxiety can decrease the response to anxiety.

Behavioural theory of the origin of neurotic disorders should be based upon laboratory experiments on man but these provide difficult ethical problems. Experimental boot fetishism has been conditioned in volunteers but this does not explain how it could arise normally in society. Homosexuality may be based on a single experience or fantasy reinforced by masturbation but the reason for the occurrence of certain fetishes is uncertain.

How Effective is Behaviour Therapy?
It is based on learning experiments in lower phylogenetic animals—do the same processes occur in man? We can say yes—the tendency of biology is to show that man differs from other animals in terms of a more complex organisation rather than qualitatively. But the major difference is man's brain and this is the subject we are dealing with: experimental animal neuroses are probably poorly equated with human neuroses. We should distinguish between conditioned *behaviour* and *learning*—the potentiality to perform certain actions.

Control experiments between behaviour therapy and other kinds of treatment (Lang and Lazovik on snake phobias, Paul on fear of public speaking, Moore with asthmatics, Davison with snake phobias, Rahn with spider phobias, Wolpe with neurosis) show that behaviour therapy is significantly more successful than psychoanalysis, insight therapy or other kinds of psychotherapy. However, all these experiments were arranged by behaviour therapists and there is difficulty in standardisation of the type of case, the strictness of the measurements and the degree of improvement. A summary of work on phobias shows that behaviour therapy was more successful with all except agoraphobia. Results with neurosis are better than with other methods but less effective than with phobias. It has been said that behaviour therapy merely treats bad habits whilst neurosis requires psychotherapy. Failure may be due to the fact that neurosis is adaptive, as well as maladaptive (the "neurotic paradox" accepted both by behaviour therapists and psychoanalysts). Thus there may be danger in using an animal model of neurosis. Agoraphobics tend to have a higher GSR and are less susceptible to reciprocal inhibitions: perhaps anxiety reducing drugs will improve the technique.

Even if control experiments demonstrate high success scores, this does not of necessity prove the efficacy of behavioural techniques or the validity of behavioural theory because of the complexities of the

therapeutic situation—the therapeutic relationship and the effects of suggestion and expectation.

There is often little relation between different treatments derived from the same learning theory and different theories may be used to explain a single therapeutic result. The theoretical distinction between reciprocal inhibition and flooding is not yet satisfactorily solved.[2]

Transfer to the In Vivo Situation and Generalisation

The transfer to the real life situation should be gradual because it generates maximum anxiety and hence reinforces the maladaptive responses, both in neurotic and deviant behaviour. Rachman[3] found that in treatment of arachnophobia there was a 40 per cent relapse. It is possible there is automatic extinction of the newly learned response and spontaneous recovery of the inhibited phobic reaction. The new behaviour should be overlearnt. In a rat tone phobia conditioned by shock, an extinction group improved less than a systematic desensitisation group with feeding but both quickly relearnt the phobic reaction.

There are the unknown quantities of mind and cognition in generalisation of a response: a man conditioned to respond to the word SURF will respond better to WAVE than SERF. Children stopped thumb sucking when a film show was halted repeatedly upon their sucking their thumbs during the show: but they resumed outside. Is "awareness" necessary? Probably not—a group therapy class were conditioned unaware to talk more during sessions by an "outside" noise intruding during silences. To what degree is insight by the patient necessary? For maladaptive anxiety probably a little, more where there is maladaptive cognition or antisocial behaviour involved. This has been traditionally ignored by behaviour therapists with their laboratory emphasis. Different types of insight may be useful—elementary behavioural theory may help with a phobia and reassurance of neurotics of a fear of madness may help the therapy. Children learn better when their parents explain why something is required rather than answering "because". Beech believes in the possibility of invalidating false beliefs by reality testing in psychotics (asking them to find "the machine hidden in the hospital") and transexuals (showing that their personal choice of female fashions corresponds with a male rather than a female view). Many therapists would find this approach facile and evident of a lack of empathy in the behavioural approach.

Results from the cognitive dissonance model show that, if a reward is used to modify attitudes, the smaller the reward, the better the results, as a large reward provides a basis for a change completely, not necessitating a change of "set".

Aversion Therapy and the Concept of Punishment

There has been much disagreement over the use of punishment in a clinical situation: there may be social objections: what is the nature of punishment in treating masochism? If punishment increases anxiety may not the new modified sexual performance be affected? Do parents who use punishment rather than positive reinforcement tend to have more aggressive complications in their children? If subsequent pain decreases repetition of an action, why doesn't social disapproval have the same effects? Mowrer showed that the punishing consequences of neurotic behaviour are delayed, the rewarding consequences immediate.

An aversive stimulus does not necessarily lead to adaptive behaviour: an escape is necessary from the aversive stimulus for optimised learning to take place. A dog, shocked repeatedly, if placed in a box where escape from a subsequent shock is possible, will not attempt to do so. Rats, placed in a tank of water, will drown immediately unless some of them are removed, thus giving the others a "chance of escape" and persisting in swimming for several hours.

Due to a high relapse rate, Feldman and McCullough conducted a control experiment and found that important factors were the contiguity of punishment, a random varied time and a differing reality of the stimulus conditions. For social and personality deviations, a social punishment may be better than the usual electrical and chemical ones as this is met afterwards and should reinforce the clinical treatment. It would however be more difficult to control and measure.

In summary, punishment should only be used if

(i) The individual agrees—it is important to assess the quality of consent and the pressure of courts, family, etc.
(ii) Greater harm would be caused to the individual without treatment.
(iii) It is suitable for the individual concerned.

It is possible that aversion therapy is not simple conditioning: the response in aversion-escape treatment of homosexuals shows that response to the slides does not parallel conditioning to an associated green triangle or red circle.[4] No anxiety was manifest after treatment to the male pictures, merely a decrease in general sex interest: backward conditioning also produced similar results, contrary to Pavlovian experimentation. These results may be explained on the basis of mere inhibition of the neural mechanisms of homosexuality arising from an abnormal focus rather than Pavlov's conflict between excitatory and inhibitory processes.

Social Implications

What are the chances of behavioural techniques being applied to society as a whole by some future government? Little I feel, because

(i) Of the difficulty of centralising all behavioural education and the time taken to apply the procedures to a whole new generation.
(ii) The difficulty of applying behavioural techniques in an unwilling population. We have seen that behaviour therapy only really works when the individuals wish to be treated.
(iii) The history of utopian and anti-utopian literature (Plato's Republic, Moore's Utopia, Samuel Butler's Erewhon, Yevgeny Zamyatin's We, Huxley's Brave New World, Orwell's 1984, Morris' News from Nowhere) has shown that without constant control, man reverts to his "type". Each society exaggerates certain characteristics, in particular docility and social conformity applying them extensively. Individuals of a different constitution in particular will react against these controls. A more plausable and serious threat of excessive social control comes from the possibilities of genetic engineering. Man's wide assortment of genetic material is his guarantee against the excessive use of behavioural techniques.

A more serious consideration is whether the more successful controls now available will penalise individuals within our society. (These criticisms really apply to the whole of psychiatry but have been particularly levelled against behaviour therapy, presumably because it is more successful. Gerald Leach in his recent book "The Biocrats" notes that we approve of amateur attempts at behaviour control such as marriage guidance but not scientific control.) How humane is it to train our psychotic patients to adapt to our mental hospitals instead of expressing symptoms with a possibly "legitimate" basis? We are now beginning to find out what our mental patients feel about their environment and to take their views as more valid than their symptoms.[6] We must be convinced that, for instance, self-injury is always harmful and that it may not be the start of a changed attitude leading toward recovery. Should we help people adjust to an unsatisfactory background, whether it be a modern factory, a mental hospital or a modern corporation.[7] Should, for example, behavioural techniques be used to condition salesmen to higher productivity?[8] Biologists, unlike physicists have always been aware of the possibility of misuse of their science.

Psychotherapists have always used their theories and methods on themselves—to determine their attitudes to therapy, their role, values and rewards. Perhaps behaviour therapists should follow suit. What is the personality of the behaviourist as opposed to the psychotherapist? Is he averse to introspection? Does he manifest a punitive tendency? Is he more conservative? Does he prefer tangible and concrete constructs? Whatever the answer to these questions, it does not alter the validity of behaviour therapy but may provide some interesting answers. What is the effect of treatment on the therapist? Clearly success would be rewarding and confirm him in his approach. In aversion therapy does the administration of punishment lead to an association of deviancy and vindictive feelings towards the patient? Does experimental and clinical success make him correlate it with his punishing role? Maybe we should make the administration of the aversive stimulus as mechanical as possible.

In Samuel Butler's "Erewhon" those considered ill in our society, are punished: those we term criminal are treated medically. One of Butler's more stimulating chapters is the account of a trial for tuberculosis, ending in the judge's summing up, an excellent parody of own concepts of freedom of action in the face of overwhelming evidence of psychic determinism and environmental factors. In the hundred years since Butler's book, it has become common for psychiatrists to offer in court evidence of mitigating circumstances, decreasing the responsibility of the particular individual for a particular action. In our everyday life, we manage to avoid rigid distinctions of freedom of will and determinism, but the evidence of behavioural methods of changing action or behaviour may lead to future forensic complexities.

Behaviour therapy has been criticised as inhuman and reducing men to machines. If we accept the behavioural critiques of psychotherapy, then this must apply to the whole of psychiatry as it uses the same mechanisms, though less effectively. Possibly the public are most anxious about the use of aversion therapy and operant techniques with hospitalised psychotics. A recent govenment enquiry in the use of the latter (*The Times*, February 22nd, 1973) raised doubts about the validity of pursuing a rigorous approach. Whether psychiatrists consider the report fair or not, it clearly raises the issue of the responsibility of therapists to the public opinion of the time.

CONCLUSIONS AND PROSPECTS

In spite of the criticisms and problems raised, we have seen that behaviour therapy has proved of value in treating a variety of behavioural anomalies. It appears to be most successful in the simpler neuroses, particularly phobias and obsessional thoughts, less so in the case of more diffuse neuroses and antisocial behaviour. It will be seen whether the techniques can be modified to extend to these, but we have seen that environmental and social factors are important in the case of delinquency and a low level of conditionability in psychopaths.

Although largely grown up in opposition to the major psychotherapeutic theories, behavioural methods now recognise the importance of central processes and the social environment. They will, I think, become increasingly incorporated in general and indeed psychodynamic theory, although still maintaining a separate identity by emphasis on experimentation, learning theory and modification of symptoms in disturbed behaviour. It will be interesting to see whether they will provide theories for the origin of the psychoses or continue to rely on medical models.

* * *

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TEACHING COMMITTEE REPORT

By GERARD BULGER

Rote, our notorious monthly rag has been temporarily written off. Our original aim was that it should be a mine of information on all the teaching activities of the hospital as well as a forum for discussion between all those involved. We failed. Once *Rote* was labelled a left wing rag few members of staff or students would have been bothered to write for it and improve its standards. There is a place at Bart's for an easily produced and entertaining magazine so *Rote* will survive but in a different form. I am not sure whether *Rote* created a "communications gap" between students and staff or whether it simply exposed a gap that had always been there.

Rote has brought to a head an important question: Is the existence of a STUDENTS' Union Teaching Committee itself divisive? Should we not be thinking in terms of forming a student-staff education group? Primrose Watkins has argued along these lines in these pages before. Our experience with *Rote* shows that while students can influence members of staff there is little opportunity for staff to influence the Teaching Committee. Only three members of staff have told us exactly what they thought.

End of Firm Assessment

A scheme grading students at the end of each firm 5, 4, 3, 2, 1, according to attendance, ability and personal relationships has just been introduced. The results of this grading do not go towards the final M.B. B.S. mark but count in determining the allocation of house jobs. An open meeting of the teaching committee considered this and found it to be an unsatisfactory form of assessment. A grading system based on a clinical test and viva would be much more accurate and it would be more useful to the student. The meeting was split 50-50 as to the worth of Multiple Choice Papers at the end of each firm. We hope that the grading system will be replaced. As it happens Guys Hospital uses a grading system to allocate house jobs and this is not popular. Apart from anything else the students tend to collect identical grades.

More Living In

It has been expressed by students and staff that there is not enough living in during the course. The Teaching Committee is canvassing around to see just how much living in students think they need. Indeed Bart's seems to rank very poorly when compared to other medical schools. Bart's is extraordinary in that there is no living in during the first year clinical. We must tread carefully as I can here students talking of too much living in and complaining of slave labour. Living in would help students feel "involved".

Preclinical Curriculum

The saga goes on. It is apparent that a real change in the curriculum is a long way off. Our plea that the course should be clearly defined has gone unheeded. If the course cannot be defined then the allocation of time between each department is quite arbitrary. We have therefore suggested a remarkably conservative time table to last one year. Our primary concern now is to prevent the new subjects simply adding to the students' workload. Meanwhile we hope new people will be involved in drawing up new integrated curriculum based on the objectives of the clinical course.

Defining the Content of the Clinical Courses

So far the Surgeons and the Paediatricians have set up working parties to define the objectives of the courses. It is too early to comment on their reports other than to say that they are very encouraging. The surgeons seem alarmingly eager to tighten up on the way the students achieve these objectives.

House Jobs

A working party of the Teaching Committee has been set up to consider this matter in detail. It is not a witch hunt; the idea is to come up with some constructive ideas.

Primary Health Care

Progress has been slow and so far we have not taken up Miss Jones's (Chief Nursing Officer) interest in improving student/nurse co-operation to this end. Hopefully we will have plenty to write about this next time.

A.S.M.E.

The Association for the Study of Medical Education had a conference in December on Shortening The Curriculum. A.S.M.E. is made up of interested medical teachers. Its members are "radical" in the medical world as they consider that medical education requires study. All the old ideas came up like the need to define the course in terms of objectives and the need to involve new people in designing new curricula. Bart's Clinical curriculum compares very favourably with the "new" curricula shown off at the conference. Indeed we have considerable flexibility and our electives are excellent and more varied than many other hospitals. One school however, has an elective where students can work in a factory or they can work with a social worker for a month. Has anybody asked to do that at Bart's?

An Apology

I wish to make it clear that no member of the Teaching Committee will breach the confidence of any Bart's Committee and I wish to apologise in these pages for the unfortunate comments I made in December.

Who Make Up the Teaching Committee?

A list of all those involved and their jobs has gone up on the main notice boards and should answer this question.

ON BEAUTY AND DISABLEMENT

By JAMES ASPINALL

The realisation that one is to suffer a permanent or progressive disablement may drop one into a dark well of loneliness, despair and dejection. It is an uncommunicable outsideness, a sad aloneness and an exasperating incompetence and frustration. Soon, however, acceptance of it sets up a less dejected loneliness. "The mind will banquet though the body pine," wrote Shakespeare. I had beautiful memories and an alive imagination, and mental masturbations are often more thrillingly complete than actual experiences.

My physico-nervous mechanism had, as they do, let me down, leaving my interests, values and desires intact. But suns explode, so what? Let dust go to dust, I remained my essential but mysterious self. One adjusts to Life's lonely discontent. The tragedy of a disablement is the same as that of growing old; one remains healthy and young in spirit. I have frequently felt an alien in this world of fraudulent let-downs and disappointments, a trespasser in disillusioning mortality where all trespassers are prosecuted and given a life sentence. The promise of life never fulfilled itself, salvation never happened. And what, after all, do one's moral and aesthetic sensibilities and intelligence have in common with the unkind harshness of life and the cold indifference of this earthly environment? Born in the same chance hit-or-miss way as that of tapeworms, we try to pass our time away somehow, with much of our moral and aesthetic faculties wasted and useless. In our reaching out for universal and eternal love, beauty and goodness, where does one find understanding and sympathy amid the impotent and mindless sun, moon and stars? Why unhappiness about an existence of being which should be a joy of being?

Although loneliness and despair can become a tranquil balm, my very protesting and disapproval indicate that I do not fit in with this schemeless chaos of things. I am not an unfeeling and unresenting stone, raindrop or speck of stardust. Whether grass protests and suffers its tooth-torn fate in silent helplessness, it can offer no resistance to being ploughed into the earth along with the innocent and writhing worm. So how comes it that I protest on behalf of the grass and the worm? I do not want to go the way of all flesh, though my flesh is already on its way. I do not want to be a participant in Nature's harsh waste and bloodiness. Though now cornered and resigned, I would go the way of gods—into Paradise.

* * *

James Aspinall is a Bart's patient suffering from Syringomyelia. His disease has had a progressive onset, and he has now lost the use of both arms and legs. He has, however, been able to commit some of his feelings about disablement to paper, both by typing with one hand and, later, by dictation. He has been kind enough to allow us to print one of his essays in the *Journal*.—B.D.S.

In the posing of these questions lies their answers, for Thought, like Awareness and Will, are the very essence of our being. They are of the I who am aware of my being, my flesh and the sun. The erasion of the sunset passing away into darkness has not been the erasion of its beauty from my remembered experience of it. And what can the sense behind the senses be other than a lasting sensibility? The senses are themselves mute and neutral; the eye as efficiently as a camera lens looks at a flower as it does at a stinking corpse, but it does not "see". It is the inner self which sifts the good and beautiful from the mass of data fed to one by the indifferent senses. And when the senses fail without loss to themselves, memory and imagination provide joys-by-proxy. It is I who remember and think of other days, not the day itself nor my pained and caressed flesh. I reach out from the disabled now while the flesh is confined within its skin as the day is confined within its dayness, remembering no yesterdays nor thinking of tomorrows. If life is a tale told by an idiot, then I am in the idiot's repertoire of multi-told tales—or the unenlightened idiot. I am aware with infinite awareness, eternal in eternity; the "I am" can never become "I was" any more than it can ever be "I will be".

Considering the precarious trifles and the tremendous odds of chance and accidents which go in the determining of our biological being, and how fragile and uncertain that life is with the fungi of decay born with it, one may wonder about the merit or the importance we attach to life's confounding impotence. Apart from broad speculations about genes and the prolific waste of sperms, the wonder is that we are alive at all. But, since we are alive and aware of it, it is impossible to grasp any idea of not being, even despite knowledge of death. It matters little whether life is based on some self-arrived-at "cogito ergo sum", for the certainty is that I am even if I think the outside of otherness or see it through a glass darkly, I am, here, alone, aware, and aware of being. I feel to be more than a chance bubble blown only to burst in the frothy cuckoo-spit of a capricious and long-winded froghopper. The essential I feels eternal with unformed and unclarified faith in being and hope exists unspoken in the tranquil sadness and aloneness of impotence and frustration.

* * *

Being disabled and unable to get out and about brings with it, with time, a leisurely introspective loneliness. It becomes, in the material-practical rat-race sense, a divine uselessness, as useless as God is to power politics and saluting bomb-aiming. Disablement, like beauty, is, in itself, practically and economically useless. Beauty arouses awe, disablement pity and fear.

Self-consciousness is part of all of us; we all like to be "nice to know". The disabled, like the odd and the beautiful, arouse curiosity and attention from others. Both the disabled and the beautiful woman develop a sensitive self-consciousness. Beautiful women and the handicapped are always stared at or given a contemplative look, to the pleasure of the woman and to the embarrassment of the cripple. Both may have an uneasy dissatisfaction that they are not living fully. The beautiful woman may feel that her transient beauty is being wasted, that it should arouse more satisfying reverence and bring her more delight in being beautiful. She sadly feels that her beauty is a pearl cast before swine, and she does not know quite what to do with it except show it. The disabled sadly feels his incompetence and limitations, his sorrowful unlovableness. He desires and needs more than sympathy, and reflects that, instead of inspiring love, he is a "pain in the neck" disturbing people's peace and complacency. Neither can lose themselves easily in a crowd.

The world as it is seems unworthy of the beautiful and is often indifferent; the aesthetic and moral values of the handicapped makes his deformity an unjust insult to his intelligence. The harsh world is an affront to the beautiful conscious of beauty, and a disablement is an affront to the aesthetic will and spirit of the disabled. She fears the passing away of her beauty unenjoyed fully, and is sad in not getting from life all that her beauty should possess. The disabled revolts against such an insult of crippledness. Beauty often leaves lovers impotent, and all they can do is stand and stare; crippledness does not arouse goose-flesh of erotic desires. Beauty and unlovableness are two incommunicable extremes in the human soul. Both are disturbing, creating in the hearts of both unanswered questions and unresolved seekings. So both the beautiful woman and the cripple are often sad individuals, lonely and introspective. The world fails them, and they may withdraw into their aloneness. Both dream of a fuller and a more satisfactory paradise. Both are misfits, if not outcasts, in this rat-race world.

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BOOK REVIEWS

MEDICINE AND . . .?
Medicine and Society by Henry Miller (O.U.P. 80p)
Medicine and Man by Noel Poynter (Pelican 40p)

It must by now be apparent, even to the most die-hard professor of Ancient Anatomy or Galenic Physiology, that a purely scientific training is no longer sufficient for the doctor of the late 20th century. Despite rearguard actions in defence of cherished little empires (professorial status being measured in terms of the number of hours allotted, in the curriculum, to the given subject) Second M.B. is soon to be a nightmare of the past, gone the way of "leeching", sulphur-and-brimstone, thalidomide, and other horrors of medical history. The tyranny of an artificially divided course designed to produce speed-writing parrots has been deposed.

For this old type of training was fine when dealing with students who inevitably did Classics (or at least arts subjects) at school and maybe university before going on to do medicine. Thus First M.B. was the rule rather than the exception and students were generally well-versed in some non-scientific subjects. Furthermore there were only two real departments, and they taught you: —

(a) The structure of the human body, or Anatomy; and (b) How the body works, or Physiology.

Since there was nothing else to learn you learnt those two in considerable detail, partly to grasp the basics of "Scientific Method", partly to help you understand the more obvious clinical signs, partly to have lots of long words at your command in cases you couldn't do anything about. In fact there was a time when it was normal practice to take Primary F.R.C.S. immediately after 2nd M.B. so as to avoid learning the same stuff twice. Now, however, we have gone beyond the basic forms of assessment when examining a patient; not only can we measure Body Weight and Blood Pressure (crucial as they are), we can also get a very accurate picture of electrolyte balance or enzyme levels. Thus we need to know about events at the cellular level. We also need to know how to communicate our knowledge to people of different backgrounds; how to assess the part played by psychological factors in the actiology of many conditions; how to keep in touch with modern methods of treatment while sitting in the middle of a phenomenal "knowledge explosion". Muscle "insertions" are of little help in this.

Fortunately the old methods are now being seen for what they are by many of those involved in the teaching of medicine. The immediate post-war years obscured matters by introducing many "mature" students who had been delayed by military service from completing their education. For them a course of facts rather than ideas was clearly most necessary and they were not encumbered with the need to grow up while simultaneously trying to learn a massive series of poorly related lecture-notes. But this now has got to change and in line with this new attitude many more books are appearing, concerned with relationships between Medicine and the "outer world". Some are very specialised; mostly they are very readable in that they tell of the non-technical side of medical practice. Since it is quite obvious that doctors, whether they like it or not, have already assumed the role of the priest in modern society, it seems only logical that they should be aware of their position and prepared to explore it in all its aspects.

"Medicine and Society", by Henry Miller, Vice-Chancellor of Newcastle University, is a 90-page pamphlet that attempts to deal with some of these paramedical problems arising today. At nearly 1p per page it is rather costly and it is also somewhat unbalanced. For half of its inconsiderable length is devoted to "Medical Logistics and Priorities", while the "most important dilemma in the world today"—Modern Medicine and the Third World—has less than 4 pages allotted to it. Nevertheless much of the writing is incisively analytical and often boldly unorthodox. In a brilliant section entitled "Drug Problems" he savages the standard attitudes on the use of analgesics and the non-medical use of drugs. He points out the absurdity of prosecuting annually (and thus glamourising) some 7,000 cannabis users, in a society smoking 350 million cigarettes a day (the cause of at least 40,000 deaths a year) and where some 350,000 chronic alcoholics are rapidly increasing their numbers. Since the "pot to hard drugs" connection is far less substantial than either of these monsters he advocates legalisation of cannabis forthwith.

In his main chapter, "Medical Logistics and Priorities", he castigates the poor handling of personnel within the N.H.S., the appalling record of medical education in this country (with 2 new Medical Schools built this century!), and the anomaly of the Salmon Report on Nursing being headed by "a distinguished businessman from the world of mass catering". As a critical analysis of the present N.H.S. situation his pamphlet is especially suited to the student (nurse or doctor or whatever) who is about to start work in such an environment.

A more historical and wider ranging approach is taken by Noel Poynter in "Medicine and Man", but though lucidly written it is much less forceful. Thus while analysing many of the problems of modern medicine, particularly in terms of their historical roots, he rarely strays beyond the "accepted" in postulating possible solutions. True, he does deliver a timely swipe at the pseudo-religiosity of those who manage to oppose both euthanasia AND vivisection; for it is only the fruits of the latter form of research that have produced our ability to prolong life beyond the once immutable laws of nature. Logically therefore anti-vivisection = pro-euthanasia. In addition there is a short but well-chosen bibliography and many a reference to the history behind present situations; both should stimulate the reader to plumb further into the fascinating depths

of the medicine of olden times. Sadly few worthwhile books have as yet appeared in this field, most of them being of the "and then" variety, listing in chronological order the technical changes and "Big Names" concerned in a given area of study. In this respect Poynter is refreshingly un-dry, and he may well point the way to a new approach to "The History of Medicine", involving the subject in the social, economic, and religious factors of the time.

Primarily then, what these two books really show is that medicine is not just another branch of science, nor is it a special "art". Rather it is the most central of all disciplines in that it bridges the so-called culture gap between arts and sciences. It uses scientific method to deal with people's problems; it demands both academic and human skills; its practitioners need to be both painstaking and imaginative. To misquote Dr. Johnson, "He who is bored with medicine is bored with life."

T.T.

BRITISH GENERAL PRACTICE by D. T. C. Barlow. Published by H. K. Lewis & Co., London. Price £2.25.

This is a medium-sized book, easy to read, and abounding in National Health Service practicalities. The style is authoritarian, "tell and sell", whereas many would say there is a need to pass beyond this to Socratic, heuristic and counselling styles; one suspects in fact that the author does practise counselling but he holds back from expanding on this. Essentially it is the teaching which the author's trainee assistant would receive, clearly and carefully gathered together, reflecting a successful general practice in rural or urban areas of the West Country. However, the title is misleading, for a particular type of general practice is described rather than "British" General Practice as a whole.

The account is that of a doctor who stresses the human against the machine, the personal against the practically efficient; wisdom, with knowledge always. He deals with only the minimum of basic "clinical" teaching, and scarcely a single drug is named, which is very commendable. But perhaps the baby has gone out with the bathwater, for he does not study the use of the drug "Doctor", though one is conscious all the time how important a part of his practice it is. Areas where General Practice has peculiar problems receive separate chapters—commendably so—but with some 15 per cent of British G.P.'s working from the 533 British Health Centres and the percentage increasing, perhaps the 77 lines on these Centres is not enough. Also the Charter for General Practitioners, which is particularly British, is left out, and the repeat prescriptions situation, involving at least 25 per cent of the patients of any practice, is not considered. Likewise the numerous difficulties present in the inner city areas, where most G.P.'s work, are carefully left alone. Possibly the enormously thorough and very valuable "The Future of General Practitioners", published by a Working Party of the Royal College of General Practitioners, has come too late for the author to modify his individual ideas in the light of its more basic approach.

On the positive side this book does fill a certain blank, although several other publications (e.g., Craddock's "Introduction to General Practice", Vincent's "Approach to General Practice") are also available and of value in related fields. The index is highly condensed and efficient, but no bibliography is given nor references named, which helps the reading along. The writer seems to be an orthodox and traditional G.P. seeking to come to terms with modern developments, yet convinced that his approach is adaptable to the latter half of the 20th century. He does not consider at all the idea of some alternative type of G.P., for example the "In-Between" G.P. who lies halfway between the traditional G.P. and the psychiatrist. Finally he seems to under-stress the importance of successful management of minor procedures—but one suspects he practises it!

A. L. HODGSON.

BASIC SURGICAL TECHNIQUES. R. M. Kirk. Churchill Livingston, Edinburgh. Price £1.50.

In the preface to this book the author tells us that his book is intended for physicians, dentists, veterinarians and experimentalists. Whilst the opening chapter gives sound and practical advice on the ideal approach to surgery, the second chapter explains how to hold a scalpel and use artery forceps. Surely dentists and vets know about these simple techniques, but undergraduates don't, and they, curiously, are not mentioned in the preface.

The style of some sections of the book is short and didactic and all the line drawings are clear and easily understood. However some of the prose is lengthy, for instance the section on tieing knots is simpler to understand from the drawings alone. Furthermore the text is occasionally confusing as at times the reader is the assistant, and at others, the operator.

On the other hand, the book contains much information of use to the medical student and at £1.50 is good value for money. On those grounds it could be recommended.

B. J. BRITTON.
Lecturer in Surgery.

INTENSIVE CARE. Ed. G. Gerson. Heinemann. Price £3.00.

This book succeeds in its stated aim of providing a practical and interesting basic guide to the management of Intensive Care Unit Patients. For easier reference, each chapter begins with a list of the topics included, and the whole volume is well indexed. Most of the diagrams and tables complement the text satisfactorily, and in the useful section on Poisoning a handy sub-index of particular toxins appears. References and suggestions for further reading are kept to a reasonable minimum, and those I checked are relevant, accessible and repay investigation.

Succinct yet surprisingly comprehensive résumés of the various disease processes are followed by modern, logical plans for treatment, together with dosages, recipe régimes and points of technique.

The book is attractively produced, moderately priced and easy to read: most junior doctors will find it a worthwhile investment, and every Intensive Care Unit should have a copy on its shelves.

IAN HINE.

PRINCIPLES OF BONE X-RAY DIAGNOSIS. Third Edition. George Simon. Butterworths, 1973. Price £9.80.

The first edition of this book was published in 1960 and although much of the original text has been retained, the work has been updated, and numerous new illustrations have been added. Many of these are full size, or even enlarged, to present adequate pictures of the conditions indicated, and the 343 figures are well reproduced.

This book has maintained its high standard through three editions, and is invaluable not only to radiologists, but to surgeons in general. Dr. Simon is to be congratulated on the production of yet another classic within the field of diagnostic radiology.

AN AID TO CLINICAL SURGERY, by Peter R. Scott. Published by Churchill Livingstone 1973. Price £4.

Judging by the effort to produce a paper for publication in a journal, the writing of a textbook must be a monumental task. Thus when faced with a bad book the temptation is to dismiss it as not worth a review rather than cause offence to an author who will have worked hard to produce his book. On the other hand it is necessary in these days of numerous attractively produced synopses, aids and shorter textbooks to issue some guidance to potential buyers.

"An Aid to Clinical Surgery" does not cover its topic completely, and much of the information it contains is out of line with contemporary thought and presented in an illogical fashion. Thus the chapters on "swellings in the neck" and "the thyroid" are separated by a chapter on "carcinoma of the lip and tongue". This lack of a rational approach, evident throughout the book is exemplified by the chapter on swellings in the neck which commences with a completely unclassified list of 14 lateral swellings of the neck; only 6 of these swellings are discussed, and then in a completely different order from which they were listed.

Many conditions normally dealt with in surgical textbooks are not covered, for example there is nothing on fluid balance, shock or infection. Others are mentioned but without definition. Vague statements such as "the patient is maintained in adequate fluid and electrolyte balance" occur without discussion and contrast with the detailed description of how to perform a craniotomy.

References at the end of each chapter are spasmodic: none are given after the chapters on acute pancreatitis and the gall bladder whilst 14 are given after the chapter on the thyroid.

Much of the information is out of line with modern thought, for example, in the chapter on head injuries the now discarded terms "conscious, semi-conscious and unconscious" are replaced with the equally meaningless terms "clear consciousness, rousable coma and deep coma". Similar examples could be quoted from nearly every chapter.

This textbook cannot be recommended for use by undergraduate medical students.

M. H. IRVING.

CLINICAL RESEARCH FOR ALL, by Cyril Maxwell. Cambridge Medical Publications Ltd., £2.85.

The author of this "thin book" considers that all medical students should be expected to read it at some time before their finals. He does, however, admit that there are very many "thin books", and some less industrious students might overlook this particular one. He recommends, however, that should this happen the oversight should be remedied as early as possible in in one's postgraduate career. Although one cannot disagree with his view that an understanding of the principles of clinical research make a solid foundation for future practice, it is arguable whether these principles can be learnt in isolation from research itself. For example, the best way of learning how to perform a clinical trial is to be involved personally in one. This is the time to read about the pitfalls which can trap the unwary. This, perhaps, should be the purpose of the elective period during the clinical course.

Nevertheless, the book provides a useful simple introduction to research methodology for the doctor who wishes to try his hand. It outlines clinical trial design, measurement of clinical variables, data handling and (very) simple statistics. In addition, advice is given to the beginner on where to find the information which he is seeking, how to look up references, what to look for in a research paper and how to store abstracted information in a filing system. This good advice will be invaluable to a postgraduate who proposes to start on an academic career.

One criticism of the book is the author's verbosity, which this reviewer found exasperating. A more succinct style could have shortened the book to no more than half its length, with no loss of useful information. However, the reader who enjoys the style will find in this book a painless start to a career as a clinical investigator.

ALAN RICHENS.

MONOGRAPHS ON ONCOLOGY: THE CHEST, by T. Deeley. Published by Butterworths, £2.25.

The monograph is the first of a new series on clinical problems in malignant disease. Each monograph will deal with malignant disease at one site and this book has been written by one author who has a great deal of experience as a radiotherapist in treating carcinoma of the bronchus. Most of the monograph involves this disease, but there are short chapters on mediastinal tumours, mesotheliomas and metastatic disease in the lungs. Although the latter are, in no way, comprehensive, the several chapters on the management of patients with carcinoma of the bronchus are very good and are likely to be very helpful to the physician dealing with such patients. The surgical and radiotherapeutic approach is dealt within detail, but I was a little disappointed that hardly a mention was made of chemotherapy. Although chemotherapy is disappointing in cancer of the bronchus, a great deal of work is being done on this topic, and undoubtedly, this form of treatment will play a greater part in the future.

I think this monograph provides a useful appreciation of the current approach to the treatment of bronchogenic carcinoma and should be of value to physicians treating these patients or reading for higher examinations.

D. CROWTHER.

LAW OF DOCTOR AND PATIENT by S. R. Speller. Published by H. K. Lewis. Price £5.

In his preface to this slim and expensive volume Mr. Speller asks the pertinent question, "To whom is the book addressed?" and answers it thus: "Being a book on law, I hope that it may be of some service to those whose responsibility it may be to advise doctors and others concerning matters dealt with on its pages. I hope too that it may be of interest to doctors and dentists themselves . . . that it may help them to avoid some pitfalls . . . and perhaps minimise possible ill-consequences for the practitioner".

Without in any way decrying Mr. Speller's laudable hopes I would suggest they are vain. Seriously to suppose that a legal practitioner would turn to a book attempting to cover such a subject in 193 pages, citing only 65 cases (including the delightfully named Razzel v. Snowball) cannot really be accepted. A solicitor or barrister would doubtless consult the standard works or use the Law Reports Index. As for the medical practitioner, I cannot see him desperately clutching a well-thumbed "Speller" to his bosom so as to consult it before advising his patient. Nor will it be of interest to him, for it is a dry book, setting out the bare bones of the law with a few statutes sandwiched verbatim in between.

In summary therefore I would say Mr. Speller has fallen between two stools: he is neither interesting enough to be read casually nor detailed enough to be consulted in depth. Furthermore his failure to cover disciplinary proceedings for misconduct by the G.M.C.'s Disciplinary Committee, while not being an omission of a strictly legal matter, seems a serious error. At £5 this book is a serious risk for the buyer.

W. G. HAWKESWORTH.

ACCIDENT SURGERY AND ORTHOPAEDICS FOR STUDENTS. J. R. Pearson and R. T. Austin. Lloyd-Luke (Medical Books) Ltd. Price £2.75.

This is a tabulated review of the major part of accident surgery and orthopaedics presented simply for students. It is quite comprehensive and the rare conditions and diseases receive mention. It is illustrated by rather inelegant but effective line drawings and is easy to read and follow. It is quite didactic in its approach and the views presented would seem to me to be acceptable to most orthopaedic surgeons in this country.

It takes the form of a fairly large, well presented, paperback, and while called a book for students would probably be too full for the undergraduate, though suitable for the orthopaedic house surgeon or for use in preparation for the final Fellowship examination. This is an orthodox simple text book which should appeal to the readers mentioned, but it does not seem to offer anything especially new or different from those text books already available.

D. CARO.

NURSING TEXTS IN BRIEF

The Principles and Practice of Surgery for Nurses and Allied Professions. Fifth Edition. D. F. Ellison Nash. Published by Arnold. Price £6.50.

This is the reference work of choice for nurses involved in the care and management of patients for surgery. The fifth edition has been fully reviewed by its author, and some chapters have been fully revised. Since this text was reviewed by this *Journal* in its fourth edition only a brief note on the amendments is needed here.

The major amendment to the book is the enlargement of Chapter 8, which deals with "Haemorrhage, Shock and Fluid Balance". This is an important point, since it is the nurse who largely cares for the patient in this respect. My only complaint is that there is some confusion of order in presenting the topics: for example, "Nutrition by Intravenous Infusion" is dealt with before the general chapter on "Infusion and Transfusion".

On the whole, an expensive but thoroughly dependable book.

Special Tests and their Meanings. D. M. D. Evans. Published by Faber. Price 95p.

By "Special Tests" the author of this useful little book appears to mean almost all the investigations carried out to augment the findings of the clinical examination. Also, at least as far as the Nervous System is concerned, the clinical tests themselves are also described. The style is note-like and rather terse, though generally quite adequate for the use to which such a book would be put.

Generally speaking, the normal values given are dependable, though there seems to be a tendency to give them too many places of decimals. The qualifying notes given with each test are extremely good, but one gets the impression (again) that there is too much dogma for practical purposes.

ROYAL HARRY by William Mayne. Published by Puffin. Price 25p.

I was at first reluctant to read "Royal Harry" as I thought it unlikely I would enjoy a book intended for children aged 8-10. But having started to read it I literally "couldn't put it down".

The story itself is rather fantastic, but the characters portrayed are quite realistic, and not at all stereotyped as in so many children's books. The three main characters are a 12-year-old girl, named Harriet, and her Mum and Dad. Contrary to many children's heroines Harriet is anything but all sweetness and light—quite a little horror at times in fact. It isn't in every children's book that you find the heroine kicking her father on the shin. Throughout the book, the relationships between the characters develop and show up as being neither wholly good or bad, but a credible mixture.

The story begins when Harriet receives a letter informing her that she has inherited a house and a mountain. On arrival at the house, the family discover that a "quasi-royal" title and rather mouldy crown are also part of the bargain. The mystery of how and why these things have come to Harriet and the obligations they carry gradually unfolds, but, as in all good stories, is not completely revealed until almost the last page.

The story is at once compulsive and humorous, e.g., when Harriet wishes to go outside and make a snowman just before breakfast, but her meaning is anything but clear to her Mother:

Harriet: " . . . can I borrow the fire shovel?"

Mum: "No. Use a knife and fork like a Christian."

Expressing a personal opinion I would say "Royal Harry" is suitable reading for children aged 8-80.

J.D.

INVITATION TO SOCIOLOGY: A HUMANISTIC PERSPECTIVE, by Peter L. Berger. Pelican, 25p.

If the title suggests an "Idiot's Guide to Sociology" in the same vein as a "Dialectical Materialism for Medical Students" or "Phenomenology for Brick-layers", then do not be deceived. This book is not a patronisingly simple account of sociological trends, although the author does not allow sociological jargon to confuse the issues with which he is concerned. Professor Berger surveys the contemporary scene in sociology from an enormous height, and his view is not altogether beautiful to behold. With acid irony, he castigates his fellow sociologists as well as the proponents of doctrinaire methodologies and ideologies. After taking a wry look at the motivations and personalities in sociological research, he turns his attention to sociology as a form of consciousness and examines the emphasis which sociology has somehow given to certain areas of society. He also examines the modes of coercion which human societies utilise to maintain their normative values, and skilfully debunks such notions as "maturity" and "self-realisation" as mere rationalisations of role-assignment. Why is it, Berger asks, that religion in the Western hemisphere is essentially a middle-class phenomenon? Can it really be coincidence that salvation has an economic bias?

The early part of the book presents a convincing and depressing deterministic view of society, although this is mitigated to a certain extent in later chapters by a shift of emphasis towards the social actor as a force of individualism. Thus man can, at least theoretically, influence the structure of the social milieu. This volume should be mandatory reading for anyone even thinking about a sociology course. (— dogmatic, no?!) Those who have already dabbled will appreciate the qualified cynicism of the author in analysing the field in which he works.

BRYAN SHEINMAN.

THE CENTURY OF RUSSELL

An Inquiry into Meaning and Truth, by Bertrand Russell. Published by Penguin University Books. Price £1.00.

Modern British Philosophy, edited by Bryan Magee. Published by Paladin. Price 75p.

British philosophy of this century has sprung very largely from the work of Moore in Ethics and of Russell in Logic in its first decade. The change was from the classical notion of a somewhat deified Philosophy concerned with the search for Truth, and altogether above the run of everyday things. Such philosophy was characterised by the constructive aims of German Idealism, and rooted in early Greek metaphysics. And the result of the change was a critical conception of philosophy.

So it was that in his classic introduction to philosophy, "The Problems of Philosophy", published in 1912, Russell used philosophical techniques to question the nature, appearance and even existence of matter. Though, being still at the boundary with more classical ideas, he prefaces his remarks by calling them constructive: his theme being roughly that philosophy is concerned with the world of abstracts or Universals. This is a view which he appeared to hold for several years, even though his conception of Mathematics was somewhat modified by his association with Wittgenstein. This association led to the formulation of Russell's position on philosophical logic, and was the early precursor of his work on truth and meaning.

Wittgenstein's "Tractatus" was itself the impetus behind the development of the Vienna Circle's Logical Positivism. And this method of philosophy was to influence both Karl Popper and A. J. Ayer. The latter was to publish in 1936 the first English book on Logical Positivism—"Language, Truth and Logic". And so it was that the philosophy of language was put into the forefront of British philosophy. Thus when Russell delivered the William James Lectures for 1940 at Harvard, these developments were fully in his mind, and the result, "An Inquiry into Meaning and Trtuh", was a competent survey of the contemporary state of those developments together with Russell's own views.

This book, originally published in 1940, and now produced by Penguin, is concerned with the constructs underlying the use of language. The links between perception and belief, and between belief and the expression of that belief, are examined primarily, one suspects, for their logic. And the thesis is one of synthesis: the work of Berkeley and Hume is added to that of the Logical Positivists. This thesis is then used to refute the views of many on language, including Wittgenstein and several "pure" Logical Positivists; to show the nature and existence of "Universals" in language; and that "belief in language" logically implies the existence of a metaphysical explanation of knowledge.

This is indeed the century of Russell as regards many aspects of philosophy, and one of the best short surveys of the philosophical developments of this century is "Modern British Philosophy", edited by Bryan Magee. In fact this book is a collection of conversations between Mr. Magee and several eminent contemporary philosophers, which were broadcast on radio in 1970-71. This book shows, in an easy and intelligent style, how much current thought really does owe to Russell, and how much it has changed since he investigated it. On the whole, this is a competent introduction to a fascinating area of thought.

T.D.

JOURNAL MATHEMATICAL PROBLEM No. 3 by R.T.J.

The brilliant consultant is two years older than Sister, who is twice as old as he was, when she was half as old as he was, when she was twice as old as he was, when she was half as old as he was, when he was half as old again as half her age now. How old is Sister now?

Solution next month.

Answer to last month's problem

Basil is going out with Clarissa. The full result reads as follows: Arnold went to Grammar School, lives at home, goes out with Dolores, and is doing Orthopaedics. Basil was educated privately, lives in a flat, is going out with Clarissa and is studying Gynaecology. Cedric went to Public School, lives in digs, is going out with Arabella, and is doing Obstetrics. Daryl went to Comprehensive school, lives in College Hall, is going out with Beatrice, and is doing Paediatrics.

ST. BARTHOLOMEW'S HOSPITAL
PRE-REGISTRATION HOUSE APPOINTMENTS
JULY, 1974

APPLICATIONS ARE INVITED FOR the following appointments:—

House Physicians to Dr. Hayward/Dr. Wykeham Balme	(two posts)
House Physicians to Dr. Black/Dr. Dawson	(two posts)
House Physicians to Dr. Oswald/Professor Hamilton Fairley	(two posts)
House Physicians to Dr. Gibb/Dr. Galton	(two posts)
House Physicians to Professor Scowen/Dr. Spencer	(two posts)
House Surgeons to Mr. Tuckwell/Mr. Birnstingl	(two posts)
House Surgeons to Mr. Ellison Nash/Mr. Griffiths	(two posts)
House Surgeons to Mr. Robinson/Mr. Shand	(two posts)
House Surgeons to Mr. Todd	(two posts)
House Surgeons to Professor Taylor/Mr. Irving	(two posts)
House Surgeon to the ENT Department	(one post)
House Surgeons to the Department of Orthopaedics	(three posts)

Regional Board Hospitals

CONNAUGHT	House Physician	(one post)
	House Surgeon	(one post)
CRAWLEY	House Physician	(one post)
	House Surgeon	(two posts)
HACKNEY	House Physician	(three posts)
	House Surgeon	(one post)
HAROLD WOOD	House Surgeon	(one post)
HEMEL HEMPSTEAD (St. Paul's Wing)	House Physician	(two posts)
METROPOLITAN	House Physician	(two posts)
	House Surgeon	(two posts)
NORTH MIDDLESEX	House Physician	(one post)
	House Surgeon	(one post)
ORPINGTON	House Surgeon	(one post)
PLYMOUTH	House Physician	(one post)
	House Surgeon	(one post)
PRINCE OF WALES'	House Physician	(two posts)
	House Surgeon	(two posts)
REDHILL	House Surgeon	(five posts)
ROYAL CORNWALL	House Physician	(one post)
ROYAL BERKSHIRE	House Surgeon	(four posts)
BATTLE	House Surgeon	(one post)
ST. LEONARD'S	House Physician	(three posts)
	House Surgeon	(three posts)
WHIPPS CROSS	House Physician	(three posts)
	House Surgeon	(two posts)
SOUTHEND	House Physician	(one post)
ROCHFORD	House Physician	(one post)

Details of the posts at Regional Board Hospitals are available in a folder in the Library, together with any additional information on the posts at Bart's. THIS FILE MUST NOT BE REMOVED FROM THE LIBRARY.

Application forms, which must be returned by the 24th April, 1974, are available from the rack outside the Medical College Library, or by post from the Sub-Dean's Office.

BART'S SPORTS

CROSS-COUNTRY

Despite unathletic festive binges, the rural explorers have continued with relentless success in the New Year. The third London League race proved a grand reunion of the squad, thirteen of whom prepared to brave the severe Blackheath elements, only Hugh Rogers changing his mind after the first gruelling lap. Happily, the gowned members of the team were not disqualified for their extra-human assistance on the south westerly sections of the course, and are to be commended on their respect for the formality of the event—although the bow ties, fortunately, did not betray the hospital colours. Tony Jones' duck-warbling tactics obviously helped nothing towards his 86th position. Bob Miller waded his way to 33rd place on his farewell performance, and we wish the children of Vancouver luck with his new appointment. Jim Deady now holds the rare and dubious honour of comprising the entire Bart's 3 team, lying expensively in 24th place in Division 2, whilst Bart's 2, rapidly emerging as the Cambridge comedians' contingent is now nervously nearing towards promotion in 8th place. No praise is sufficient for Bart's 1 who command the lead in Division 1, by an ever increasing margin.

Position	Name	Time
10	Bill Fulford	28–51
15	Steve Mann	29–50
18	Martin Reader	30–08
27	Bruce Campbell	30–54
33	Bob Miller	31–04
39	Dave Wainstead	31–44
52	Mike Lean	33 25
63	Mike Page	34–28
77	Dave Dosseter	37–55
82	Jan Maciolek	38–59
86	Tony Jones	39–21
92	Jim Deady	45–43
Also ran	Hugh Rogers	

The not-so-annual tour saw the Page disco-on-wheels in action round the West Country, with the Dan Tunstall-Pedoe Maxi a clear winner from Bart's to Dartmouth. The Brittania Naval College proved admirable hosts, and a tough course was arranged over their dreaded hills, well marked by saluting sailors. A resounding victory provided sufficient excuse for an extensive reconnaissance ashore in the evening.

1. Bill Fulford
3. Steve Mann
4. Bruce Campbell
5. Dave Wainstead
6. Martin Reader
10. Dan Tunstall-Pedoe
11. Mike Page

17 runners

Result: Bart's 86 points, B.R.N.C. 61 points
Conclusion: Bart's won easily

A second match at Sherborne school was won with the same success—five hospital hares home in the first six. This last sprint surely cannot be attributed to the knickerbocker and clotted cream break-races.

1.	Bill Fulford	25–40
3.	Steve Mann	
4.	Bruce Campbell	27–04
5.	Martin Reader	27–37
6.	Dave Wainstead	27–38
14.	Mike Page	29–52

23 runners

Result: Bart's 61 points, Sherborne 39 points
Conclusion: Bart's won very easily

An enjoyable and successful weekend—William Fulford must be congratulated on clearly winning both races, and the turd of the trip trophy.

DAVE WAINSTEAD.

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9 a.m. - 1 p.m. Saturdays

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

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Editorial

STOKING THE FIRES OF INDUSTRY

In a recent BBC Radio broadcast, Lord Stokes (Chairman of British-Leyland) suggested that academics should be obliged to leave their ivory towers and soil their hands in Industry. Almost without a pause he went on to say that students should abandon "subjects of no use to mankind . . . such as Sociology" and actually "make something". I am sure that it is obvious that such generalisations were only heat-of-the-moment responses and were not entirely heartfelt. At least I hope so, for I imagine little more abhorrent than a world cluttered with nothing but consumer bolt-on-goodies.

To extrapolate, however, are Lord Stokes' views applicable to the practice of Medicine? Or, more bluntly, has the recent emphasis on para-medical subjects in medical training any validity at the business end of medicine? These are relevant questions at a time when Sociology etc. are being introduced into the pre-clinical curriculum. Possibly one's answer depends on one's views of the role of Medicine in society. The business end of general medicine is the G.P., and in Lord Stokes' sense what he makes are a diagnosis and a recommendation of treatment. For this, it could be argued, he requires little more than sharp senses and a pocket reference book on differential diagnosis and indicated drug therapy. No need for theoretical background knowledge here: and thus no need for professional status and rates of pay.

The Service Industry which medical practice has become rests on more than parrot-like responses to clear-cut situations, however. That Medicine must now be regarded as a service and nothing more may be regretted by some, but it is of vital importance in satisfying the needs of society. The realisation of these needs in terms of the individual thus becomes important, and these needs rarely present as clear-cut symptoms. And this is the point of the "useless" subjects like Sociology and Psychology which involve understanding of the processes of individuals and society: which indicate the reasons for consulting the doctor as much as the signs and symptoms.

Lord Stokes' point then has some validity: industry should do and make that which it was designed to do and make. But to forget the need for theoretical knowledge of those "useless" subjects indicates a head-in-the-sand notion of the needs of the people as individuals. The falseness of that notion has only recently been learned by Medicine, one wonders when it will be learned by industry.

A LITTLE KNOWLEDGE

A recent conference on "The Voice of the Patient" at the King's Fund Centre in London was told of the results of surveys of patients' views of hospitals carried out in Manchester. Grievances listed included too much noise; unappetising food and bad toilet facilities; but top of the list was lack of information from the medical staff. The information which patients felt they needed concerned results of tests; their progress and treatment; the nature of treatment, especially surgery; and what to do on leaving hospital. At least one encouraging finding emerged: patients often welcomed medical students because these were a good source of much-needed information, and were less likely than doctors to assume that the patient knew all he wanted.

It is doubtful (and it is certainly doubted by many doctors) whether patients retain even that information which doctors do give to them, and there is often little time for a repeat performance by the doctor himself. However there is no excuse for increasing a patient's anxiety by not explaining his progress to him, and this is one function which could to a large extent be aided by the student. The functions of such an exercise would be several: the student would be encouraged to learn as much as possible about the patient's treatment and to liaise with the house officer; the doctor's load would be slightly relieved, although he would necessarily retain final responsibility; and the patient would perhaps gain knowledge, reassurance, a little friendship and relief from boredom. The dangers of treatment may be great, but there is no reason to allow a lack of knowledge to remain a problem.

"VALE".

The sharp-eyed amongst our readers will have noticed a recent change in the column marked "Editors". This is due to the summoning of Allan House and Michael Johnson to greater things than are called for by the simple work of editing this Journal. Our thanks for all their help as Editors, and as guides to their successors, and our best wishes for their future trials.

ANNOUNCEMENTS

Deaths

DALY—On February 8th, 1974, Prof. Ivan de Burgh Daly, C.B.E., M.A., M.D., F.R.C.P., F.R.S. Qualified 1918.

HEALD—On February 9th, 1974, Charles Brehmer Heald, C.B.E., M.D., F.R.C.P. Qualified 1909.

LEECH—On March 10th, 1974, Paul Keith Leech. Student.

LEHMANN—On October 3rd, 1973, Dr. Harold Paul Lehmann, M.R.C.S., L.R.C.P. Qualified 1926.

MATHEW—On January 17th, 1974, Geoffrey Gartside Mathew, M.B.B.S., D.I.H. Qualified 1945.

Appointment

Dr. J. A. CHILD has been appointed Consultant Clinical Haematologist at Leeds General Infirmary. This is a joint post between the University Department of Medicine and the Department of Haematology to commence on October 1st, 1974.

Knott Surgical Prize 1973

DAVID COURT and DAVID MOODY-JONES have been awarded jointly the Knott Surgical Prize for 1973.

Correction

Dr. Henry Archer wishes to point out that he spent most of his career at the Department of Chemical Pathology at this Hospital, and only two years at the Imperial Cancer Research Fund, not as we reported in the February *Journal*.

PERSONAL NOTICE

Mrs. Lisa Baker would like to thank all her friends at St. Bartholomew's for their kindness, interest and concern during her recent stay in Lawrence Ward.

She is progressing very favourably.

NOTICES

Any one interested in voluntary research into the medical problems of tribal peoples contact—SURVIVAL INTERNATIONAL immediately: 36 Craven Street, London WC2N 5NG. Telephone 01-839 3267.

TRAINEE REQUIRED for Bart's graduate with two partners—London, S.W.20—full secretarial and receptionist staff, appointments system. District nurse and health visitor attached. Full access to X-Rays and Pathology. Trainee encouraged to attend appropriate courses and meetings. Possible to arrange attendance at various Out-Patient Departments. Obstetrics undertaken. APPLY: Dr. F. I. Macadam, 20 Pepys Road, London SW20 8PF.

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LETTERS

51 Sloane Street,
London, SW1X 9SW.
01-235 5151.
February 11th, 1974.

Dear Editor,

Driving in London is difficult enough at the best of times. When one's daily round of visits to patients is frustrated further by crocodiles of students ostensibly demonstrating for much deserved grant increases, but nevertheless waving somewhat "leftish" banners, one cannot but help for a moment sympathising with the predictable comment of the watching pensioner, "Why don't they get down to a hard day's work like everybody else?" Against this background it was a delightful surprise to find the unselfish kindness of the wine committee students who gave up their free time in order to help us enjoy our 15th Decennial club meeting in the Great Hall on Friday, February 8th, of which I hope you will carry a report in this edition of the journal. When I offered to pay for their services I was politely but firmly told they were quite happy to organise a bar for us in the Great Hall as a service to old students, and that it was expressly against the rules and concepts of the wine committee that any of them should receive any financial benefit. They certainly made our evening possible and enjoyable and I am sure that many people did not realise that this group of students are giving up a great deal of leisure time for no reward other than enjoyment of giving a necessary service to their fellow students.

Yours sincerely,
JOHN IND.

A recent edition of Sennet, the U.L.U. Newspaper, reported that the Students' Union at Bart's was solidly behind the N.U.S. Grants Campaign.—Ed.

March 5th, 1974.

Dear Sir,

I fail to see any logic in Dr. J. Ind's letter to the *Journal*: to compare acts of a large polyglot group on the one hand with those of a tiny self-selected society on the other can prove nothing except the existence of prejudice in the person making the comparison. The Wine Committee are free to do their charitable deeds, but it should be remembered that other students, of other views, are also free to peacefully make their point.

Perhaps Dr. Ind and his colleagues in their prosperous Chelsea practice should think about those who try to do the most for the pensioners to whom he refers. It is very doubtful whether these gentlemen have supported increases in pensions (which always mean tax increases), or whether they have actually gone out and helped pensioners in need of food, warmth and company. The fact is that several students have done so, as evidenced by the large numbers of students of many Colleges and political viewpoints in the Area Team Volunteer Groups set up by local authorities. There are very few doctors or Wine Committee members in these groups.

Yours faithfully,
TEIFION DAVIES.

4 Hamilton Road,
East Finchley,
London N.2.
February 5th, 1974.

Dear Sir,

I suspect that Bart's, being a conservative hospital, may not have many professional workers who read "The Guardian". In view of this, may I write of an article therein, entitled "Waves of Anxiety"?

We all know, and may have tried to use, the celebrated micro-wave ovens in the new-look canteen. Forgetting for a moment that these often do not actually work, perhaps radiologists would be interested to know that the British Standards Institute approves radiation levels in these ovens, 500 times higher than in the Soviet Union, and five times higher than even the United States—who have never been noted for their care. Laboratory experiments with animals have shown that levels as low as 10 milliwatts per square centimetre (very close to the B.S.I.'s standard) has affected testicular function.

Following symptoms of radiation sickness after the installation of a micro-wave oven, an unfortunate Wimpy Bar manager was informed that levels of 20 milliwatts were emerging from his oven. The battered Bart's ovens might therefore merit a closer look. Perhaps lead-aprons could be provided with the paper napkins . . . ?

May I conclude by requesting that the radiographers on duty in casualty, close their lead-lined door before taking X-rays? During nearly two years there, and many requests, I was always closing it, and during a recent visit, found them again at work, door ajar! Unfortunately, nearby is the children's casualty, where many small people and pregnant ladies abound.

Yours sincerely,
SUSAN EATON.

College Hall.

Dear Sir,

With regard to Mr. O'Malley's letter in your March issue, I am sure that most of the consultants at Bart's would be most willing to receive constructive criticism regarding the layout of their Outpatient Departments. However, their organisation compares favourably with the majority of other London hospitals, and the "workhouse" atmosphere that was once prevalent has now largely disappeared.

I doubt whether Mr. O'Malley would be in a suitable state of consciousness to comment on the organisation of an operating theatre, unless he was to visit one as a casual spectator.

I accept that there are many problems in the redesigning of any department, including dining rooms. However, queues one hundred feet long remain unacceptable, and the *Journal Architectural Award* for 1973 seems to have been presented with good reason.

Yours faithfully,
R. TREHARNE-JONES.

THE ACCIDENT FLYING SQUAD

By JOHN COLLINS
(Consultant in Accident and Emergency, Derbyshire Royal Infirmary)

It is accepted that the majority of patients who die within five minutes of an injury are usually beyond help. There is another group who will die within the next 30 minutes if nothing is done for them but some of these can survive if treatment is commenced early, particularly where urgent resuscitation is required. This may take the form of clearing and maintaining the airway, by intubation where necessary, or restoring the circulating volume. This is the main purpose of the flying squad.

The team should also be capable of dealing with any emergency, including any essential surgical procedures which may be required. It is accepted, however, that surgery should only be carried out when absolutely necessary and only the minimum essential done as quickly as possible. Obviously the proper place for surgery is in the ideal conditions of the operating theatre. Surgery can be carried out safely, however, in the flying squad situation providing the patient is already being adequately treated for shock.

History

The Derbyshire Royal Infirmary Accident Flying Squad was formed on March 1st, 1955.[1] The necessity for having such a team was emphasised by a train accident which occurred on January 23rd, 1955, at Sutton Coldfield, when 72 patients were injured and there were 12 killed. This train had passed through Derby and was subsequently derailed, and it was realised that this could have happened in the vicinity of the Derbyshire Royal Infirmary. Apart from this, in the area around Derby there are numerous large industrial concerns, mining and agricultural communities as well as important roads, railways and an airport. The population served by the Derbyshire Royal Infirmary is approximately half a million and therefore the possibility of a serious accident occurring is ever present. It may be necessary for seriously injured patients to travel fairly long distances to hospital and their survival depends upon early commencement of resuscitation. Patients who are trapped and seriously injured require urgent treatment at the scene until released, and even though the incident may be in the town quite near to the hospital the services of the team are essential if there is likely to be a delay in releasing the patient. With all these factors in mind it was thought worthwhile to form an accident flying squad. The Derby scheme not only deals with road accidents but also accidents which occur in industry or in the home.

Equipment

As there was no similar scheme to guide on the equipment required, a comprehensive list of equipment was prepared but after careful consideration of each item the list was pruned drastically. The listed equipment was then gathered together and resulted in a formidable heap. Less essential things were discarded and space was reduced by obtaining miniature instruments and compressed dressings where possible. The equipment is under constant review and where it is found that under certain circumstances special equipment may be necessary this is added and, of course, the equipment is continually being renewed and brought up to date. Simple apparatus has been considered the best because of the special requirements of transport and local conditions.

In order to reduce the amount of equipment it is divided into three categories: —

1 The essential things such as drugs, dressings, anaesthetic apparatus and surgical instruments are always taken.
2 Special splints such as Thomas's splints are not always taken but may be required and are always readily available to go.
3 Equipment which may be required if an accident of some magnitude is to be dealt with is also readily available but only rarely taken.

All equipment is kept in special boxes and hold-alls, each of which has its own list of contents, and each item has its place. The hold-alls and boxes are of convenient sizes in order that they may be easily carried even under difficult circumstances, and they can be packed into the boot of a motor car.

The equipment is regularly inspected and checked and the surgical instruments are sterilised at regular intervals or whenever they have been taken out on a call. It is kept in a cupboard near to the main entrance of the accident department, and is never used for any other purpose than for the accident flying squad. Several keys to the cupboard are available to the staff and there is one in a small "break glass" box in the reception office.

The drugs are contained in a special carrier—they are kept up to date and replaced when necessary.

There are certain special pieces of equipment which are kept in the cupboard for special incidents; for example the Siebe Gorman breathing apparatus is available for the team and this corresponds with the fire service equipment. It enables the team to work in dangerous or contaminated atmospheres. Protective helmets, waterproof reflective jackets and special boots are also available for the protection of the team. The Ambu ventilator, the foot operated sucker, together with the Brook airway are always taken with the team. In order to give anaesthetics and have the facility of ventilation, the Blease Manley ventilator was combined with a specially designed anaesthetic machine. This has now been superseded by a new machine which folds up and has a Carden micro-vent substituted for the Blease Manley ventilator. This machine was made to the design of members of the team by Oxylitre Limited.[2] The original machine is now kept with the reserve set of equipment. Portability is of the utmost importance, particularly as the equipment may have to be carried over uneven ground, underground or even on scaffolding, and therefore containers must be robust and easily carried by one person.

Further reserve equipment to set up a special accident clearing station is available in the accident department and could be sent to the scene of a major accident should it be required.

In certain areas which are vulnerable to accidents—for example the airport, special stores have been established so that in the event of a major disaster vital equipment is immediately available.

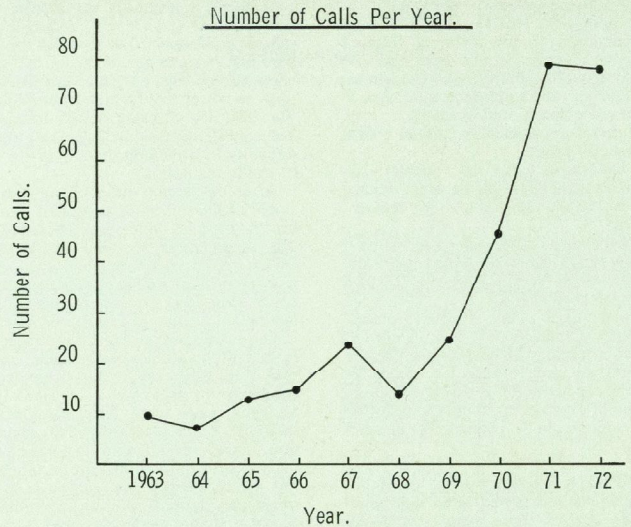
As a result of the accident at the Rangers Football Ground at Ibrox Park on January 2nd, 1971, when 157 patients were injured including two dead, it was decided that it might be necessary under similar circumstances to turn out two teams concurrently. It was also realised that if two calls should ever occur simultaneously the second set of equipment would be available for another team.

Transport

As the important element is speed the use of ambulances or special vans was considered to be impracticable because of the size of these vehicles and the difficulty of getting through congested streets during rush hours. A large car was the obvious choice and the hospital taxi service was originally considered as a means of transport. The first call for help was to a man who had been extricated from the cab of a lorry and taken to a cottage hospital some distance away and was unfit to travel any further by ambulance. Immediately the difficulty of using a taxi became obvious—there was considerable delay in locating the vehicle and also difficulty in travelling quickly across the town because of traffic regulations.

After discussing the problem with the Chief Constable of Derby it was suggested that the team should be conveyed by police car. The obvious advantages of this arrangement are that all the drivers are highly skilled advanced drivers and they can obtain a free passage through traffic simply because the vehicles are police cars. The equipment, which has already been mentioned, is designed to fit into the boot of a car.

The team is taken from the hospital all the way, or as near to the accident as possible. Usually two cars are used, but whenever it has been necessary for more equipment or personnel to be taken to the scene of an accident, extra cars have been made available. It should be stated that without the magnificent co-operation of the Derby County and Borough Constabulary the service would be lacking in much of its efficiency. The return journey need not be so speedy, particularly when the patients are on treatment. Indeed, it is accepted that a moderate speed is more conducive to preventing shock, but nevertheless the police usually



complete the job affording a facilitated journey for ambulances back to the hospital.

The staff of the accident flying squad is drawn from the staff of the accident and emergency department, with assistance from other departments when necessary. Usually the team is made up of a senior member of the accident and emergency unit, an anaesthetist or a doctor from the intensive care unit and a trained nurse. This team may vary from time to time but all the personnel are well versed in dealing with accidents.

Each member of the team must be familiar with the equipment. Usually the team has worked together in the hospital and so can work smoothly outside. The anaesthetist is the only member of the team who is not from the accident and emergency staff, but it is undoubtedly useful that such a specialist should be available as respiratory problems are frequently present. Resuscitation may be required or an anaesthetic may be necessary in order to release a trapped patient. The members of the team should be immediately available to answer a call and such calls should be given priority by the staff.

The team is insured for up to six members for an average call and up to 20 for a major disaster.

Method of Call

There is no accepted or defined method of calling the team but in practice it is usually a doctor, a nurse, an ambulance crew, police officer or fire officer who initiates the call, although a call would be accepted from anyone if they state that a patient is in danger of his life. In Derby there are special arrangements for calls from particular concerns—for example an agreed form of words is accepted to call the squad to the airport. Certain large industrial concerns also use special messages. The ambulance depots for the Derbyshire County and Derby Borough services are connected on the internal telephone system of the hospital, and if the accident flying squad is required the ambulance controller using the internal system dials 555 which rings an alarm bell in the accident and emergency department and also three strategically placed warbler telephones. When a call is received from an outside source requesting the accident flying squad the caller is connected on the 555 telephone to the accident and emergency department and the member of staff receiving the call in the department will request the essential details of the incident such as the number of casualties and the location. The team is alerted by a "suite" of six bleeps which are simultaneously activated and each member recognises the urgency of the call.

Major Accidents

Within the hospital comprehensive arrangements have been made for dealing with a major accident or disaster and within this scheme the accident flying squad has a major role. The squad would be sent to the scene of a major accident and the surgeon in charge would assess the seriousness of the incident and report back to the hospital by radio and when necessary put into effect all the arrangements for the receipt of casualties from a disaster. This would include the evacuation of patients, sending home those ready for discharge or newly admitted "cold" cases, transferring patients to other hospitals, etc. The team would be reinforced under this scheme by other medical and nursing staff and a second team could be easily formed with the duplicated equipment already available. The scheme for major accidents has been published in the hospital, and all the staff, medical, nursing, administrative and clerical are aware of the duties they would be expected to carry out.

Communications

Most people who have at any time dealt with accidents would agree that communication is of vital importance. Because of the accident flying squad it was considered necessary to have a direct link with the hospital by radio and so a multi-channel radio transmitter/receiver was installed in the accident and emergency department in 1962, capable of transmitting and receiving on three frequencies of the Derbyshire, Staffordshire and Nottinghamshire ambulance services. The Derbyshire Royal Infirmary was the first hospital in Great Britain to have this radio service and the accident flying squad requirements were responsible for its introduction. A new set just installed includes Leicestershire and Derby Borough as well as the above services.

The great advantage of direct connection with the accident and emergency department is that possible errors can be avoided and the senior member of the team at an incident can arrange in advance for the reception of the injured patient. The team has a small portable battery muli-channel radio transmitter/receiver on all the above frequencies which is carried on the shoulder and this affords direct contact between the team and the hospital. The radio is also used by ambulance crews to ask for advice in dealing with a patient and in this way sometimes the need for the assistance of the accident flying squad is established.

Recently a special frequency has been allocated for the use of the accident flying squad and three small pocket radio telephones have been purchased for the use of the team so that in difficult circumstances such as a large wide-spread accident or in bad weather members of the team can be in communication with one another. In Derby the local midwives are on a radio system which allows them to be called from the ambulance station. Members of the accident flying squad have portable radio transmitter/receivers on the midwives' radio frequency, and in this way they can be alerted at any time even when out in the town.

Calls

In the beginning, particularly because the existence of the accident flying squad was not widely known, there were only few calls, but the number has steadily increased over the years. In 1972 there were 78 calls and 64 in 1973.

The calls originate as a result of a wide variety of incidents. One patient had his arm trapped in a printing press and required an anaesthetic to be released, and another had to have his foot amputated to release him from where he had been trapped by the wheel of a crane on an overhead gantry 30 feet above the ground. It has been necessary to attend and help to release injured miners and on occasions surgical procedures have been necessary. An amputation of a leg was carried out in the manure yard of a poultry farm, the man having been trapped by a leg around the drive shaft of a machine.

The team has dealt with incidents involving a number of patients, particularly where buses have been involved in accidents. On occasion the team has been called to doctors' surgeries to resuscitate and deal with patients who have been taken there after being severely injured. The accident flying squad may be called to deal with cases of severe burning or scalds, particularly when these occur at a distance from the hospital, and early resuscitation and intravenous therapy of the patient can be started if the squad meets the ambulance. In order that the team should function efficiently there must be close liaison with the ambulance, police and fire services.

It has been widely stated to all authorities that any call will be answered without question, and indeed there is never any criticism if a call should later be considered unnecessary. It has always been emphasised, however, that anyone calling the team should realise that the hospital staff will be depleted by members of the medical and nursing staff forming the team. It should be stated that the squad is not mis-used, and in the 19 years of its existence every call has been answered. Although on occasion it may have been impossible to do anything to help, the calls have all been considered to be genuine.

General

The cost of sophisticated equipment for the team is considerable, but the hospital authorities have always accepted the idea of the accident flying squad, and any reasonable request for equipment has never been refused.

The basic instruments are supplied from the central sterile supply department. The equipment has been chosen to suit the requirements of the district—for example, the Derby squad carries breathing apparatus and equipment for testing for radiation hazards, but perhaps in other areas the needs would have a different accentuation.

It should be stated that the cost of transport has never been charged by the police and their efforts have always been of the highest standard.

Summary

1 The accident flying squad in Derby has been in existence for nearly 19 years.
2 The squad is based on a hospital and manned by trained personnel.
3 Resuscitation is the first duty of the team, and surgery should only be performed when and where necessary.
4 The equipment should be kept for flying squad purposes only and be ready for instant use.
5 Speed in reaching the injured patient is of vital importance and police co-operation, particularly for transport, facilitates this.
6 The squad should be so organised that all calls are answered. It is thought that commencement of treatment as early as possible after an accident has occurred has contributed to a successful outcome for a number of patients brought in by the accident flying squad and this has amply justified the efforts of the team. In Derby, where the accident flying squad has been in existence for nearly 19 years it has been considered a useful part of the hospital service and it is encouraging to note that other schemes similar in pattern have been set up in other areas.

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Acknowledgment:
The author acknowledges with thanks permission from *Derby Evening Telegraph* to publish the photograph of the accident scene.

IN PRAISE OF EASTERN INCONSEQUENCE

By RICHARD SMYTH

"Many an hour have I spent in the strife of good and evil, but now it is the pleasure of my playmate of the empty days to draw my heart on to him; and I know not why this sudden call to what useless inconsequence."

Rabindranath Tagore.

Like writers who weave a weary plot in the name of some overall theme, or after-dinner speakers who reluctantly plod to their punch-line, we live a tedium for the sake of some eventual fulfillment. We fight to make money, or convince others of our beliefs, or become trained, and we sacrifice the solemn play of the child in the sand. But whose sandcastles are more real? Will the goals justify the loss of spontaneity? And are they not already—even the most altruistic—rather paltry? Then how will they seem when we reach them?

Should we not live like Tagore, as vagrants, to discover the soul and surrender ourselves to the moment of now?

Bangalore: The Children

There is poverty in England too. There are wet-walled bedrooms and broken lavatories, and there are dirty children on the streets. And there are those who forsake even the discomfort of their own mind and wander into outer darkness.

Here it is different. No lunatics, tramps or alcoholics are in evidence. There are no bedrooms and no lavatories. Just people, and mostly children. Heart-warming, you might think. But here a thousand children does not mean a hundred homes: it means no homes.

I like to think that where there is poverty, there is also a measure of love: that even in squalor, disease or famine, if human relationships are born and grow there is a quality of life which may well have missed the most affluent. Sometimes I can even convince myself that such hardship would draw families and communities into a closer union. But it is questionable.

If it is questionable in England, it is not in Bangalore. Starvation has orphaned these children. Their mother's milk is dry. The rice their father earns is eaten by the bigger members of the family. It is every man for himself. They are seen scavenging rubbish-tips in competition with dogs, and sleeping alone on the side-walks. They must spin out their destinies till their stunted frames are big enough to be employed. Meanwhile, they are nobody's children.

The Sari

I wonder who invented the Sari. Hardly a member of Women's Lib, I feel. 'Course, I've never worn one, but it seems to me it must be the most impractical garment in the world. Here we are, with the temperature around 90, and all the women, without exception, are swathed in six yards of cloth (minimum) which is so inefficient a covering that they have to wear something else on top to be modest, and something else on the bottom to tuck it into. Do you know, they even *swim* in them?

Yes, he was certainly a male, the inventor—and yet a romantic too. He knew exactly how to make a girl look 'pukka', as Hindi has it. Different, really, from the daughters of our own culture, who flaunt their bare limbs (even when it is snowing in Paris), and strut affectedly on their promenades. These, by contrast, on some secret locomotion, glide darkly and with down-

Hurler's syndrome.

cast eyes, yet tall, perhaps with a pot on their head, arms akimbo, vertical as noon, with the sway and rustle of a poplar in our own summer.

Vellore : Noon

The heat rises in shimmering sheets from the naked earth and dripping bodies in the street. You walk slowly. The dust spurts up behind your feet in tufts, hangs in menace, and settles uneasily. Everyone moves stealthily, measuring their steps, talking furtively, in case the sun should notice. The trees stand to attention on their shadows, and you wonder when they will reel and crash like sentries under the barrage of heat. The universe is as heavy as lead. Hanging there.

Agra

The day ended with a physical struggle to get into a third-class compartment for Benares, given up, and substituted—not without much haggling—with a first-class sleeper. It sounds grand, but all you really get is room to lie down and a mattress. Furthermore, we had to contend with two businessmen who kept asking why we had embraced the hippy cult. Clearly these brief-case-carrying Indians were not used to ruck-sacks in their compartment. Richard, however, told them mildly we were "not *really* hippies", to their utter relief, and I lay awake trying to decide what we *really* were. In the end, I took up a loud conversation.

"You know, Richard, I think we should confess to these gentlemen. About being hippies, I mean. The fact is, friends, we're drop-outs, outcasts from the West, infiltrators. Just as you thought."

"Worse, in fact," said Richard in his same meek voice. "Not only do we have a social disease, but we *love* it."

"Every minute of it," I chimed. "Especially first-class carriages."

"You see," said Richard, "we're not *ordinary* hippies." He was warming to the theme. "We're not the tame, harmless kind that bum-it-and-rough-it. Oh no. We have it worse than that. You see . . . (he paused) . . . you see, we've got *money*. Far from being parasites, we are entirely self-sufficient. It makes us particularly virulent, of course. Particularly insidious. The impoverished hippies mostly retire to a life of begging in Katmandu. They quickly disappear."

"Yes, yes," I said, protecting him from cross-fire while he re-loaded. "They're no problem. But what immunity has your prosperous society against a *prosperous* hippy?"

Fortunately, Richard was already refreshed. "We are invisible, irresistible, and insatiable. Perfectly camouflaged, we are perfectly free. Not only in your first-class seats, we are in your airliners, offices, hospitals, places of worship and corridors of power. Everywhere, silent, waiting, always multiplying, we grow like a cancer till the final breakdown. . . ."

"And the age of the Bourgeoisie is over," I cried . . . and hit my head on the luggage rack . . . and woke up.

Khyber

(First impressions on crossing the Khyber Pass, where the bus took on a hired gunman.)

Dung is being spread to protect the village from evil.

From that white-hot, inscrutable chasm of heaven, where the ringing atomic light finds no rest, and, exhausted, forms languid whirlpools round your brain, and sublimes to solid crystal in the sky, there hangs a kind of extension of itself, paper-thin and only half as real, a gossamer veil over the mountains. It lends to the peaks an evil uncertainty, teasing us, like familiar voices in a doze, tempting us for a creeping moment on the very edge of reality. Set in a circle, vacillating in the haze, they are ghastly spectres, holding hands and levitating in a nightmare. And as the mirages leap and fly ahead of us, we close our eyes like shutters on the mind, in the dim, wistful hope that some further faculty might come to our aid in discerning fact from fiction, vision from hallucination; or even that the East itself might awaken that sense or magic or faith which somehow dispenses with the very need for any such discrimination.

But we need not despair. For even now, as we approach nearer, the domes and spires begin to shed their mystic aloofness and take on frowns and furrows; they become substantial, mortal, earth-bound, as though capitulating to the advancing empire of material things. The sky moves solemnly behind them, hanging like a silken tapestry. Against it now, the crests and ridges rise and clang together with huge, uneven efforts, splitting into canyons or crashing into chasms. At their feet, the broken jangle of jutting grey and red gives place to a melody of undulating purple, and in the foreground figures of men and goats are dwarfed by the spreading plain to harmonise with abject, heedless space.

The fish market—Kerala.

GROUP THERAPY FOR HOSPITAL WORKERS!

At the Tavistock Centre last week the question was raised as to whether medical students, doctors and nurses should have the opportunity of group therapy sessions to help them discuss and attempt to come to terms with difficult emotional reactions they encounter with chronically ill or dying patients on the wards. Group psychotherapists organise such sessions for General Practitioners at the Centre, and problems they they have in communicating with and understanding difficult patients are discussed, and attempts are made to resolve the conflicts. G.P.s who participate in these sessions are apparently very enthusiastic about them.

Hospital staff no doubt would deny the need for group therapy sessions, and to lend weight to this claim could demonstrate that in fact very few workers suffer from emotional disturbance as a result of dying patients. The traditional "stiff upper lip" approach generated within the hospital system undoubtedly serves a very important protective function in this respect, creating in effect a barrier between the inner self of the staff and the inner fears, hopes and anxieties of the patient. The hospital system itself tends to curb any development of strong emotional staff-patient relationship. Each member of the doctorial hierarchy from houseman to consultant has his or her own very exacting duties to perform in elucidating a correct diagnosis and then attempting to restore the homeostatic mechanisms by putting right the anatomical, physiological, or biochemical malfunction. The nursing staff from student nurse to sister play a no less responsible role in their issuing of drugs, recording the physical parameters of Temperature, Pulse, Respiration, attending to the patients' toilet, etc. And amidst this turmoil of activity, the medical student is slowly being integrated into the intricacies of the medical system.

"Have you felt that liver and spleen in Bed No. 2, Jim?"

"Bed No. 5—lovely example of clubbing."

"A beautiful mid-diastolic rumble over in the corner."

These are all too frequent and common examples of the way we as medical students are learning to look at patients as manifestations of disease. I'm not saying we must not learn to palpate hepars, to hear the diastolic murmurs or be competent at observing pathology in the fundi; it is obviously very important that we do learn, but let me ask this question. Have any of us ever said to each other or been told by our superiors, "Oh, go and chat with Mr. Brown for half an hour or so—he's got carcinoma of the lung with advanced secondaries—his prognosis is pretty bad—he knows he has got cancer!" Isn't this just as important and valuable as going up to Mr. Brown and looking at his clubbed fingers, listening to his lungs, and palpating the secondary deposits in his skull? True, it is a much more difficult and painful emotional experience for us to approach Mr. Brown, sit down next to him, and without the protective armament of our clinical questions, get him to talk about his illness, what it has done to his life and his aspirations for the future. It might require a lot of patient listening and empathising before the emotional barriers are broken down Mr. Brown can confide in us his deep, nagging fears. "Is it going to be painful?" "Am I going to be brave?" "What will my wife do?" "What is death all about anyway?"

To listen to these confidences from a person who is about to face death cannot fail to touch even the most hard-hearted of us, and for those who really empathise it can only be a very emotionally disturbing process.

Some hospital workers will say that you cannot afford to get too close to your severely ill patients—it puts too much emotional strain upon your shoulders and inevitably you must crack. Their patients in this situation then will stay on the ward, become objects of clinical interest to the students, their physical needs will be attended to, the odd investigation will be done in the interests of medical science, and when their distress and pain start to get bad they will be able to drift out of life under the influence of chlorpromazine and heroin.

It all looks very humane. The hospital is showing that its highest priority is patient care and comfort.

But this is really a delusion! If we were truly involved in patient care, surely this would have to include dealing with the patient's emotions and fears concerning his illness. Do we not owe to our patients the opportunity, if they so wish, of expressing their fears, of being able to confide in us, of being able to have a feeling of trust and security? Illness has cruelly taken them away from the security and love of their homes, a home to which they may never return, and the least we can do is attempt to provide some substitute. To do this, however, we the staff need help, reassurance, confidence, and the opportunity to express the emotions that will surely generate inside us—or else we will crack. Group therapy sessions would give us the necessary opportunity and outlets. Imagine a group of 10-12 workers, all from the same ward, doctors, nurses and medical students with a psychotherapist to guide them in terms of breaking down their own erected barriers and hence enabling them to face up to their own emotions and those of others. The group surely would begin to see each other rather more as human beings than as filling particular roles of Doctor, Nurse, Student. They would be able to give each other the confidence and assurance each needs, and this could only lead to better staff-patient relationship as well as staff-staff relationship.

As doctors then, we must ask ourselves—are we to become students of disease or are we to become healers, that is, are we going to involve ourselves in our patient's illness and all that this means to him. If we adopt the latter approach as our ideal, Mr. Brown will probably die of his cancer despite our efforts to save him, but if in his last few weeks he has been at peace with himself, with his close ones and the hospital staff and been able to discuss frankly his fate and thus making it much easier emotionally for those around him, then we have not failed in our task.

TONY HARRIES

IMPROVING THE HOSPITAL SQUARE

A PERSONAL VIEW

By ROBERT TREHARNE-JONES

The Problem A.D. 1974

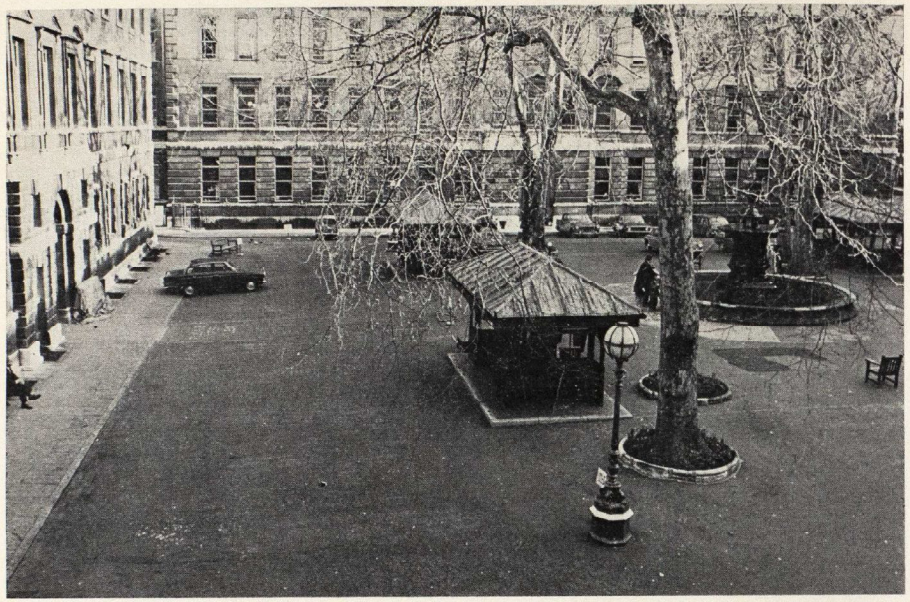
When I first came to Bart's for an interview in 1969, the student who showed us around (and who later became quite well-known) took us into the middle of the square and said "This is the famous Bart's square, with the famous Bart's fountain in the middle, and in this are the famous Bart's goldfish."

However, the square has changed in many ways over the years, and in this article, I hope to show how the island site may be made more pleasing to the eye by the removal of almost every motor vehicle, and how the square may be restored to its former glory by the judicious use of the fountain.

Car Parking

A total of 2,500 people would like to park their cars within the hospital precincts . . . but only 67 spaces are available! Permits are allocated according to a a combination of seniority and necessity. Thus, as well as the 120 consultants and their senior registrars, space is made for X-ray vans, BOC vans, and lorries for various building projects. One space is allowed per project, but this system does not work very well as a lot of work is sub-contracted to smaller groups. Voluntary workers are allowed to bring in their cars, but then not all of them *own* cars. The duty staff are not given permits because it is considered that since they are on duty, they will not be requiring the use of their cars.

Visitors are expressly requested not to drive into the hospital since the present system of open visiting hours



The Square 50 years ago? No, this photograph was taken within three days of the other, from the same angle.

means that some cars would be parked all day, while their occupants visited patients.

Housemen are subsidised by the hospital to park at the NCP multistory in Aldersgate Street; each receives about £3 per month. Junior medical staff and nurses also receive some sponsorship to park there, where there appears to be plenty of room.

The total number of people with permits is almost 700, and the system relies on only 10% of these cars turning up at any one time.

Towards a Solution

Only 67 spaces are available for parking cars on the island site. The question arises, "What constitutes a space?"

Certainly, I am willing to believe that there are 67 areas demarcated by white lines, but these do not include many plots where cars are to be found quite regularly. Taking a random time which happened to be 1150 hours on Thursday, February 21st, 1974, I counted 131 cars parked inside the hospital; this number did not include the many ambulances, transport division vehicles and other delivery vans which were present.

I feel sure that a great number of the present day medical students would love the chance, one day, to roll in through the Smithfield Gate as a Bart's consultant in a large and impressive Rolls-Royce, and draw to a halt at the bottom of the steps of James Gibb House.

However, as I hope the facts above have shown, only a fraction of permit holders are consultants, and few of them have Rolls-Royces. In fact, very few of the cars in the hospital reflect the pristine glory of their original state; a whole spectrum of cars are to be seen, and at the lower end are the crumbling wrecks represented by the vehicle which was recently towed away from the front of the West Wing, and whose sole value lay in the profuse guano deposits on its bodywork.

Compared with the beauty of Gibbs' facades on three sides of the square, there is no place for the modern ugliness of any motor car whatsoever, and I should like to see a regulation enforced banning all vehicles from the island site.

I realise that practicality necessitates certain exceptions, and these would include goods vehicles to the pharmacy and kitchens. All these vehicles would use the so-called emergency entrance in Little Britain, adjacent to the Post Office; the Smithfield Gate would then be for pedestrian use only. (One wonders why the Emergency entrance is so-called, unless someone has already had the foresight to see that a large lorry will one day become stuck in the arch under the Great Hall).

It was mentioned in the February edition of the Journal that there was a considerable amount of erosion of the Smithfield gateway and North Wing arch by large lorries.

I find it totally anomalous that the Hospital can spend many hundreds of pounds on cleaning the stonework of the North Wing, and still allow lorries to use the archway. The position is now such that coloured bands of paint may be seen at the end of the archway adjacent to the square—the results of large lorries scraping past.

The Fountain

On Thursday, 14th February, or thereabouts, a film crew were shooting in the Square. As I passed through, I waited to one side for a few moments, giving the Director a chance to shout "Continuity!" (which he didn't), so that I could rush on to that particular scene, and would then have to be called back for the following shot.

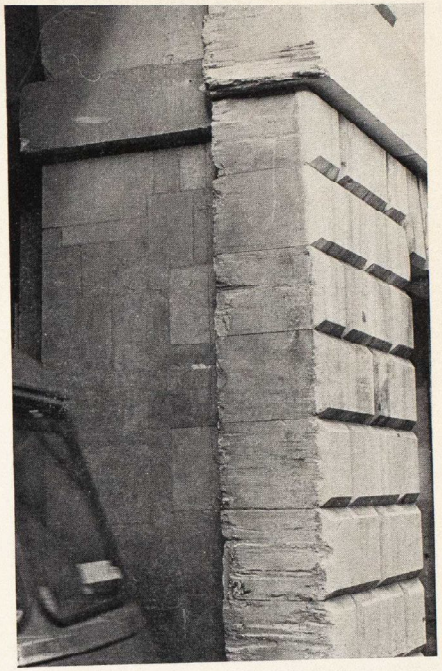
While waiting, I noticed that the fountain was actually switched on . . . a rare treat for regular visitors to the hospital. Why is it that the fountain is hardly ever used except on View Day, and at meetings of the Fountain Club?

Many reasons are quite predictable, in the present power crisis, it is obvious that such trivia must remain unused to allow the diversion of power to more vital appliances. The water rates may be prohibitive, but why not have a recycling process, using an electric pump, with only a small water supply to top up any leakage? One reason that I have heard for the disuse of the fountain was the inconvenience to patients who might be drenched with water on a windy day as they lay in their beds in the square! The obvious answer is to turn the force down in such circumstances.

The fountain was built in 1859 and has thus been the epitome of Bart's for 115 years. Does this have to be yet another case of substituting economy for fine tradition?

Acknowledgements

For much of the information on car-parking, I am indebted to Miss Turner of the Medical Staff Office. I also have to thank Charles Wellingham, who took the photographs.



Detail of the north wing archway, showing large scrapes produced by vehicles.

BARTS FILM PREVIEW

By FILMFREEK

April 16 The Life and Times of Judge Roy Bean (Western)
Starring Paul Newman, directed by John Huston

April 23 Curse of the Werewolf (Horror)

April 30 Royal Hunt of the Sun (Film of the play, about the conquest of the Incas)

May 7 Winnie the Pooh (Cartoon)

This month has at last found a gaping hole in your critic's movie repertoire, since I have to confess to having seen none of the forthcoming attractions. Despite hours spent in trains, trams, tubes, trolleycars and taxis, travelling to cinemas all over the world(?), light from the above-mentioned four has never traversed these much-dazzled corneas. All I can say is that I'm looking forward to seeing the "Royal Hunt of the Sun", since the original play was a fine spectacle and well written. It tells the absurd tale of the fabulous Inca kingdom being conquered by a mere dozen or so adventurers from Europe. However, being a British production the film version may well suffer from tight budgeting, so watch out for flapping backdrops and sparse crowd scenes.

N.B. The time is fast approaching when next year's films will have to be selected and booked with the distributors. If you suffer from lots of ideas on the subject send a list of choices to the journal to help us in what is usually a very subjective process. Films of recent vintage (i.e., the last two or three years) are preferred, since they are pre-television and the print is less likely to be a mess. Still, golden oldies will be given a sympathetic hearing.

NEWS AND VIEWS

FROM BETWEEN THE SHEETS

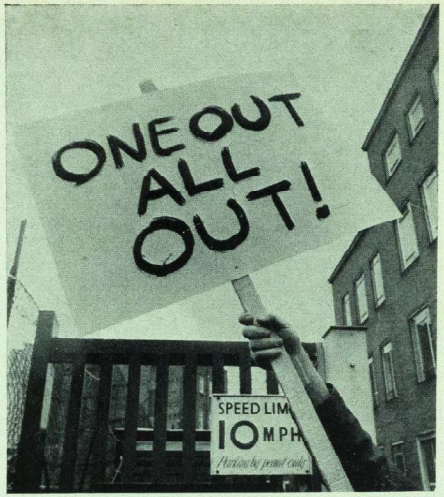
By J. M. GIBSON

I recently spent a brief period as an in-patient in Bart's and was thus able to discover from first-hand what it feels like to be a patient in a large teaching hospital. It must be said though that a medical student is far from being a normal patient—in as much that he/she should know what to expect in the way of treatment and the ward does not constitute a completely strange environment. Furthermore the student may recognise a few friendly faces amongst the nursing staff on the ward, in which case he is in an even more favourable position than his fellow patients.

The patient's world is one which is dominated by a total dependence upon other people and by ward routine. Due to the paucity of entertainment on the wards, one finds that almost any disturbance to the daily grind is welcome relief. Ward rounds took on a completely different significance to me, as along with most of the other patients I found myself actually looking forward to them. Perhaps it is inevitable therefore that this strange environment unites the patients into a corporate body and breeds an "Us and Them" attitude between the patients and the doctors. In this respect I found myself in the strange position of having a foot in both camps, and whilst being able to join in the groans about treatment with the rest of the patients, I also found myself defending the medical profession on more than one occasion.

One of the surprises which I suffered while in hospital, was to find that the nursing staff were clearly identified by most patients as being on their side. This was in contrast to the doctors and senior nursing staff who were by and large regarded with suspicion by the patients. This strange phenomenon is presumably a result of the friendly rapport which most of the junior nurses are able to strike up with many of the patients, whereas the housemen and registrars tend to adopt an aloof position. Perhaps there is a lesson in this for someone.

I must admit however to going into hospital with pre-conceived ideas about the nursing care I could expect to receive (a terrible admission to make in an article which will be read by nurses). Having heard various stories of patients being woken from deep slumber to be offered sleeping pills, I was keenly on the look-out for such blunders; but throughout my stay I was greatly impressed by the standard of nursing which I observed and since emerging from hospital I have looked on nurses in a new light! As mine was such a brief stay in hospital I missed many of the experiences which make the patient's visit to hospital so memorable. Nevertheless it could be said that I enjoyed my time there and perhaps even benefited from this glimpse into the patient's world.

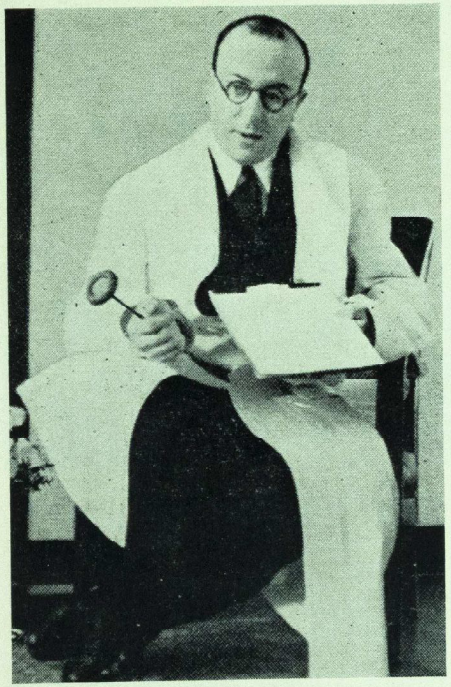


THE WHAT-A-GATE SCANDAL—
A KEY ISSUE?

Congratulations to the College on the choice of its very special back gate as being typically "factory-style". This charming vista has appeared in an advertisement plastered throughout the news media. But whatever the caption may say, for College Hall residents getting out (or in) is not at all an affair full of brotherly solidarity. For were you perchance to await a Number 5 bus (or a 55) at its stopping point in the Clerkenwell Road after 6 o'clock on a weekday evening (or all day Sunday) you might well observe the repeated enactment of a most ancient student tradition. This is the climbing of the back gate, and it goes in two phases. Early in the evening the general trend is for egress, as thirsty young bucks scramble off to various watering-houses in the surrounding district. Later things go in reverse as the said wanderers return, less thirsty though by no means thirstless, and scramble back in for all the world like any old cat-thief. Quite why this trouser-tearing, manhood-threatening performance should persist is hard to understand. The "authorities" say the gate is locked so as to protect much valuable equipment, but anyone can drive a 10-ton truck through the ever-open front gate, and as we have seen the Clerkenwell Road passers-by are now entirely accustomed to seeing nefarious scramblings at the dead of night. In fact one of the *Journal* staff has been questioned by a carload of agitated plainclothes policemen who actually witnessed his late-night entry, so the local fuzz are also now fully immunized against reacting to these strange occurrences.

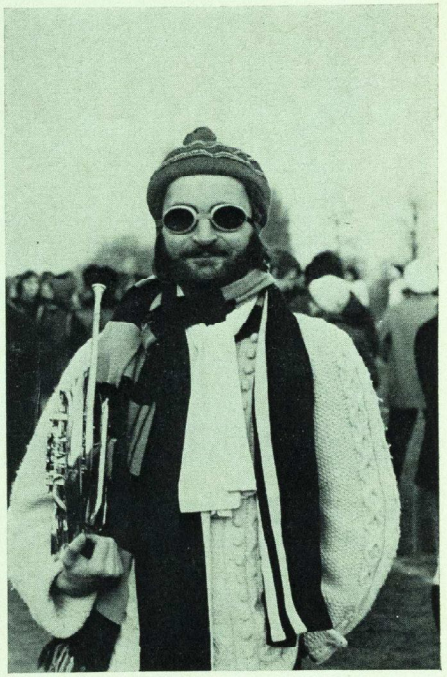
Yet a simple remedy is easily available. Why not provide a number of keys to the side-gate at the porter's lodge, which can be signed for before use? A few of these circulate already, so it would simply democratize an underground situation. As the placard says, "One out, all out."

SON OF CANDID CAMERA



Then . . . (guess who?).

Question: Which one's got the knighthood?



Now . . . times have changed.

JOURNAL MATHEMATICAL PROBLEM No. 4

By Robert Treharne-Jones

On a square 9 x 9 grid pattern, place 9 dots, such that there is one dot in each and every vertical row, also one dot in each and every horizontal row; neither may 2 dots occupy the same row diagonally.

Solution next month

Answer to last month's problem

Sister is 40 now; all that is needed is a clear head to solve this problem. The consultant is 42; 40 is double 20 which is the consultant's age when Sister was 18; twice 18 is 36 which is the consultant's age when Sister was 34; half 34 is 17 which is the consultant's age when Sister was 15; twice 15 is 30, which is half as much again as half 40.

FROM OUR HUNGARIAN CORRESPONDENT

Med for minors

Young Hungarians under the age of 18 who want to marry must have a medical examination under a regulation introduced by the Ministry of Health in 1970. Reason for the new rule was that, with a big increase in teenage marriages, a number of young couples were in trouble because they were not ready for marriage physically.

Minors now have to produce a medical certificate when they apply for a marriage licence. It is supplied by a medical specialist whose duty it is to assess whether or not the young persons concerned are mentally and physically mature enough for marriage and that early marriage will harm neither the young couple nor any prospective children.

"VIVA VOCE"

I once had, and to my knowledge still have, an aunt who maintains that if an electric light bulb is removed from its socket, electricity leaks out into the room, placing the lives of the people in the room in severe peril. Although this may not be strictly true, something or other must be responsible for the somewhat charged atmosphere in a certain room in the Anatomy Department every two weeks or so. An old saying goes, "Horses sweat, men perspire, ladies merely glow." Not so. In a viva everybody sweats.

I wouldn't dispute the reason or need for oral examinations in anatomy, but just as it is easier to cross a river using a bridge than by swimming across, both easy and difficult ways of taking these examinations exist. Should a suitable moment present itself during your next viva, take a look around you . . . it is not cold, so why are so many people shivering? Neither is the temperature excessively warm, so why are there so many glistening faces, dry mouths and croaking voices? Could some people be using "The Difficult Method"? "Yes," you answer, and of course, you are quite right.

In the following extract from "The do's and dont's of life at Bart's" (chapter 16, "Examinations") you may recognise many mistakes you have been making, indeed you may recognise yourself portrayed as one of the characters; if so, mend your ways accordingly.

It begins . . . "It is ten hundred hours G.M.T., zero hour is ten fifteen, plus or minus five minutes. The next few minutes of your life could affect the whole morning's proceedings, therefore pay due attention to them, and treat them with the respect they deserve. Look around you, you are far from alone in your panic, some people are already going home. Others grasp you about the shoulders, and scream gibberish into your ear, do not be alarmed, this happens frequently and closer analysis of their outburst reveals that they are asking you questions. "Where does this go, what does that do?" This sort of person always knows more than you do, so send them on their way.

As in all matters social, the correct mode of dress is of paramount importance. A shirt and tie can often tip the balance in your favour; similarly for women, sober dress is essential. Semi-nudity in women (an oft attempted ploy usually tried as a last desperate measure to impress the examiner), is strongly discouraged.

The time draws near, sit down and KEEP CALM. Seating arrangements should be completely arbitrary; research shows that examiners, when questioning a group of people seated in a circle, proceed in a clockwise direction, an anti-clockwise direction or in random fashion, in response to factors yet undiscovered. Any thoughts of sitting on, say the left hand side of the slowest speaker in the group, in order to supply the answer to his or her question should his or her answer become so long and drawn out that the examiner loses patience, should be cast aside. The scene is set, here you are once a group of ten keen anatomists, your number now reduced to six, one of your friends has been struck dumb the other two are still working in the library and the other one decided to pack up and get the next train home. The proceeding minutes have taken their usual toll.

Your examiner arrives, and all together, you and your comrades . . . smile. Do not under-rate this courtesy, yet avoid excesses here, the smile should be "measured", the two inch size is the most popular; slaps on the back and comments on the weather spell doom.

Now we come to the focal point of the day, namely your question, and for the sake of argument let us suppose you cannot answer it. The sledgehammer in your chest, sudden blackout and loss of speech, suggest that things are not well, and you may well begin to regret having that fifteenth pint last night, but on no account must you give in to self pity here; the best idea is to try the following. First of all cleanse your mind of any notions of committing a neat Hara-Kiri with the old Swann Morton or of running away (yes, the thought has occurred to us all—admit it); follow the following instructions.

The first step is to screw up your eyes, and part your lips to reveal clenched teeth. Now, as slowly as suits you, you look up at the ceiling, exhaling loudly as you do so. Returning to normal posture, apply the palm of the hand to the forehead, whispering under your breath any information connected with the question, albeit irrelevant. This may impart the impression that the particular piece of information required of you, has slipped your mind. Repeat this procedure several times, each time pretending that you are on the verge of remembering the answer. If you are lucky you may be provided sympathetically with the answer, gaining an intellectual rapport with the examiner. If you are unlucky, then you are in a decidedly worse mess than you were when you started; the latter case is the most probable. Whatever you do, do not contemplate humour, answering a question on say, nerves, with the reply "I haven't the vagus idea". Enough said. The same goes for mnemonics; your examiner is only human and just like you he dislikes mouthfuls of obscenities being hissed at him by someone he has never met before.

Before long, the truth dawns on you; it becomes apparent, nay, crystal clear that your life of alcoholism and vice is not compatible with your career as a Medical Student. You realise the futility of it all . . . your past life streaks before you and it is the time for repentance.

Not a bad idea.

D. ORAM.

THE GREAT STUDENT DEMONSTRATION OF '74

The following item uses February's Editorial as a kind of springboard. By the time it appears it will be stale, and a new Government will have formed.

It occurred to me as the NUS demonstration drew near that I had never been involved in any rally, demo, rent-strike, sit-in or occupation during my student life. So, as my days as a student were fast drawing to a close, it would be my last opportunity to see what actually went on at these events I had so often seen only as part of the headlines. Thus it was that on the afternoon of February 8th, I set off from Hackney for Speakers' Corner in order to attend my first, and last, rally.

The journey was uneventful as far as Tottenham Court Road—where we had to change trains owing to one of the now familiar bomb-scares. After watching people milling about for a while I decided to walk, so, making my way through the mêlée which Oxford Street now is on a weekday, I headed for Marble Arch.

The first sign of anything unusual was a placard with the inscription "Rising Prices Devalue Grants" propped up against the window of Peter Robinson. I walked on and at Lancaster Gate caught sight of my quarry; a large procession sporting multi-coloured banners was racing along the street (or so it seemed in my effort to catch up) pursued by a rearguard of glum-faced policemen. Eventually, I reached Hyde Park which was still filling with factions from various colleges with banners such as Barnsley Polytechnic Communists covered with insignia of red stars, Marxes, mailed fists, hammers, ploughs, etc. I took some photographs and then edged my way to the front. The atmosphere seemed to be more like that of a carnival than a rally the aims of which were a higher living standard. After the customary signs of fidgetiness, hand claps, shouts and whistles, the first speaker appeared surrounded by a bevy of cine and still cameras. He was a representative of the Kent miners, and gave a powerful anti-government speech, which seemed to be delivered not once, but twice. Then, a member of the ATTI appeared and made a similar speech, followed by a builder who lectured us on the injustices suffered by the Shrewsbury X (X being any number you care to think of). Why is there a creeping trend to label groups of revolutionaries with a number? Is this a symptom of our reduction to digits on a computer, or just a journalistic method of reducing printing expenses? So instead of Ted Bloggs, John Smith, etc., it becomes the Chipping Sodbury 3—giving us the idea, perhaps, of a *gestalt* organism, thinking and acting as one.

But back to the rally, where Mrs. Judith Hart, the Labour M.P., has taken the stand with a semi-political speech on the lines: "What was it who . . . the Conservative Party!" delivered in an outraged bellow. The crowd became increasingly agitated and heckling stepped up until she retreated. Then the moment we had all been waiting for—the NUS President. More reiteration of the ideas behind the earlier speeches, so I decided to see how vast had become the crowd surrounding me. Behind we were only banners in the muddy grass, and straggling groups of students spreading out across the darkening park. The rally had dwindled to a few hundred faithfuls. Behind the makeshift platform the 20 or so policemen prepared to leave. The Demonstration was over.

The biggest student demonstration ever held received 30 seconds of news coverage and 10 lines of comment on the inside pages of a daily newspaper. Followed *five days later* by the same size of coverage in the *Daily Telegraph*.

PETER GLANVILLE.

"RUDIGORE"

It was very appropriate that the Bart's Gilbert and Sullivan Society chose St. Valentine's Day for the first night of their production of Ruddigore (at the Golden Lane Theatre) as the plot involves amorous adventures and mistaken identity; whilst for the most part the sequence of events is rather predictable, the use of a past vagary of British Law—that suicide was a crime—provides a typically Gilbertian solution to the problem of ensuring that the beautiful maiden marries the handsome young hero.

I am delighted to relate that this was the first amateur, not to mention professional, rendering of a G & S work that I have seen, in which the producer followed Gilbert's directions for a pretty leading lady, by his casting of Miss Williams as Rose Maybud—a ploy guaranteed to win over the audience.

Mr. Major, the director, at the last minute had to take the part of Sir Ruthven Murgatroyd, as Mr. Birchenough was indisposed; had I not known this in advance, I should never have been aware of the substitution, such was Mr. Major's word-perfect performance; this intimate knowledge of the libretto and score, points to the painstaking preparation made by the director.

The overall continuity of the performance was greatly aided by both the superb costumes and the imaginative yet highly functional set. However, some of the dancing was a little ambitious in view of the size of the stage.

Mr. Gamble, as Sir Despard Murgatroyd, set a standard of projection and articulation in his singing which could not quite be matched by the rest of the cast; one felt experience showed; the same was true of Mr. Cooper's acting such that the audience could sense the presence he held when on the stage.

The orchestral accompaniment was carefully controlled by Mr. Lumley. He obtained some pleasant sounds, utilising the fine woodwind playing to the full. It was, however, his treatment of the unaccompanied motet/madrigal at the conclusion of Act 1, which provided the highlight of the evening; this had obviously received intensive rehearsal, and the resultant texture and balance of the singing produced a truly delightful sound.

The whole cast, orchestra and back-stage helpers are to be congratulated on providing a thoroughly enjoyable evening's entertainment.

ALLEGRO MA NON TROPPO.

TARTUFFE by MOLIERE

Rob Robertson, as Tartuffe, advances on Elmire, played by Juliet Britton.

It has been a tradition of the Drama Society to present in February a large-scale production with popular appeal. This term the Society moved further than ever from the experimental style of recent plays, presenting a full period version of a 17th century comedy—Molière's "Tartuffe". This shows the honest if obtuse M. Orgon conned by a seemingly saintly Hypointe, who leads him and his family to ruin. Only the intervention of Louis XIV himself prevents the final triumph of corruption over the innocent, to which the whole play tends.

The decision to present the play as a period piece was in many ways a wise one. The wife's defence of her honour, the daughter forced to marry against her will, the controversy of Science and Religion, would inevitably have jarred in a modern setting. However, a highly stylised comedy of manners lends itself more naturally to a proscenium stage than to the intimate atmosphere of Bart's gym. Thus a tension existed between the stylish exaggeration demanded by the play, and the intimacy of its setting. The treatment of the Prologue, and the use of actors as stage-staff, helped to overcome this difficulty. The Prologue might have been used even better if the actors were more obviously relaxed and out of character at this time, and then changed to a much more mannered and elegant style once the play itself started.

The use of a dance at the start and finish fitted the play neatly into its courtly frame, and lightened the dead weight of Molière's ending. The end was also assisted by the guest star appearance of the Sun King himself in the Royal Box—a gimmick no doubt, but an apt one.

While in some of the "chat and information" scenes the range of movement seemed a little limited, considerable inventiveness was employed whenever the opportunity arose, the comic scenes having plenty of rapid and very funny movement. As usual, I felt there could have been a bit less yelling in the angry scenes, but there were also some outstanding instances of vocal control, and the blustering of Orgon and Damis made a good foil for the more calm, reasonable—or hypocritical—characters. The dramatic moments particularly at the end, were well handled, with plenty of group reaction but not too much upstaging—Sarah Robertson must have her cast very well disciplined!

The nauseating Tartuffe was given a controlled and stylish performance in the true Robertsonian manner.

Juliet Britton as Elmire conveyed the ambiguous nature of her character very well; one never knew what her true motives were, or how far to trust her protestations of wifely love and honour. Fanny Witney as the maid Dorinne never missed a comic opportunity. All the parts were well handled, and very well cast; Steve Stansfeld as the Voice of Science and Reason was very convincing, and Sarah Evans was perfect as the pretty, pathetic daughter.

One of the most impressive aspects of this play was the dedicated and talented performances which the smaller parts received, especially the gawky maid played by Lottie Murray, who said nothing and looked everything.

All the cast were helped by their costumes and wigs: it is much easier to be courtly in velvet, lace and brocade than in blue jeans. The play definitely deserved larger audiences than it got, at least on the nights I was there, for the overall impression was of a very funny play, and a good evening's entertainment.

OLIVIA HUDIS.

N.B. A review of "Three Women" will be appearing in the May edition of the *Journal*.

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*Reprints received and herewith gratefully acknowledged. Please address this material to the Librarian.

XVth DECENNIAL CLUB

(1956-1965 entry)

MEETING IN THE GREAT HALL,

FRIDAY, 8TH FEBRUARY, 1974

Who is Robina Bush? The mystery was solved for nearly 100 members who attended the informal buffet supper meeting in the Great Hall when she made one of her rare public appearances. A year previously she had sat down for a fortnight to discover the whereabouts of the 1,500 Bart's men who had entered the College or Hospital between the years 1956-1965 inclusive. Being an ex-Bart's nurse she was not surprised that only 500 or so replied but this was enough to get started with a small inaugural gathering last year at College hall bar where an ambitious meeting was planned largely organised by Alan Bailey and an unwieldy committee. The committee members could never agree on a time to meet which suited them all and the residential weekend meeting finally had to be cancelled since when the deadline arrived too few members had applied for tickets. In true Bart's fashion a further hundred requests were received the next day!

The party in the Great Hall served its purpose of allowing old friends to meet and reminisce sustained by the Wine Committee whose kind support given free played a major part in ensuring everyones' pleasure. A buffet supper provided by three Australian "Dollies" gave rise to no complaints and a few people even said they enjoyed themselves.

The main complaints were from absentees who claimed to have received no warning of the event but this can only be due to Miss Bush's begging letter for £1 being ignored. This sum is to provide for the cost of writing to everyone for the next 100 years and should anyone feel neglected they can write (enclosing £1) to Miss Robina Bush, 51 Sloane Street, London, S.W.1, who will add the name to our list. Almost the only other fixed post is that of Treasurer held by Brian Marsh and some day he will have to publish some accounts.

Opinion at the Great Hall meeting regarding the inclusion of wives, "friends", etc., seemed divided, those who brought wives feeling obliged to vote in favour. It was therefore decided to have two meetings a year one with wives and one without, no doubt the true feelings of the membership can be ascertained at the solo evening especially as there seem to be some very attractive women doctors anyway.

If there is any member who would like to organise a future meeting please contact John Ind at 51 Sloane Street, 235 5151. Miss Bush will do the paperwork.

There should have been some photographs but Richard Wilson forgot to bring his camera.

JOHN IND.

BOOK REVIEWS

THE LAW OF FREEDOM AND OTHER WRITINGS. Winstanley. Edited by Christopher Hill. Pelican Classics. Price 75p.

BARNABY RUDGE. Charles Dickens. Edited by G. Spence. Penguin English Library. Price 60p.

THE COMPLETE POEMS. Keats. Edited by J. Barnard. Penguin Education. Price £1.00.

The "Pelican Classics", "Penguin English Library", and "Penguin Education" series are specifically marketed to provide reliable texts of established "works". Introductions, notes, a short biography, and a relevant bibliography are also included, making them very popular with those students for whom they are required reading. But this additional matter does not obtrude on the basic work, so those with no scholarly pretensions can read and enjoy them as books rather than potted courses in Eng. Lit. or Pol. Sci. However, if you do want to read the introductions its usually best (for novels) to do so after reading the text itself; not only will you avoid ruining the story, you will also be in a position to judge the Introduction for yourself. The subsequent clash of your ideas with those of the editor can be most rewarding, particularly when he has been clear and unpretentious (which is not always the case).

The three most recent volumes are typical of their respective series. "Barnaby Rudge" is one of the earlier Dickens and its importance may perhaps best be judged by its being the second last of his major works to be published in the Penguin English Library. It is rather slow and mainly remembered for descriptive scenes of the Gordon riots; nor is it cheap (for a paperback) at 60p. But there are the illustrations, something rarely seen in modern novels, and a good introduction if you feel like exploring one of Dickens' lesser achievements.

The Keats—Complete Poems—is entirely designed for educational purposes. Tables of dates, further reading, appendices, fragments, and a short dictionary of Classical names are all included to ensure total coverage of relevant data, plus several short pieces of Keatsian prose (e.g., a review of Kean, the celebrated actor). As a complete Keats it is therefore excellent; as a students' book the price of £1 is steep. For those of us weaned on "selected poems" it is somehow gladdening to see how much of Keats' verse is second-rate in the extreme. His play "Otho the Great" is quite appalling, which probably explains why it is generally kept well out of sight by most editors. Suitably adapted it might just make an hilarious ward-show.

The best of the three, "The Law of Freedom and other Writings" is a collection from a leading 17th century radical, Gerrard Winstanley. A founder of the "Diggers", a commune group established in the wake of the Civil War, his writings are amazingly fresh and vigorous, both in style and content. Essentially he and the Diggers tried to carry the Parliamentary victory through to its logical conclusion. The King, as feudal lord and head of the system keeping most people in semi-slavery, had been deposed, thus the land now belonged to the common people, to cultivate for themselves, not for the purses of clergy and big landowners. The Diggers acted. They began cultivating (digging, thus the name) some land near Cobham in 1649, and survived for a year despite continuous harassment by local landowners and minimal protection from the very army that had fired their radical hopes. In time poverty forced them to disband, but their ideas, about non-violence, universal suffrage, and some forms of communal ownership, are today accepted (though rarely implemented) as the basis of a real civilisation. At 75p all this may seem somewhat esoteric, but writings such as these are the meat of social history. They are worth more than just reading about them in columns such as these.

T.T.

G by John Berger. Penguin. Price 60p.

This is a rich, very modern novel which won the 1972 Booker Prize, the annual £5,000 fiction award now much-coveted by English writers. The author at once gave half of it away to the Black Panthers, after a vitriolic acceptance speech denouncing the whole idea of such prizes. Some may think this a rather churlish approach to having one's work praised and financially encouraged, but there's no doubt that prestige prizes (e.g., Nobel, Pulitzer, the Oscars) for creative arts do tend to become affairs dominated by unscrupulous motives; the Prix Goncourt in France for example is notorious for bias towards certain publishing houses; the Nobel prize is carefully shared out among the world's major languages; the Oscars are pure horse-trading. Anyway Berger got the prize, whether by fair means or foul, and his book has emerged in paperback at the quite shocking price of 60p. Clearly it is not expected to be a major seller.

Two things stand out. Most obvious is the format, for paragraphs are separated by a two-line gap and inverted commas (denoting direct speech) are rarely used. While at first disconcerting, there is no lack of clarity, and the way in which the individual paragraphs stand out on the page gives an immediate impression of their individual identity. Each one thus represents a single idea, both in content and in form. Secondly, "G" makes you think, both in general and specifically about the role of women in a male world. At the heart of the book there is an essay entitled "The Situation of Women", a mere 4½ pages but an incisive and brilliant analysis of the position from which women needed (and still largely need) liberating; of how in a male world "a woman was always accompanied . . . by her own image of herself" . . . "Every one of her actions . . . was also simultaneously an indication of how she should be treated."

Around this central theme (and the book is dedicated to the sisters of Women's Lib.) Berger describes a series of man/woman relationships, mainly involving "the principal protagonist", the hero, G. He is a leering, gap-toothed Don Juan whose origins, childhood, young manhood and end serve to illustrate the sheer imbalance of the male-dominated world. His loves are women who do not properly conform to the role designed for them,

women who in various ways are trying to think beyond mere acceptance of the monolithic male ethic. Likewise G is no mere "male-chauvinist", but simply a man using his position to exploit the world as it is, and in doing so showing the absurdity of men's desperate desire to control the women they love. These episodes are counterpointed by selected events and situations of the turn of the century; the heroic first flight over the Alps (and its fatal, ridiculous ending); the idiotic horrors of the First World War as massed men stumbled blindly into concentrated machine-gun fire; the activities of the Young Bosnians in Trieste (one of their number had murdered the heir to the Austrian throne thus "starting the First World War"); a riot in the same city's streets. All of these display convincingly the danger and wastefulness of a world in the grip of the virility concept.

Yet despite its structure and meaty content the book suffers from some exasperating weaknesses. The spare, forceful style tends to drift into a series of ill-connected statements, relying overmuch on a subjective use of words for its effect. Furthermore Berger suffers from the chronic uncertainty of modern novelists about their own role in the composition of a book. Victorians simply banged out a tale, sure of their own moral objectivity as mere presenters of a well-turned story. Today such certitude in value-judgment is regarded, quite rightly, with some suspicion; even ending a novel is seen as an act of horrible definity. G's death solves the latter problem, but Berger cannot avoid the continual intrusion of himself into his text. Sometimes illuminating, sometimes alarming, sometimes vacuous, they may in part represent a deliberate attempt to avoid appearing forcefully male. They can sometimes lead to appalling lapses, such as the unutterably silly sentence, "Break the astonishing silence of my breasts". Fortunately these and suchlike are the exceptions that prove the rule, and that "rule" is clear, sharp writing and clear, sharp ideas.
N.B. Other books by John Berger include:
A Fortunate Man, an essay on the role of the modern country G.P., with many penetrating ideas on a subject which has been often neglected.
Ways of Seeing, the printed version of a series of programmes on TV about people's approaches to looking at famous pictures. He makes most Art criticism seem very silly and pretentious, and rams home some good points about the role of colour print reproductions in today's attitudes towards "Art". Both are available as Penguins, but beware the prices!

T.T.

ELEMENTS OF MEDICAL GENETICS, third edition, by A. E. H. Emery. Churchill Livingstone, £1.75 (paperback).

Human genetics is not a concise subject. It is probably taught best when lecturers with an interest in the subject decide among themselves what their students need to know (they will get little guidance from the syllabus in the Regulations for Medical Degrees), who will teach what, and in what order the different aspects will be taught. Authors of texts on genetics for medical students make these same decisions and inevitably cover every conceivable aspect of the subject they consider relevant to the students' needs. Emery's book is no exception. He covers everything from Mendel's pea studies to genetic counselling in less than 80,000 words and the book suffers as a result.

The first half contains six brief and very elementary chapters on the history of genetics, its molecular basis, biochemical disorders, chromosome aberrations, genes and development and familial genetics. Oversimplification has resulted in the omission of pores in the nuclear membrane for messenger RNA to pass through (Figure 4), and variation in the number of chromosomes in a cell during mitosis (Figure 11). The medical student, one hopes, receives a more accurate and comprehensive treatment of these topics at school and during his pre-clinical course. On page 93 there is the kind of statement that confirms the layman's suspicions that the medical profession is full of Dr. Frankensteins: "Unfortunately most diseases which are inherited in a simple manner are very rare".

The remainder of the book is of value to the non-specialist medical practitioner. Whereas the principles of genetics in the first part are illustrated by rare traits, the second part deals with the genetics of common diseases and congenital abnormalities. It is up-to-date in concept and treatment. The transition from unifactional through normal multifactional to abnormal multifactional variation is rapid. It is a pity the rather wasted space in the first half of the book was not used to explain more fully the threshhold models of Falconer and Edwards, a very important and none too easy topic to understand.

It is not a reference book, but at the end of each chapter is an extensive list of books, review articles and papers which are suggested for further reading. The book has a 120 word glossary and a good index. There are adequate tabular data but there are only 46 line drawings but no half-tones or illustrations of genetic abnormalities. It is nevertheless good value for money.

M. HOLLINGSWORTH.

AIDS TO UNDERGRADUATE MEDICINE by J. L. Burton. Churchill Livingstone. Price £1.

This book, written by the author of "Aids to Postgraduate Medicine", will I prophesy, become an established member of the medical student's shelves. It will become as well-thumbed as his A-Z of London and Guide to the Turf, but 10 times more useful professionally. There is a brief introduction on Hints for Final M.B. then the bulk of the book dealing with every body system as a series of headings and sub-headings. The format sounds boring, but is actually an excellent preparation for the now inevitable M.C.Q. paper, as well as being handy for last-minute revision. While not claiming to be a complete medical textbook it is nevertheless a valuable adjunct to the more familiar tomes.

P. FIELDER.

N.B. Those wishing to review books for the *Journal* should contact Olivia Hudis.

SPORTS REPORT

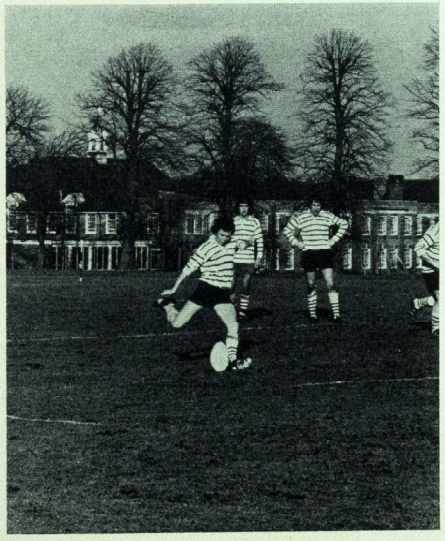
RUGBY, SOCCER AND TENNIS

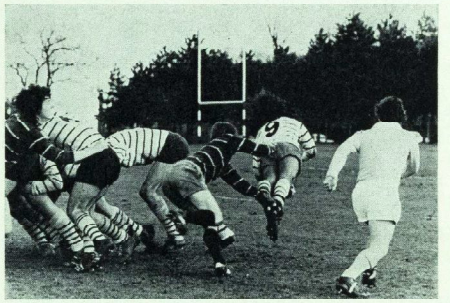
UNITED HOSPITALS RUGBY CUP 1974

Bart's v. King's at Chislehurst WON 16-6

This second round match (Bart's had a bye in the first) took place on February 7th and was not a good game from the spectator's point of view apart from the fact that Bart's won. It was a fine afternoon, but bitterly cold; fears about the state of the pitch were largely unfounded, and the snow of two days previously did not have much effect on the way the ball was played.

The first score came after four minutes, when Powell put over the first of four penalties; then followed two unsuccessful penalties to King's. Bart's did not play as well as expected; they ran the ball too much, and tried only a few of the many moves which they had rehearsed. King's were tackling well and playing defensively, so that more high kicks from Bart's could have led to a much increased score. The highlight of the first half, in which Bart's were pressing hard, was Dunn's break down the right-hand side (or so he says!). The crowd were ecstatic, but there was no score, unfortunately. Powell was in fine form, and scored two more penalties in the first half, both from





45 yards. These were matched by the King's kicker who now seemed to have found his mark, after three failures, so that Bart's led 9-6 at half time.

In the second half, Bart's had worked out the King's pack limitations, and were able to get majority possession. Four minutes into the half, some fine running led to a try by Findlay-Shirras, but it was disallowed as having been bounced down.

Another penalty gave us 12-6, and five minutes before no-side, Allen touched down the try, to make the final score 16-6.

Bart's: H. Maurice; J. Laidlow; S. Bonn; N. Dunn; N. Findlay-Shirras; J. Powell; M. Porter; S. Sullivan; B. Marien; D. Badenoch; G. Aitken; P. Gough; J. Allen; J. Capper; J. Kaye.

Bart's v. Guy's at Richmond LOST 11-16

The match itself seemed to play a minor part in the events which took place at Richmond on February 19th, and on which the national press failed to comment!

It is believed that, in the finest tradition, it was the Bart's supporters who arrived at the bar first, to regale themselves for the exertions ahead. The team itself arrived in high spirits, having shared their coach with the Casuals, a faction never exactly famed for their sobriety. While the team departed to the dressing-rooms their supporters took over the stand, a move with which the Guy's men did not agree, as was evident from the exchange of flour bombs which followed. Some Guy's consultants were also unfortunate enough to be sitting in the way.

The appearance in the middle of the pitch of three Guy's men carrying the head of our beloved Percy, who had been half-inched from the College Hall bar at three o'clock that morning, caused a large party of Bart's men to attempt a rescue. A mass fracas in the middle of the pitch followed; this lasted until the teams appeared at 2.45 for a delayed kick-off. At this point, renewed effort by supporters restored Percy to his rightful owners.

The game began really well for Bart's, who were all over the opposition in the first 25 minutes. The first try came after only six minutes when some fine passing to the left along the three-quarters gave Busk the try.

Twenty minutes later, McIntyre picked up the ball from a five-yard scrum, and passed to Capper, who scored the try by falling backwards over the line and stretching his hands over his head, while Allen applied the downward force to the ball. There is still some difference between them as to who scored!

Fitton, the Guy's No. 12, kicked two penalties in the first half to give Bart's an 8-6 lead at half time. Powell had missed both Bart's conversions, and it was unfortunate that he never really found his mark until the end of the match.

Guy's tightened up in the second half, and Bart's gave away another two penalties to bring the score to 8-12; in the whole match, Fitton scored four penalties from nine attempts. Poor Bart's tackling led to a try by Cook, and then Bart's became really desperate. Half-breaks abounded, but they were covered well; Powell scored his first and last penalty of the match and the score was 11-16. Bart's were working their way back up the field when no-side was given at a line-out on the Guy's 25-yard line.

Our lack of success was put down to inexperience, but most of the XV will still be together next year, and we hope for better things to come.

Bart's: H. Maurice; J. Laidlow; N. Dunn; S. Bonn; M. Busk; J. Powell; M. Porter; D. Badenoch; B. Marien; S. Sullivan; G. Aitken; P. Gough; K. McIntyre; J. Capper; J. Allen.

R.T.J.

Thanks are due to Nigel Dunn for his opinions, and to Lawrence Emtage, who took the photographs.

SOCCER CLUB

A report of a season of average achievement in the league is in equal danger of undue pessimism at our prospects of ever winning the competition (or of progressing to the final stages of a Cup) and of glib optimism for the coming season, fortified by the thought of the two or three (or eleven?) freshers who will make us into a good team.

Trying to be realistic, the league this year has been dominated by London and Middlesex, with UCH next best and Bart's a little way below them. London beat us, twice, very convincingly, but we produced a good performance against Middlesex, beating them 5-1 at home, although we lost the return. We played two very close games against UCH, losing each time to goals in the last five minutes. So we do have a chance of being the top team next year. If we are to win the league however, we must correct our tendency to drop points against some of the weaker sides, eradicating the slackness which, for example, gave Westminster their only win of the season. Tightening up in defence would also have got us further in the ULU and UH cups, from both of which we departed in the first round, each time by one goal margins.

On the positive side, all but one of the first team will be here next year and there have been some particularly encouraging personal performances this year, notably by Paul Spencer and Dave Watson at the back and by Peter Wilson and Pete Smith in attack. Paul and Dave have both been picked for the UH side, and Pete Jerreat and Alan Sinclair have played regularly for the University.

The second eleven have not had a happy season, mainly because of many cancellations by opponents. As a result the second team has played only four league games since the New Year. It is not surprising that enthusiasm has waned, and we have had little success in the matches that have been played. James House has cheerfully accepted the burden of keeping goal for the seconds, and the amount of practice this has given him has produced some very competent performances. Peter Hindmarsh has put a lot of effort into keeping the midfield going, and Lawrence Shaw has been averaging a goal a game this season.

Results

FIRST XI

League

Opponents	Venue	For	Against
RDH	away	5	1
Middlesex	home	5	1
St. Mary's	home	2	0
St. George's	away	3	2
St. Thomas'	home	2	3
London	away	1	6
Westminster	home	4	1
RDH	home	4	1
UCH	home	0	1
King's	home	1	0
UCH	away	1	2
Middlesex	away	0	2
Guy's	away	1	0

Cup Games

AFA Cup:	v. Old Esthamians	0-4
ULU Cup:	v. Guy's	2-3
UH Cup:	v. George's	1-2

Friendlies

v.	Marine Midland Bank	4-0
v.	HAC	4-7
v.	Merton College, Oxford	7-0
v.	St. John's College, Oxford	3-1
v.	Southampton Medical School	0-2

Results

SECOND XI

League

v.	UCH	home	2-2
v.	Middlesex	away	1-3
v.	St. Mary's	home	3-1
v.	London	home	1-3
v.	Westminster	home	1-2
v.	Middlesex	home	4-2
v.	Guy's	home	2-2

Cup Games

UH Cup:	v. St. George's	0-3
ULU Cup:	v. QE College	4-5

The Tour

And now the tour which, really, Trevor Turner wants to write about, because he scored a goal and nearly saved a penalty and he's the editor. So in order to get this report printed I must point out that it was a great goal, a superb goal, the cameras ought to have been there, and we all think you were great, Trevor—and you also caught three corners without dropping the ball afterwards.

This moment of football history came in the first game of the tour, against Merton, when we were 5-0 ahead, and Trevor was so keen to come out of goal that we stuck him at centre-forward to shut him up, then watched amazed as he slipped a right-wing cross under the keeper for the sixth goal. Trevor also wishes it to be widely known that he provided the pass for the seventh—well, yes, that's true too, but Ron Knight, the well-known unemployed doctor, had a hand in it (no, the goal, cheeky), beating three men and scoring with a fine shot from a narrow angle. To be fair to the other members of the team, Pete Smith scored a great hat-trick in this game, including one goal that was the reward of hours of practice, when Pete Hindmarsh put a superb cross right on to Pete's head, and he nodded the ball firmly into the top right-hand corner. Nice one! Earlier on the scoring had been opened by Bill McCullough who fired a through-ball past the advancing keeper, with Dr. Ron volleying the second.

In the next game, St. John's gave us a very close match. After Pete Smith had given us an early lead, St. John's came back strongly and only solid defence by Paul Spencer, Dave Watson and Dandy Tim Richardson, the sailor's friend, kept them from having a few shots at Trevor. By the middle of the second half, we seemed to have survived, although St. John's deserved to equalise. This thought occurred also to Dave Watson and, being a fair sort of bloke, Dave rewarded St. John's' efforts by delicately lobbing a 40-yard back pass over Trevor's head and into the top corner. At least it stopped Trevor pestering to be let out of goal. However, we counter-attacked strongly and took the lead again when one of John Cooper's long, long throws (so dainty for an acromegalic) was neatly backheaded in by Ron at the near post. Five minutes from the end, we made sure of the match, when John Cooper clubbed the ball in from close range.

Two wins and a lot of ale had gone to our heads a bit, but we were soon cut down to size the next day by a very competent side from Southampton Medical School. We somehow managed to keep the score down to 1-0, after 45 minutes of continuous pressure, and at the start of the second half it took a couple of good saves by their keeper to stop our forwards equalising. However, a second goal, from the penalty spot, after a harsh hand-ball decision against Ron Knight, rather demoralised us and, after this, Southampton came closer to increasing their lead than we did to reducing it. As for the penalty, Trevor very nearly saved it really, but the ball was neatly placed just inside the post and just beyond his fingertips. But it was a good dive, and you nearly were a hero, Trev.

The Southampton team and their supporters (yes, they had about 20 real supporters—all our spectators were on the pitch) gave us a good night after the match, with Jim House showing the importance of not taking too much out of yourself during the game, as he took both teams through "Clappers", getting us barred out of three pubs on the way. Trevor was equally pleased to find 30 more people who hadn't heard about his goal yet, and even Dave Watson smiled twice.

So it was that the next morning, there was less than total sincerity in the disappointment expressed by some members that our last game had been cancelled because of a water-logged pitch. And by the time we set off for home, Trevor was threatening to devote a special issue of the journal to his goal, so we thought it best to mention it because we needed a report published. I suppose we must like seeing our names in print too.

"The Secretary"

Editor's Note

Congratulations to John Connell, who despite recurrent attacks of anxiety neurosis organised the tour so well, and even included a quick walkabout of Oxford for those of an historical bent. Also it must be recorded that the St. John's post was almost uprooted by a (and I quote) "searing 25-yard volley" from the said hero, but this was counterbalanced by a paranoiac determination in all games to lash each and every loose ball into the far blue yonder. Our thanks also to the four drivers—Ron, Dave, Tim and John—for carrying us safely through this our first tour for four years.

CLUBSTERS!

If your club isn't mentioned it's because you haven't cornered your club secretary recently to write in. Don't let your support lag for lack of publicity. Let big Howard Bloom have your news right away, or else!

TENNIS CLUB REPORT

At the Annual General Meeting of the Men's Tennis Club, held in the Hospital Abernethian Room in December, 1973, it was expressed how near the 1st VI came to repeating their record success of 1972 when they won the University Cup and Hospitals Cup and League Championship. Only a very strong St. Mary's side in the final of the Hospitals Cup prevented Bart's from retaining all three titles.

With another tennis season approaching, the 1st VI can look forward with encouragement. Only John Wellingham has been lost from last year's side; Nick Perry, Jim Smallwood, Peter Mortimer, David Stewart, Tony Dale and John Howell remain to form the 1st VI squad. Nevertheless, new blood is always welcome and so it is hoped that all Freshers interested in Tennis will come forward.

There are six excellent grass courts at the Athletic Ground, Chislehurst, available for play throughout the Summer months, so there is ample opportunity for students wishing to play social tennis as well as those interested in competitive play.

The Club intends to extend the tennis calendar, with the help of the Ladies' Tennis Club, to include more mixed and social tennis matches.

If any of the new intake, both pre-clinical and clinical, would like to play tennis this Summer would they please contact either: —

David Stewart (Captain) at College Hall or Male Students Cloakroom in the Hospital—or

John Howell at Male Students Cloakroom in the Hospital.

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QUESTION TIME

"Editorials", or "Leaders" as certain journals call them, are congenitally designed to be serious, relevant, and overweight. They are meant to be written in impeccable English, yet a leavening of facts must support any given statements; they should present the arguments for both sides of a case with equal force; they should synthesise all aspects of a problem into a coherent whole; and, finally, they should reach some measure and ponderous conclusion. In effect they should be the Heavy Artillery in a journal's armory of selected weapons, to be aimed only at the more obviously hittable targets, targets worthy of a first-page assault. Sadly, but unsurprisingly, they have a consistent tendency to go the way of all "big guns" in unsuitable conditions, they get stuck in the mud.

However, if such writings are seen as prefaces to the following pages, as mirrors into the attitudes of those putting a journal together, then their primary task becomes one of readability; they must provoke interest and amusement (whether scornful or approving), and try to appeal to something sprightlier than the dull "spirit platitudinous". It is so easy for a writer to seat himself at the sacred desk, sharpen his quill, see the word "Editorial" grinning up at him, and became transmuted by a sense of awesome responsibility into a pompous, jellified hack (e.g., see my opening sentences). Contrariwise, he may flee to the opposite extreme, to the shrill heights of the radical polemic, demanding all sorts of ideal situations and sudden changes despite being without the responsibility for or an understanding of the issues at hand. Speeding through lights is great fun, unless you are the driver who may have to carry the can. So, enough of statements, let us instead revert to the interrogative mood and try a few very simple questions.

1. Why was the "lay-staff" dining-room closed due to staff shortages? The closing of the smaller "consultants" one would have been much more efficient in terms of queue length and seating capacity per serving area. Come to that, why can't we all eat together as they do in many other hospitals and large companies?

2. Why are cars allowed to roam within the hospital, yet bicycles (which often clatter and carry distinctive, high-pitched bells on them) must be pushed? Bikes may bruise, but cars can kill. Does not logic demand that car drivers also should push their vehicles around when inside the ancient confines?

3. How far can patronage influence one's chances of a house job here? No system can hope to eliminate altogether some subjective element, but is it healthy to let individuals control the careers of other indivi