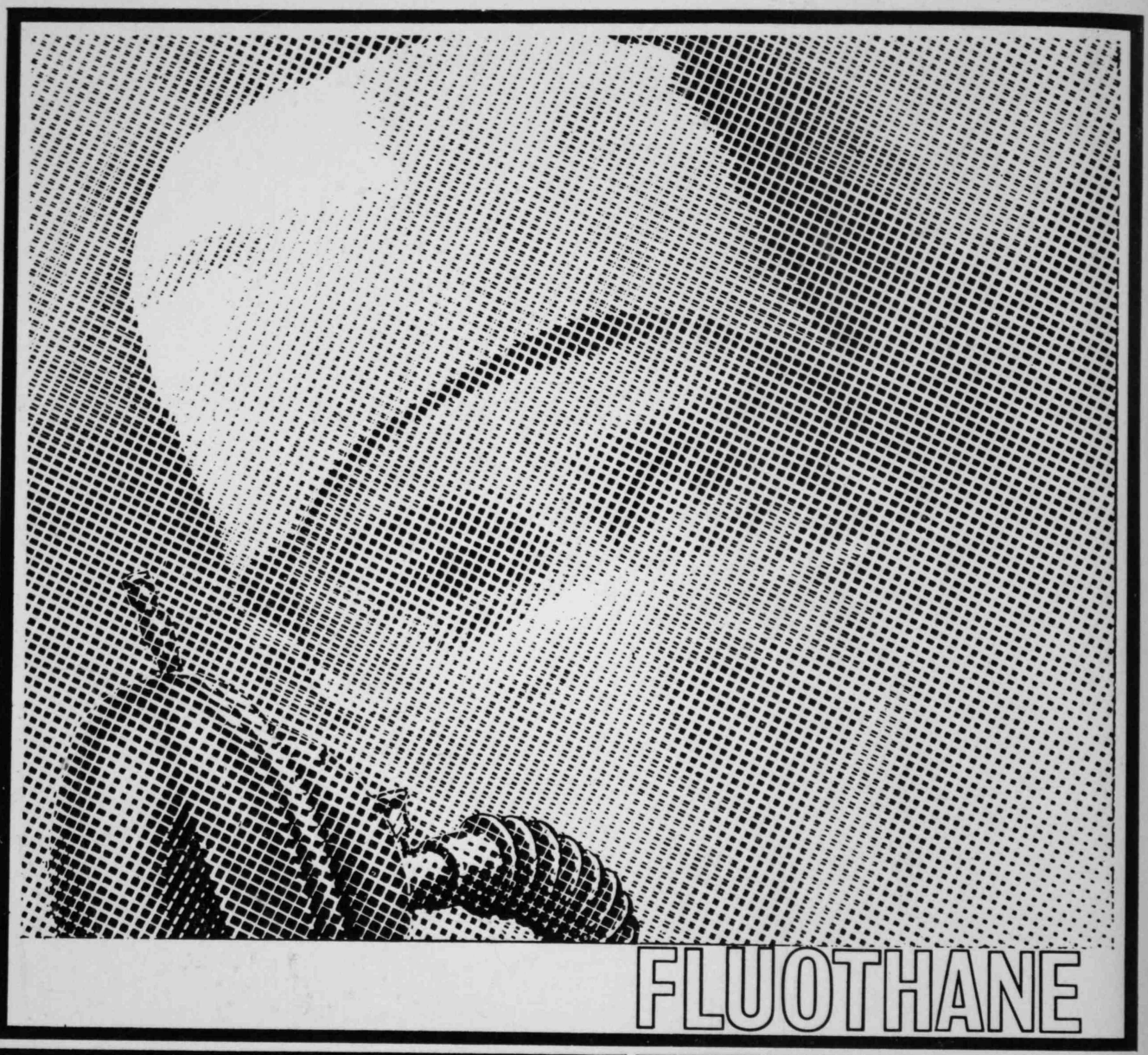

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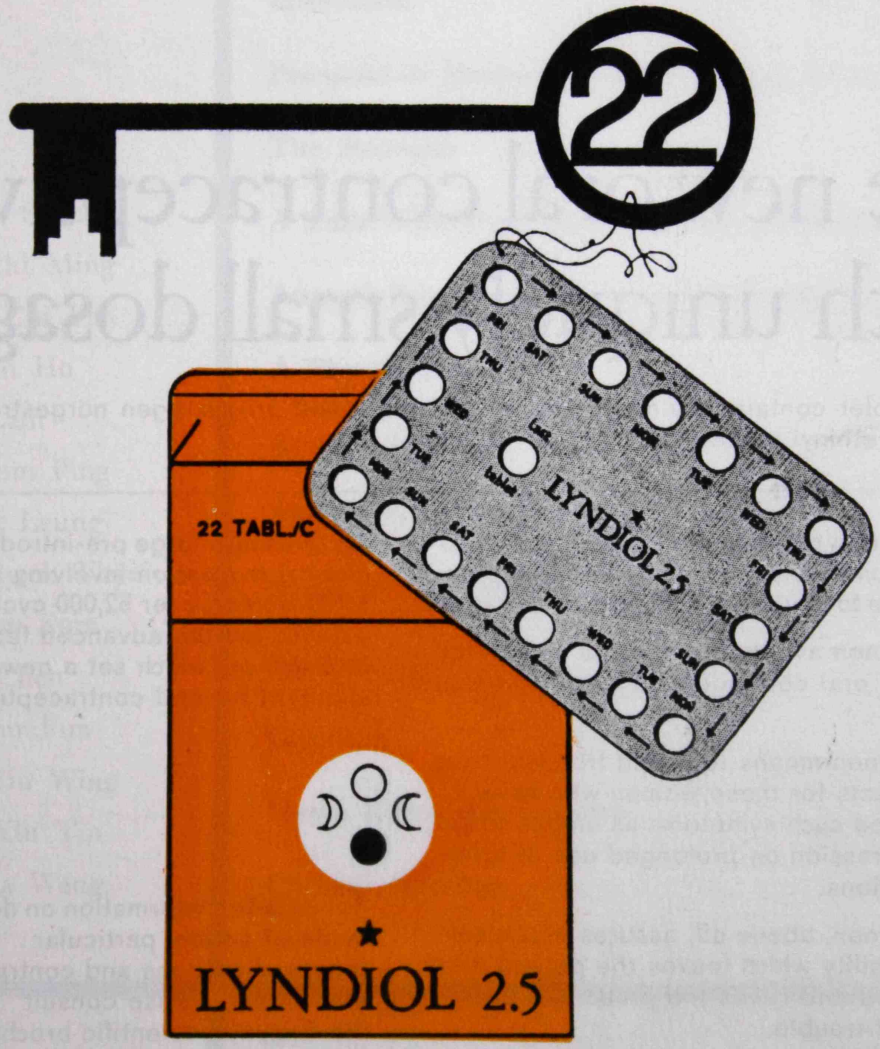

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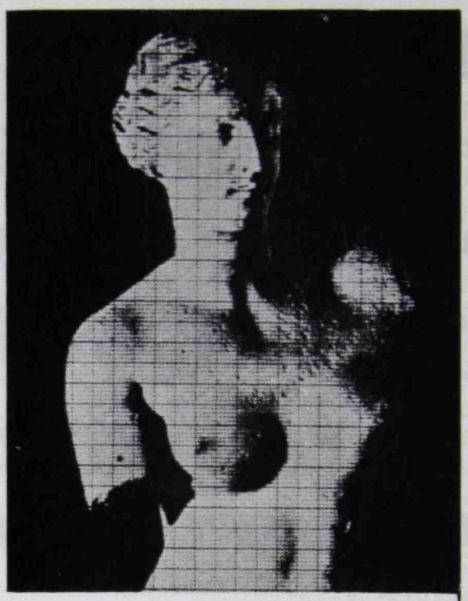

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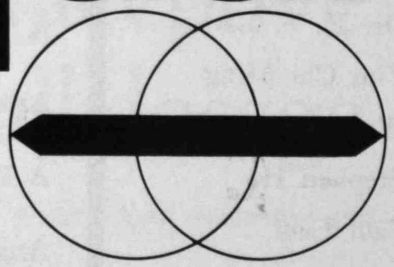

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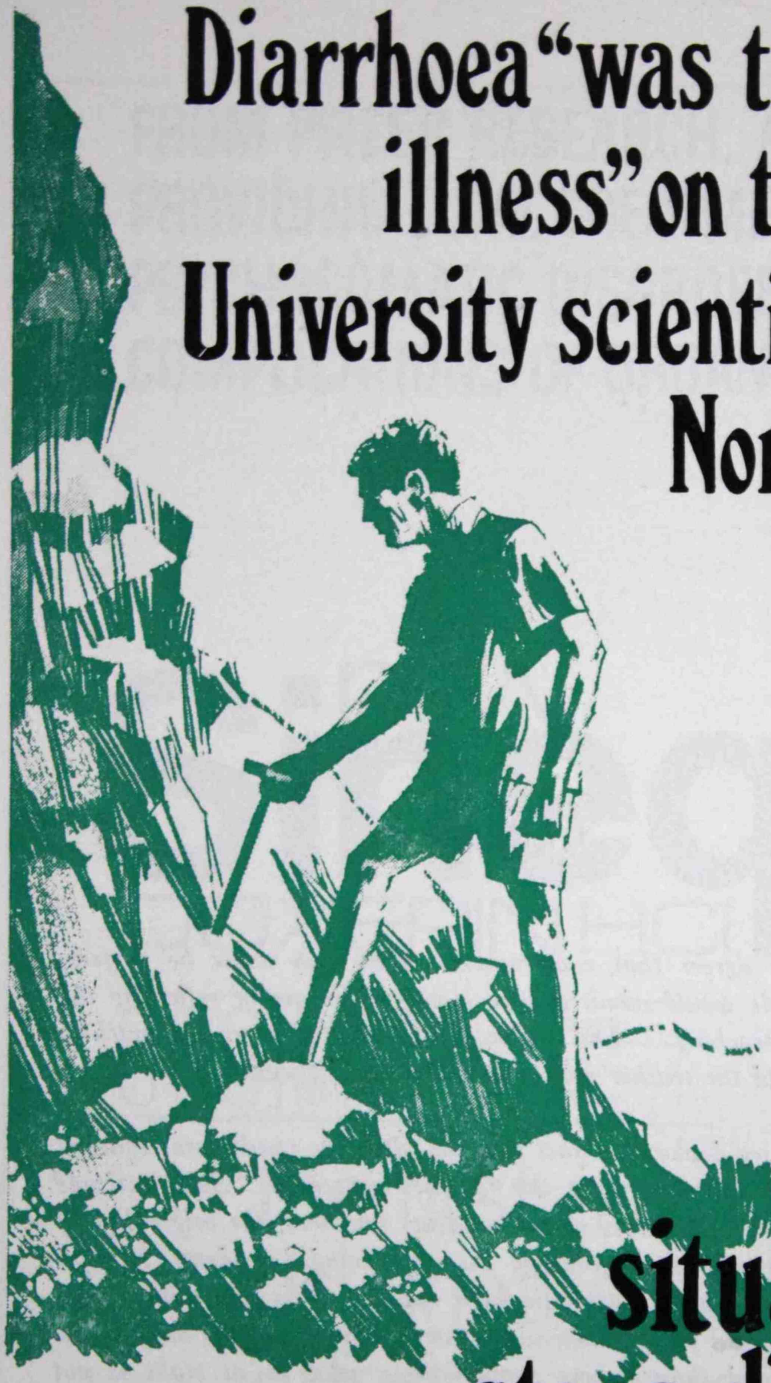
Editorial

Everybody agrees that examination system can never be perfect. Yet most people would admit that it is a good means of reflecting the effectiveness of teaching. The student can use it to measure how much he has learned, and the teacher can know where the difficulties lie.

However, we deplore the fact that too often the results are regarded with too much seriousness, by the teachers especially. Such attitude not only increases the stress on the student, smothers, the originality of thought, but it will also encourage the weak-minded students to turn to unconventional means to obtain high marks. It is sometimes a sad sight to witness foul plays practised by some medical students here. One should understand that, during examinations, what is at stake is not the marks, but the integrity of one's personality. We sincerely hope that everyone who aspires to become a member of the great medical profession will have the moral courage to resist the temptations of such unjustified manoeuvres in examinations and taking advantages over one's classmates. After all the punishment of losing one's self-respect is much worse than failing a test.

We are sorry for the delay in putting out this issue. This was due to some troubles with the printer. We had thought of changing printer, and it is after much negotiation that we finally decided to use the same printing company. We wish to apologize for the unfortunte delay.



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RETROSPECT AND PROSPECT: REFLECTIONS ON SURGICAL PRACTICE AND EDUCATION

The First Kenelm Digby Memorial Lecture
by

Sir John Bruce,
C.B.E., T.D., LL.D., D.Sc., F.R.S.E.,
Regius Professor of Clinical Surgery,
University of Edinburgh.

The rememoration, from time to time, of those who have earned the respect and the affection of those amongst whom they have lived and laboured is more than simply a pious duty, or an act of veneration. It is a salute of indebtedness to them, and them, and through them to history. It is a frank recognition—though at times, in our complacence over new found skills, we tend to forget it—that we are but the heirs of a goodly inheritance. This is especially true of the physician, to use that honorable designation in its Hippocratic sense; for more than most, in the words that Tennyson puts into the mouth of Ulysses, he is "part of all he has met". Guy de Chauliac as long ago as the 14th century, presumably thinking along similar lines, declared: "We are as children carried on the shoulders of a giant; aided by the labours of our predecessors, we see all they have seen, and something beyond".

It is particularly appropriate to recall this especially to the surgeons of today—a time when the foliage of the surgical tree is so colourful and so exuberant that it is easy to forget the roots from which it has been nurtured; easy, in our conceit, to fall into the error of regarding the great achievements of modern surgery as of our own devising.

This lecture is a tribute to the memory of a dedicated teacher, a fine surgeon and a great gentleman, Kenelm Digby, and I am honoured by the invitation to join you, and grateful for the privilege of sharing with you in this, your first act of homage.

It was not my good fortune to know Digby in the flesh, but there can be few surgeons of my vintage in the Commonwealth who are unaware of the legend of his courage in adversity and under duress, and of that enviable blend of skill and humanity which are the hallmarks of the great doctor—the kind of doctor of whom Robert Louis Stevenson of my native city—who was often at the mercy of doctors in his short, disease-wracked life—could write so movingly:

> "He is the flower, such as it is, of our civilisation; and when that stage of man is done with, and only to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race.
>
> Generosity he has such as is possible to those who practise an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are more important, Heraclean cheerfulness and courage. So that he brings air and cheer into the sick room, and often enough, though not so often as he wishes, brings healing".

Kenelm Digby was one of the architects of this Medical School—a School which is possibly equalled but, in our Commonwealth, certainly not excelled, in instellectual vigour and academic achievement. Today in surgery the vision, the industry and the integrity of G.B. Ong and his colleagues is making of this place a Mecca for surgeons who admire artistry and honesty. Hong Kong is now at the cross-roads of the surgical world, and we must be grateful that fate—that unpredictable divinity—spared Digby after his years of labour and affliction to see the burgeoning of the seeds he had helped to sow.

The selection of a topic for a memorial lecture is by no means easy. The audience is usually varied in its composition, its interests, and its tolerances. This alone is enough to preclude the technical matters that have been my chief concern, and the wit and erudition to play the philosopher are gifts that have passed me by.

In the event, my choice of subject has been dictated by the fact that Digby's talents came to fruition in the first decades of the century, a heady adventurous period in surgical history, when craftsmen of unsurpassed execution were exploiting with courage and imagination the new opportunities made possible by the solution—as it was fancied to be—of hospital infection and wound sepsis and when the simple and crude environment of the surgical operation was beginning to acquire a dignity and a discipline. It was the heyday of surgical masters whose operative repertoire was catholic and who ranged with unquestioned and sometimes arrogant confidence, if not always finesse, from top to toe. It was a time of pioneers, of great individualists, when a surgeon was able personally to do everything then known to be possible for the recovery of his patient. It was a time of superb surgical dexterity, a time of shrewd clinical observation, of great diagnostic acumen independent of laboratory and other aids; it was the start of the Golden Age of Surgery, which not even yet has reached the pinnacle of its achievement. Well might the surgical tyro then exult:

"Blest was it in that dawn to be alive;
But to be young was very heaven"

as he reflected that the discipline of his choice was now firmly established among the arts and sciences of healing.

Indeed, just shortly after I graduated, when Digby had begun here to earn repute as a skilful and careful surgeon, one of the leading lights of the British surgical world had been tempted to prophesy that surgery had reached its zenith, and nothing remained for the surgeon but to brush up and improve his techniques. Of course, this assertion has been made regularly by surgical maestros since the time of Ambrose Paré in the 16th century! The dictum of the distinguished British commentator met the usual fate, for the lie has been speedily given: since the years of the last war and its restless aftermath, there has been a virtual and remarkable revolution in surgical thought and practice, and the zenith of surgery is still beyond our vision.

I have been privileged to live through these decades, and for part of the time to head a University Department. And so it occurred to me that it might not be inappropriate to the occasion if I were to invite you to take with me a brief glance backwards, and a quick peep through the curtain of time at the future. You may recoil at this ambitious design for though my seniority may just excuse an excursion into retrospect, by the same token, among my junior colleagues at least, it would not be regarded as a licence for prospect. Yet, as the present is the offspring of the past, so is it the parent of the future, and I am convinced that from time to time we must pause and place the present and the past in balance.

My concern is not with autobiographical reminiscence, or with the fascinating topic of expanding operative technicalities: rather it is with the scientific concepts and philosophies that seem to me to have influenced surgical practice, and its humanistic basis.

The chief philosophy which now pervades all modern surgical effort is the legacy of a handful of surgeons at the turn of the century. Of these, two in the English-speaking world tower above their fellows—Halsted of Baltimore, and Moynihan of Leeds. Both were superb craftsmen; but both brought to an exquisite operative skill something new—*a reverence for human flesh*. I do not intend to denigrate Halsted's contribution by confining my observation to the message of the great Leeds surgeon. Halsted is unquestionably the father of modern American surgery; but to us of Britain and its Commonwealth, Moynihan was the bridge-builder between the old and the new surgery in our own ken.

Reverence for human flesh

When Moynihan entered the surgical scene, surgical craftsmanship, thanks to Lister, was safer and greater in enterprise than ever before, but it was not notably different in execution from the pre-Listerian days. The limelight was still on the operation and the operator and the operator's eye

was still on the clock. Speed and dexterity were the acknowledged hallmarks of excellence but with them, often enough, went roughness, disregard for tissues and insensibility of blood loss.

Moynihan campaigned vehemently against this. He became the apostle of gentleness. He preached, and he showed by example, that surgery was a gentle, indeed a merciful, art. A continental visitor to his theatre, noting his meticulous control of bleeding, exclaimed: "Is your British blood, then, so valuable?" To Moynihan, it certainly was.

In the preface to his classic on "Abdominal Operations"—a page of superb prose which I think should be required reading for all surgical apprentices—he declared:

> "Surgery is not only a matter of operating skilfully. It must engage in its service qualities of mind and of heart that raise it to the very highest pinnacle of human endeavour. A patient can offer you no higher tribute than to entrust you with his life and health, and, by implication, with the happiness of all his family. To be worthy of this trust we must submit for a lifetime to the constant discipline of unwearied effort in the search for knowledge and of most reverent devotion to every detail in every operation that we perform.
>
> Of all the temples in the world none is more sacred than the operating theatre. No high priests nor any acolytes engage in nobler ministrations than do the surgeon and each one of his assistants. Nothing base should dwell in such a temple. Since no joy is greater than that of service in such a sanctuary, no responsibility is greater than that which falls daily to our lot".

Moynihan himself remained faithful to these high ideals throughout a lifetime. No trouble was too much if it made for the safety of those entrusted to his care. He was the first to change into clean operating garments, with cap and mask: one detractor called him the "pyloric pierrot" and another, learning of the clean white operating shoes, enquired if he "intended to stand in the abdomen". Undaunted, he persisted with his so-called foibles—rubber gloves, the green drapes, the red towels of danger. His opening address to the Association of Surgeons of Surgeons of Great Britain and Ireland in 1921 was on "The Ritual of a Surgical Operation"—it too should be required reading for the young surgeon—and yet a famous metropolitan surgeon left the meeting, angrily exclaiming that the only thing "he would ever take off for an operation would be his collar—and that not for the sake of the patient".

It is scarcely possible to overestimate the influence of Moynihan's philosophy on surgical craftsmanship. His fame does not rest on the development of a particular operation, or a crucial discovery, or in practice amongst the famous. It rests on the change he wrought on the whole *quality* of surgery. He blazed a trail along which British surgeons—and by implication the surgeons of the British Commonwealth—have marched ever since; and the "affectations" for which he was ridiculed have become part of the inflexible ritual of every responsible surgeon.

Surgery more than the operative procedure

A second fundamental concept that began to take root in the twenties was that surgical therapy was more than the actual operative procedure. This first emerged when the need for scrupulous postoperative management was recognised but it was soon appreciated that the preparation of the patient before operation was also vitally important.

The compelling stimulus was the First World War, with its appalling carnage and the inability of the medical services fully to comprehend the causes of so many of the fatalities. The response was an acceleration of a change in emphasis—already haltingly begun—from anatomy and pathology to physiology as one of the props of surgical practice and from that to a revival of the experimental method in defining the scientific milieu of surgical practice.

After the discovery of anaesthesia and antisepsis, surgeons for a time had become too immersed in the excitements—and rewards—of the clinic and the operating room to spare time for the laboratory. The message of John Hunter and of Joseph Lister was for the most part unheeded, but

the more shrewd observers had come to recognise that the operations of surgery, however beneficent, however skilfully executed, were all of them a form of injury, succeeded by what Lériche called the "maladie postopératoire". The scrutiny of homeostasis and its defences soon became the urgent challenge of the surgical physiologist and, ever since, physiology has intervened in a most gratifying way in every aspect of surgical endeavour. The surgeon no less than the physician has come to think in terms of disordered function and its correction, more than in terms of structure; indeed his interest in morbid anatomy is in its effects on function, and their possible relief by his operative ingenuities.

Over the last 40 years the functional and experimental approaches to the problems of surgery have yielded a substantial dividend, not only to surgery but also to all the disciplines of Medicine. This is a story for another day but, so far as surgery itself is concerned, it is probably true to say that today the gross circulatory, metabolic and nutritional derangements that beset operation and injury are appreciated, if not yet understood in all their complexities. The steady fall in the number of deaths following operation is an index of this. Indeed that so many surgical activities are accomplished without anxiety and without complication is one of the inspiring features of modern surgery. Today it is more often the progress of the "disease" that determines the outcome of surgical therapy than any hazard inherent in operation.

Stemming from a practical and purposeful concern with hominal physiology, the resurgence of experimental surgery since the last war has added enormously to the scope of surgical practice. There are still some who, in ignorance of the diverse activities of a surgical laboratory, disdain what they stigmatise as "dog surgery" but none can afford to ignore its discoveries: discoveries such as that of Blalock, in 1930, of the cause, and the treatment, of surgical shock; of the studies in cardiopulmonary physiology which, on a muted key and with the help of our anaesthetic and pharmacological colleagues, have created the safety of modern anaesthesia and Assisted Respiration Units and, on a major key, have made possible the surgery of the lung and of congenital and acquired heart disease; of the physiological studies that have provided a rational basis for the treatment of endocrine, metabolic and alimentary diseases, and stimulated such special ventures as Renal Dialysis and Coronary Care Units.

Fortunately it is becoming gradually obvious that the dicta of the self-styled "pure clinician" are no longer accepted uncritically upon the authority of even the most distinguished unless they are backed by relevant knowledge and pertinent scientific enquiry. The attitude of mind that automatically places scientific enquiry lower on the scale than clinical work has been an unconscionable time a-dying, but for the last two or three decades it has been in its death throes.

The concept of measurement

The application of the concept of measurement—which in sophisticated form has taken a long time to gain a foothold—has become one of the most significant of the factors that mediate modern surgery. Some of you may recall that the great Scottish physicist, Lord Kelvin, insisted that "when you can measure what you are speaking about, and express it in numbers, you know something about it, and it is scientific". In my time as a house surgeon, the only measurements available were the blood count, the specific gravity of the urine, the blood urea and a primitive test meal. Our ability now to measure with mathematical accuracy such variables as cardiopulmonary, gastric, pancreatic, hepatic and renal function and to dissect with precision the blood and its chemical and biological content has not only entrench surgery as a scientific discipline, but it has also fostered a further change in surgical philosophy.

Treatment of the patient: not treatment of the disease

Until the end of the last war, most surgeons in a therapeutic sense still thought largely in terms of the treatment of a disease. For peptic ulcer, for example, the operation was a short circuit and all breast cancers were submitted to radical mastectomy. Today this "blunderbuss" approach has gone, and surgical treatment more and more is becoming "tailored" to the particular and often

the measured needs, not of the disease, but of the individual patient.

Biological approach to surgery

It was a natural sequel to the study of function, to experimental surgery and to the growing sophistication of mensuration of body activities that another advance should occur in surgical philosophy—the tendency that has grown up for surgeons to think "biologically". This is exemplified in such conditions as cancer, in which dissatisfaction and disappointment with the results of our efforts has dictated a change of outlook from the mechanistic to the biological. It was disquieting that two cancers, apparently identical and treated identically, could behave with such disconcerting and diabolical difference. The demonstration in 1941 by Nobel prizeman Charles Huggins that certain cancers could actually disappear after the removal of the adrenal glands was a breakthrough: the definition of cancer on which we had been reared—that it was tissue anarchy, autonomous and beyond restrain—was no longer tenable.

It has become obvious that in cancer we are dealing with a biological enigma which as yet we have no means of resolving. It seems likely that in many the disease has been firmly established not only in its local site but also distantly long before an opportunity occurs for treatment. The significance of this is that it has stimulated a new philosophical concept, namely, that since cancer has so often disseminated before treatment is sought we should think not only in terms of cure but also in terms of the control of its consecutive manifestation for as long as is possible compatible with mercy.

So far my retrospection has concerned only the humanistic and intellectual influences that have contributed to the evolution of surgery in our century. However, I can scarcely avoid reference to some outstanding technical advances. Many of them have stemmed from the discoveries in other disciplines which have been enlisted in the forward march of surgery. The earliest of these—radiology—is now of respectable age. It is a far cry from the crude glass plate shadows which the Medical Electricity Department supplied in my student days to the sophisticated radiodiagnostics and radiotherapeutics of today. The development of a myriad of endoscopic devices, of electronic measurement and monitorship has culminated in a remarkable diagnostic precision and in an ability accurately to keep trace of a patient's condition before, during, and after operation.

The advent of the antibiotics, however, is perhaps the therapeutic development which has most significantly altered the character and practice of surgery in the past 50 years. In the days of my surgical youth, infections—and particularly pyogenic infections—carried a formidable and distressing death rate; and drainage and even amputation—often that last act of desperation-were often unavailing. I can recall such frantic endeavours as immuno-transfusion, when a parent was inoculated with staphylococci some hours before donating blood in an attempt, rarely successful, to save the life of a child with osteomyelitis. But even when the shafts of death were turned aside, the legacy of deformity was enough to daunt the most skilled and the most humane craftsman.

Antibiotics have largely prevented the surgical sequelae of infection. The need for surgery in the complications of venereal disease is largely past. Chronic osteomyelitis which had challenged surgeons since before Lister until the last war has all but disappeared from our surgical wards as better control of the acute phase is achieved by antibiotics and early drainage. The nature and magnitude of the surgical management of tuberculosis has in many parts of the world been profoundly altered, though I am well aware that there are still centres such as this which demand—and I know have received—surgical care that is renowned for its originality of approach and notable for its outstanding success.

At the same time the control of the most common infections has given to surgery more than it has taken away. It has extended the scope of operation to areas forbidden of access because of the near inevitability of postoperative infection (the chest, the oesophagus, the colon and the bladder) though the other supports of modern surgery—blood transfusion, anaesthesia and the control of blood chemistry—have had their appreciable share in these successes.

Apart from this, the successful treatment of formerly lethal infections such as pneumonia has been followed by a generous extension of life expectancy, and has increased the numbers of old people with surgical problems, especially those of malignant and chronic degenerative disease.

Perhaps the crowning technical achievement of modern surgery—and the most controversial—is the transplantation of organs. Only time will answer all the ethical, philosophical, and economic problems posed by the current philosophy of "new lamps for old"; and as one nearly beyond the battle, I can only regret that our profession has not been left in peace to resolve the difficulties we have created. Nevertheless, there are no surgeons who are not proud of the brilliance of some of the feats of transplantation; and many of you will appreciate that on this high peak of surgical endeavour the legacy of our surgical past has yielded its most spectacular, if perhaps not yet its most useful, dividend.

Prospect

And now, what of the surgery of the morrow? Churchill, in one of his addresses, said that "the longer you can look back, the further you can look forward". This is not true of surgery, for so far as my recollection goes, nobody yet has predicted successfully its future development for even a short, let alone a long, period ahead. However, what can be said, in the light of the achievements of the last 30 years, is that never have either the arts or the sciences of surgery been more vigorous or more invigorating: and that if the pattern in the years to come is not clear, the fabric will certainly be sound. The future is indeed secure.

I imagine that we are within measurable distance of solving the problem of the rejection of alien tissues and that transplant surgery with then expand enormously; though in one organ at least—the heart—some sort of a mechanical pump will fortunately render the use of a human donor heart unnecessary.

The continued elucidation of the intimate and ultimate mechanisms of disease will certainly lead to earlier and consequently less demanding surgery; in some situations it may even diminish the need for such costly remedies as transplantation, as, for example, the control of vesico-ureteric reflux in the induction of chronic renal disease.

In two areas there is opportunity for significant advance. Trauma—now one of the captains of the men of death—demands a much more enlightened approach. The crude parameters of the injured state are well known, but the irreversible shock of major trauma is a complicated problem in morbid physiology and will take the surgical researcher into the complexities of votal cellular geography, or the cellular economics of physiological derangement. There is no doubt that if the tragic death toll of accident is to be reduced, the principles that have evolved in the years since the last war to determine the success of modern general surgery will have to be applied with more enthusiasm—and sometimes even at the expense of the early correction of the anatomical sequelae of trauma.

But perhaps the greatest challenge to the surgeon in the years ahead is that of malignant disease. It is apparent, biologically speaking, that cancer is unpredictable in its behaviour and in its threat; and techniques must be found for assessing its inherent biological aggressiveness in time to design an effective therapeutic program. The disappearance of established cancers, and the sometimes long regression of metastases, point to a hitherto largely neglected aspect of cancer research, the defensive resources of the host. There is evidence that some cancers provoke an immunologically based resistance to themselves very similar to the rejection mechanism in homotransplantation which may for long contain them and sometime induce their annihilation. Some hope may lie in the exploitation of this immunological response, by enhancing it and so stimulating the repulse of tissues that have ceased to live in amity with their neighbours.

Mr. Dean: It would be inappropriate in a lecture commemorating the labours of a great surgical teacher to ignore the educational problems that beset modern surgery.

But first let me say two things about changes in the surgeon himself. I began my surgical career some time later than Digby, but still in the era of the great surgeon-individualists. There are still some

who aspire to emulate this; but the rapid advances, in knowledge of the disordered physiology of disease, and the skilled measurement of it, increasing diagnostic precision and the complex techniques ensuring it, and the metabolic problems of pre-operative and post-operative management have left most surgeons only too thankful to become members of a team, of which happily they are sometimes the Captain!

There is a second change in the pattern of today's surgeon. In most centres of surgical education, he has become entirely, or in large part, a "specialist". This is an inevitable result of the massive advances in knowledge and technique. In surgery the frontiers are now so wide that no single individual is equipped to ride all the marches; and save in small communities and distant places, the day of the general surgeon has gone forever.

The impact of this change on surgical education has been slow to be recognised in Britain and its Commonwealth, with the exception of Canada which has subscribed to the American pattern. Until quite recently the young surgeon in the United Kingdom learned his surgery by apprenticeship to a master—a preceptor, if you like—and by personally contrived or inspired sojourns in a laboratory or in one of the departments of the sciences basic to surgery. The process was notable for its lack of instruction; the apprentice more or less climbed by his own bootlaces, and perhaps I am nostalgic in affiming that to some at least there was inspiration and stimulus in being somebody's "disciple". I was John Fraser's man, and he in turn had been Stiles', who was Caird's who was Annandale's who was Lister's who was Syme's. You will appreciate that I am conscious of my inability to discharge my own obligations to such a past. But for many apprenticeship was haphazard and unsatisfactory. It is all the more remarkable that it produced generations of surgeons able to hold high their heads in any surgical company.

In North America for more than 50 years there has been a controlled and supervised system of training characterised by an arranged programme of increasing experience and responsibility. The product at the end of the day was no different from—nor, I think, any better than—our own of some years ago.

However, it has to be accepted that our former method is outmoded. One of the principal reasons for this is the lack of preceptors with the width of knowledge and practice to produce the complete "surgical man". For even amongst the depressed class of general surgeon, a man's practice is often selective, and restricted to a particular corner of even that contracting field. Long apprenticeship to such a one is intellectually and practically unrewarding. Today for a wide surgical training the embryo surgeon must serve a succession of masters with different skills and individual surgical interests. This will be more easily possible if and when the proposed divisional arrangement comes to pass in which a number of the small units typical of British hospital organisation are combined under a chairman, one of whose duties would be to ensure a variety of experience and exposure for the surgical tyro. This is a change that will be strongly resisted by the reactionaries, but I think it is inevitable if British surgery is to thrive.

The ambition of the British specialist societies to hallmark their product, and the proposal that the General Medical Council should establish specialist registration has stimulated new interest in education for surgery. Amongst other effects has been the formation by the Colleges and others of a Committee on Higher Surgical Training which seeks to lay down the outlines of a programme for general surgical and specialty training and implies strict standards in the selection of centres where they may be undertaken.

Many must deplore the loss of an opportunity even in title of distinguishing between training and education. Training is the absorpton of current knowledge and acquisition of the technical ability to use it. It is intensely important to the surgeon and to his patients; and there are many splendid hospitals in which it can be conducted with supreme efficiency. But it is different from education, which is the stimulation of intellectual and critical faculties, an ability to receive and to follow new leads on the frontiers of surgery and a readiness to submit both the new—and the old—to scientific enquiry.

It is possibly hair splitting to separate training and education for the two are complementary. But the difference is not only a matter of semantics for, whereas instruction in, and practice of, a craft can be acquired in many environments, education can be obtained only where research and the spirit of investigation are active, and where close contacts with other advancing sciences which have contributions to make to surgical science are easy and intimate. At the moment—and for a long time to come—this stimulating kind of environment can be provided only by the universities. This obligation has been long accepted in the United States and in Canada. We in Britain have lagged behind—a national characteristic—and I would personally be glad to see our new Committee renamed the Committee for Graduate Education, with a predominantly academic university representation.

I should have liked also to have seen more emphasis on the desirability of exposure to research in surgical education. The value of this is sometimes denied, but only because it is sometimes equated with work in the experimental surgical laboratories. Surgical research is simply systematic investigation, designed to increase the sum of surgical knowledge: it may involve experimental surgery, but equally it can be carried out in wards and clinical laboratories —as Cushing, Cuthbert Dukes, Francis Moore and others have demonstrated so admirably in our time. Its purpose is not primarily to discover but to instil the habits of analysis and assessment and to promote the recognition of problems, the methods of their possible resolution, and some familiarity with the modern tools of laboratory investigation which are the clinical tools of tomorrow. It is my personal view that a period of research should be a compulsory part of education for surgery. The argument that some have no aptitude for the bench or the laboratory is one that I find irksome. Indeed an embryo surgeon who fails to detect some problems in his clinical work to interest him and who wants to be only a "hewer of flesh and drawer of blood" would be better out of surgery altogether, and for all time.

I appreciate that the implementation of a compulsory research experience must increase the burden on academic departments in terms of staff and of finance. On the teacher it places great responsibilities—to set a high personal standard in clinic and in investigation, to ensure that the surgical aspirant has the necessary time for the pursuit of knowledge and for reflection, and to secure the appropriate facilities. Halsted once said: "I want only good teachers and receptive students; and the head of a department who can distil a contagious enthusiasm, display imagination and vision, and a humility proper to one who recognises the still enormous gaps in his own knowledge will have many to sit at his feet, and perhaps a Hunter or a Lister to inspire".

This is a time of unease not only in postgraduate education but in undergraduate education also. In the last few years I have been more than little disquieted by the tendency to denigrate the importance of surgery in the undergraduate curricula both in Britain and the United States. Training for surgery is a continuing educational process that begins in undergraduate days. It is essential that students should have an adequate exposure to surgical work in its widest sense in order that a proper proportion of the best will be attracted to a service that provides one of the most satisfying postgraduate careers, with its unique blend of intellectual challenge, practical skill and humanitarian philosophy.

It has been too readily assumed in some places that in the changing pattern of undergraduate education the physician should retain the major rôle. There was a time when this may have been appropriate, when large tracts of disease had not yet come within the ambit of surgery, and nostrums and Galenicals were the order of the day. I have no wish to stir the embers of old controversy, however. What I must say is that if the aim of current undergraduate programmes is to produce a scientifically orientated graduate able to understand and to deploy the further inevitable advances in medical science there is no better place where the principles of modern medicine and their use in the treatment of disease can be displayed than in the surgical wards and theatres, for today surgical practice is almost literally underpinned by science.

And there is an additional bonus, a not

insignificant one. There is much talk these days of preserving the relationship between doctor and patient. This can never be more intimate than is to be found between the surgeon and his patient, and the student should not be denied the opportunity of seeing and learning from it.

However, it is my conviction that in the years to come we shall see a progressive blurring of the boundaries between surgery and medicine, and even a departure from the traditional geographical separation in our hospitals between surgeon and physician. No doubt the reasons for this segregation were once cogent, for the two disciplines were separated by more than tradition. It was not, as the unkind gibe affirmed that the surgeon worked with his hand and the physician with his brain. Each discipline tackled special and different problems, and there was a time not so long ago when intrusion by one into the supposed territory of the other was likely to provoke resentment.

Today surgeon and physician are more and more concerned with the same clinical problems, each bringing to them his particular diagnostic or therapeutic approach.

Increasing, and increasingly intimate, clinical co-operation is one of the happiest features of the modern scene and it would be a logical extension of it to revise the concept of medical and surgical "hospitals", or "slides" or "services". Medical and surgical units dealing with similar kinds of work should be geographically proximate, if not indeed combined, since the methods and the apparatus of investigation are common to both.

I am aware that such a development would not meet with immediate approval. For long the palpable untruth has been proclaimed—mainly by surgeons—that "the surgeon is a physician who operates". If this was ever true, it is certainly not so now, when the techniques and the apparatus of investigation available to the physician have advanced as much as the techniques and the apparatus of surgery. The obligations of both physician and surgeon have become increasingly exacting, and often enough the demands of the operating theatre leave the surgeon with little time personally to undertake the burden of physiological study that may be needed in his most difficult cases. In my experience the intimate association of medical colleagues of equal standing pays a rich dividend. It does not follow that the surgeon then becomes so preoccupied with his surgical manoeuvres that he leaves everything else to the physician: indeed, it is quite the reverse. He interests himself in the functional aspects of disease and the achievements, and the limitations, of medical therapeutics as well as of his own. In such circumstances it is not unusual to find that the physician, brought into close contact with surgery, becomes more aggressive as the surgeon becomes more conservative!

Mr. Dean: I am afraid my discourse has been superficial and discursive. Such as it is, it is my personal homage—and I hope yours to Kenelm Digby. In its ultimate analysis, history is but the story of great men. To some has been vouchsafed the privilege of a memorial that is part of mankind's perpetual heritage—the St. Paul's of Christopher Wren, the immortal lines of Shakespeare, the imperishable symphonies of Beethoven, the inspired canvasses of the Great Masters.

Not so is it with those who have espoused the arts and crafts of Medicine; but nonetheless their memorials, too, are not ephemeral. Pericles, mourning the flower of Athenian chivalry slain by the spears and bows of Sparta in the Peloponnesian War, disclaimed:

> "The whole earth is the tomb of great men; nor is their story graven only on stone that covers their clay, but abideth everywhere without visible symbol, wrought in the stuff of other men's lives:"

I am sure it has been scarcely necessary to help you, his professional heirs, to keep green the memory of a great surgeon, a great teacher and a great gentleman; for as long as the arts of Medicine shall endure in this, the place of his adoption, some part of Kenelm Digby will assuredly survive.

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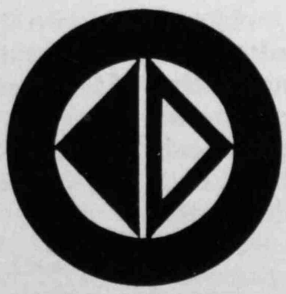

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DEPARTMENTAL SURVEY

SURGERY DEPARTMENT

MESSAGE FROM THE PROFESSOR

The road to surgical specialisation is long and arduous. A surgeon continues to learn throughout his working life. He is a partner of his physician colleague and while he is not a specialist in internal medicine, he must be familiar with most of the medical conditions that may develop in a patient undergoing surgery.

For this requirement, he has to learn the basic principles of both the disciplines of medicine and surgery. In order to acquire this, he has to begin as an undergraduate, for it is in this period of his life that he is taught and learns to correlate the basic sciences and clinical aspects of diseases.

Upon graduation he continues to learn the intricacies of surgery. He quickly learns that an operative treatment is only a partial management of a surgical patient. The pre- and post-operative care are just, if not more, important in seeing a patient safely through his suffering.

The scope of surgery is expanding depsite many predictions to the contrary. About half a century ago Lord Moynihan the great master from Leeds, believed that surgery had reached its zenith but he did not live to see the great advances made during the last 10 or 20 years. This advancement will continue and many a medical student from our school, I hope, will take part in this progress.

STAFF MEMBERS

PROFESSOR ONG GUAN BEE' O.B.E., M.D. (Shanghai)

M.B.B.S. (H.K.), F.R.C.S. (England & Edinburgh), F.R.A.C.S., F.A.C.S., J.P.

Professor Ong, former resident in the Eliot Hall, graduated in 1947 with the degree of M.B.B.S. from the University of Hong Kong. His medical studies were interrupted by the second world war during which he escaped to Chungking where he continue his studies. After the war, he returned to Hong Kong to finish his medical studies at the University of Hong Kong.

Having gone through the training as house surgeon and surgical Registrar at Queen Mary, he proceeded to the United Kingdom in 1951 to take his fellowship exams. He was Commonwealth Fund (Harkness) Fellow in 1956 and studied in Harvard University, Massachusetts General Hospital and the Bellevue Hospital, New York University. From 1957 to 1963 he was surgeon-in-charge in Kowloon Hospital before the building of the Queen Elizabeth Hospital.

In 1964 he succeeded Professor Stock to the chair of Surgery, University of Hong Kong. His special appointments include being consultant surgeon to the Hong Kong Government, the British Military Hospital Hongkong, Grantham Hospital, Kwong Wah Hospital and the Austin Hospital, Heidelberg, Melbourne, Australia. He sits on the editorial boards of the "British Journal of Surgery" and the "Surgery", and he is Corresponding fellow to the Thoracic Surgery Section of the Royal Australasian College of Surgeons, and to the Surgical Research Society of Australia. He is also the Corresponding Fellow of the Association of Surgeon of Great Britian and Ireland and the Representative for Hongkong of the International Society for Burn Injuries. Only recently, he has been further honoured by being appointed to deliver The Hunterian lecture (1969-70) in England, an honour which had in the past been similarly bestowed on such great names as Sir James Paget.

Professor Ong's publications include numerous papers on

1. Carcinoma of oesophagus.
2. Recurrent Pyogenic cholangitis.
3. Carcinoma of the liver.

and he has written chapters in the following books:

1. "Pye's Surgical Handicraft" 19th Edition edited by James Ryle."
2. "Progress in Clinical Surgery" edited by Rodney Smith Series III.
3. "Operative Surgery"—second edition, volume 4 edited by C. Nanton Morgan.

Professor Ong is married to the former Miss Christina Chou M.B.B.S., (H.K.), F.R.C.O.G. (England), and they have six children.

Dr. K. H. Kwong, M.B., B.S.(H.K.), F.R.C.S.(Eng.), M.S.(Colorado)

Dr. Kwong was a past graduate of La Salle College. Ho obtained his M.B., B.S. in 1958 with distrinctions in Medicine and Surgery. He also won the Li Po Kwai Prize in Surgery.

After serving as assistant lecturer in Surgery for two years in the University of Hong Kong, he went to England and studied Postgraduate course in Surgery in the University of Edinburgh. He passed the Fellowship Examination in May, 1962, followed by an appointment as Locum Registrar in Surgery in *Cltterbridge* Hospital. He was also registrar in Surgery, Brompton Hospital in 1963, and later registrar in Thoracic Surgery, Path Hospital, Manchester. He came back to Hong Kong and joined the Department of Surgery in January, 1964.

In February, 1967, he won the China Medical Board Fellowship to study in the University of Colorado, where he obtained the Master Degree in Surgery in June, 1967. In July 1968, he was promoted to become senior lecturer.

Dr. Kwong's special interest was in cardiac and thoracic surgery. His hobbies includes Chinese painting, swimming and fishing.

Dr. C. G. Koo, B.A., M.B., B.CHIR.(Cantab), F.R.C.S.(Edinburgh), F.R.C.S.(England)

After completing his secondary school education at St. Stephen's College, Dr. Koo furthered his studies in Cambridge University in England. He was qualified in 1958 after his studies in the London Hospital, London, England.

Dr. Koo then served as a Surgical Registrar at Bethnal Green Hospital, London from 1961-62. For the next year, he went to London Hospital, London, working under the same post. As part of an exchange between the London Hospital and the Royal Victoria Hospital, he flew to Montreal, Canda, where he became the Assistant Resident in Surgery at the Royal Victoria Hospital and the Queen Mary Veteran's Hospital. From 1964-65, Dr. Koo worked as a Research Resident at the Department of Surgery, Royal Victoria Hospital and McGill University; researching on clinical and experimental Renal Transpiration.

Dr. Koo's special interest was in urology and Transplantation Surgery. His hobbies include tennis and squash.

Dr. Paul, C. K. Yue, M.B., B.S.(H.K.), F.R.C.S.(Edinburgh), F.R.C.S.(England), D.C.H.(London)

Dr. Yue graduated from the University of Hong Kong in 1960. He had been a Medical, Officer in the Casualty Department, Q.M.H., from 1961-62 the University Paediatric Unit Q.M.H. in 1962-63, the University Surgical Unit. Q.M.H. in 1964 and the University Orthopaedic Unit, Q.M.H. in 1964.

He won the Commonwealth Scholoarship to the United Kingdom from 1965-67 where he obtained his F.R.C.S. (Edin.) in 1966, his F.R.C.S. (England) in 1967 and D.C.H. (London) in 1967. He was also a Member of the International Society for Burn Injuries.

While he was in England, he was the Honarary Surgical Registrar to Professor Wilkinson at the Institute of Shild Health in the University of London, and the Hospital for Sick Children from 1966-67. He then came back and worked in the University Surgical Unit, Q.M.H. as a Medical Officer in 1967.

Dr. Yue's special interest is in Paediatric surgery. His hobbies include swimming, fishing and music.

Dr. Edward, C. H. Leong, M.B., B.S.(H.K.), F.R.C.S.(Edinburgh), F.R.C.S.(England)

Dr. Leong was a past graduate of St. Joseph College. He entered the University of Hong Kong in 1957 and obtained his M.B., B.S. in 1962 with distinctions in Anatomy, Gynaecology and Obstetrics.

He was appointed the Clinical Assistant in the University Surgical Unit from 1963-65. When he was in England, he was once the Locum Surgical Registrar, in the New End Hospital in London in 1966. He became a Permanent Lecturer in the University Surgical Unit in 1967.

While he was still an undergraduate, Dr. Leong had been the Editor of 'Elixir' from 1963-64. He then became the Chairman of the Medical Society in the University of Hong Kong the following year.

His special interest was in mology and especially in bladder function.

Dr. Frank, C. Y. Cheng, M.B., B.S.(H.K.), F.R.C.S.(Edin.), F.R.C.S.(Lon.)

Dr. Cheng was a past graduate of Wah Yan College. He entered the Faculty of Science in the University in Hong Kong in 1957 and then joined the Medical Faculty ni 1958.

During his undergraduate days, he won the Ho Fook and Chan Kai Ming Prize. It was also with flying colours that he passed his M.B., B.S.xamination in 1963, with distinctions in Anatomy, Biochemistry, and Surgery. He was also the winner of the Digby Memorial Gold Medal in Surgery that year.

After two years training in the Department of Surgery Hong Kong, he joined the Hammersmith Hospital as a Commonwealth Scholar in 1966, and later the Royal Postgraduate Medical School in 1967. In the same year, he passed both fellowship examinations of the Royal Colleges of Edinburgh and England. He came back to Hong Kong in December, 1967 and was appointed Lecturer in Surgery.

Dr. Cheng's special interest was in gastroenterology, and his essay on 'Gastirc Acid Secretions' won the Li Po Kwai Prize in Surgery in 1968.

Dr. Arthur Van Langenberg, M.B., B.S.(H.K.), F.R.C.S.(Edinburgh), F.R.C.S.(England)

Dr. Langenberg graduated from the University of Hong Kong in 1962. He obtained his F.R.C.S. (Edin.) and F.R.C.S. (Eng.) in 1966.

He was Clinical Assistant in the University Surgical Unit in 1962 and then in the Orthopaedics in 1965. During the years 1966-1967, he had been registrar in Sefton General Hospital, Royal Southern Hospital and Warrington Infirmary.

His special interest was in cancer and surgery of the large intestine. The beloved warden and teacher is also a great fisherman.

Dr. Mohankumar Adiseshiah, L.R.C.P., M.R.C.S.(London), M.B., B.S. M.R.C.R.(London), F.R.C.S.(England)

Dr. Adiseshiah was born in Madras, India. He studied in Wansworth School, London in 1958-1960. In 1960, he entered King's College, and in 1962, he entered with scholarship to Westminster Hospital Medical School. He graduated in 1965 with the Arthur Evans Memorial Prize.

After serving one year in the Westminster Hospital as house Surgeon, casualty officer and later senior house officer in Pathology, he worked as senior house officer in St. Georges Hospital in 1966. In 1967, he was trained in general and cardiac surgery in the Hospital for Sick Children. In 1968, he passed the membership examination of the Royal College of Physicians, and in the next year, he passed the fellowship examination of the Royal College of Surgeons.

Dr. Robin, S. Y. Yih, M.B., B.S.(H.K.), F.R.C.S.(England), F.R.C.S.(Edinburgh)

After receiving his secondary education in Royden House, Hong Kong and Acton Technical College, London, Dr. Yih took up the M.B., B.S. Course in the University of Hong Kong, 1956-1961. In 1963, he took leave to England and studied in the Royal College of Surgeons for the Primary F.R.C.S. Course. In 1966, he finished his Final F.R.C.S. Course at the St. Thomas' Hospital, London, thereby obtaining his higher degrees.

While persuing his higher studies, Dr. Yih worked as Senior House Officer at the Royal Northern Hospital in 1963, then Senior House Officer at the Whipps Cross Hospital from 1963-1964. For the subsequent two years, he was first Senior House Officer at Mosth Middlesex Hospital, then Prince of Wales Hospital. Having obtained his F.R.C.S. degree, he was appointed Surgical First Assistant, Professional Unit at St. George's Hospital, London, and stayed on the post for 2 years. He then refund to Hong Kong and joined the University Surgical Unit as lecturer.

Dr. Yih shows special interest in Urology and General Surgery. In his spare time, he likes to refresh himself by playing tennis and going swimming.

Dr. Mok Che Keung, M.B., B.S.(H.K.), F.R.C.S.(Edinburgh)

Dr. Mok graduated from St. Paul's College, Hong Kong. He then studied medicine at the University of Hong Kong. After graduation, he received post-graduate training as Registrar at the Department of Orthopaedic Surgery, Queen Elizabeth Hospital, from 1965-66. During the subsequent 2 years, he transferred to the Registrar, Department of Surgery, University of Hong Kong, Queen Mary Hospital, Hong Kong.

Dr. Mok obtained his F.R.C.S. (Edinburgh) degree in September, 1968. His special interest lies in Cardio thoracic Surgery.

Dr. W. T. Lee, M.B., B.S.(H.K.), F.R.C.S.(Edinburgh)

Dr. Lee spent her secondary schooling at Ying Wah Girls' School and was matriculated at St. Paul's Co-educational College in 1959. She studied medicine in the University of Hong Kong, graduating in the year 1964. She obtained F.R.C.S. of Edinburgh in 1967.

After her internship, she became the Assistant Lecturer in the Professorial Surgical Unit, Queen Mary Hospital from 1965-66. She was also the Temporary. Lecturer in the Professorial Orthopedic Unit in the following year. During her stay in England, she worked as a Senior House Officer in the Cardiothoracic Surgical Unit, Hospital for the Sick Children, in London in 1967-68. In September 1968, She was senior House Officer in Hammersmith Hospital in the Cardio-thoracic Unit.

Dr. Lee's special interest was in cardiac Surgery. Her hobbies include sports, music and swimming.

Dr. Lee is now a lecturer in the Department of Surgery of the University, and She is also the only Chinese female surgeon in Hong Kong.

Dr. C. K. Mok, M.B., B.S.(H.K.), F.R.C.S.(Edinburgh)

Dr. Mok obtained his M.B., B.S. in the University of Hong Kong in 1964. He had been the Registrar in the Department of Orthopaedic Surgery, Q.E.H. from 1965-66. He also became the Registrar in the Department of Surgery, in the University of Hong Kong, Q.M.H.

Dr. Mok is at present a lecturer in the University Surgical Unit and also a member of the Cardiac Surgical team.

Dr. Michael, K. G. Ma, M.B., B.S.(H.K.)

Dr. Ma spent his secondary school days in St. Paul's Co-educational College where he was also elected the Head Prefect in 1960. He then entered the University of Hong Kong and obtained his M.B., B.S. in 1965 with distinction in Physiology.

He became the Assistant Lecturer in Surgery in the University Department of Surgery, Q.M.H. in 1966. The following year, he became the Temporary Lecturer in Surgery, Attached to University Orthopaedic Unit, Q.M.H. and in 1968, he was the Lecturer in Surgery, in the University Department of Surgery, Q.M.H.

Dr. Philip Wu, M.B., B., (H.K.)

Dr. Wu completed his secondary education in St. Paul's College. He graduated from the University of Hong Kong in 1965. After serving half a year as a house officer in University Surgical Unit (USU) and another half a year in University Pediatric Unit, he joined the Medical and Health Department as a Medical Officer in Grantham Hospital in 1966. Except for the first half of 1969 where he worked in University Orthopedic Unit, Dr. Wu has been working in USU since January, 1968. Dr. Wu is interested in General Surgery, but likes to spend his spare time in paintings.

Dr. Peter, Y. T. Tam, M.B., B.S.(H.K.)

Dr. Tam was a past graduate of Wah Yan College, Kowloon. He entered the University of Hong Kong in 1962 and obtained his M.B., B.S. with distinctions in Biochemistry & Pharmacology in 1967.

When he was still an undergraduate, he had been in the Steward's Committee in the Student Union in 1965 and was also the Social Convenor of the Medical Society in 1966. His extracurricular interest was mainly in fishing and swimming.

Dr. K. H. Wu, M.B., B.S.(H.K.)

Dr. Wu was a past graduate of La Salle College. He entered the Medical Faculty in 1962 and finished his M.B., B.S. in 1967 with distinctions in Anatomy, Pathology and Paediatrics, Obstetrics & Gynaecology. He also won the Anderson Gold Prize and the Chan Kai Ming Prize.

His special interest was in cancer research. His hobbies include bridge and hiking.

He passed the Privary F.R.A.C.S. examination in September 1969, and he scored the highest marks in that examination. A Gold Medal of the Royal Australian College of Surgeons was subsequently awarded to him.

Dr. Malcolm Chan, M.B., B.S.(London), F.R.C.S.(Edinburgh)

Dr. Chan, after having received his primary schooling in Canton, left for England in 1950 to complete secondary education at a London Grammar School. He then Studied Medicine at University College, University of London and later University College Hospital, London, from 1956 to 1961.

After qualifying, he worked at various hospitals in and around London, and held posts in General Medicine, General Surgery, urology, obstetrics and Gynaecology, orthopedics and casualty; with most time Spent in General Surgery. A good length of time was also spent in General Practice in various parts of U.K.

Dr. Chan joined USU at Queen Mary Hospital in March 1969 as a Medical and Health Officer.

He likes swimming, walking, music and reading.

Dr. John Leung Siu Man, M.B., B.S.(H.K.), F.R.C.S.

Senior Medical Officer

Cardiothoracic Surgeon, University Surgical Unit, Grantham and Queen Mary Hospitals.

Dr. Leung has been with the University Surgical Unit since 1964. Me has had clinical attachments with Royal Northern Hospital, Middlesex Hospital and Bromption Hospital, London, and has been surgical fellow in Cardiothoracic and Vascular Surgery, Green Lane Hospital, New Zealand. He has conducted study tours to Chermside Hospital (Brisbane), St. Vincent's Hospital (Sydney), St. Vincent's Hospital (Melbourne), Stanford University Medical Centre (Palo Alto) and Oregon University Medical Centre (Portland).

In New Zealand, he worked on aortic valve homografts and heart transplantations. There he received his Certificate in Cardiothoracic and Vascular Surgery in 1969.

His constributions to the medical fieldi nclude papers on "Surgical Management of Mitral Incompetence due to Ruptured Chordae," "Aortic Valve Homograft Observations," and "Surgical Treatment of Bronchiectasis in Children," Dr. Leung's interests stretch from football to music. He plays the Violin, accordion and guitar. He won the British Commonwealth Essay Competition in 1958. In addition, he is also an expert in rifles and pistol shooting.

A SHORT HISTORY OF SURGERY DEPARTMENT

Surgery in Hong Kong began in 1914 when Kenelm H. Digby was appointed to the Chair of Anatomy at the University of Hong Kong. Digby was Surgical Registrar to Asbuthnot Lane at Guy's Hospital, London, and shortly after he was appointed to the Chair of Anatomy, he was made Honourary Visiting Surgeon to the Government Civil Hospital. In 1915, the Ho Tung Professorship of Clinical Surgery was established in the University of Hong Kong and Digby became Ho Tong Professor of Clinical Surgery. In 1922 when this ceased to exist, he became Professor of Surgery, and was to remain in the chair for the next thirty years.

Surgery in Hong Kong came to complete halt during the Second World War when the Japanese occuiped Hong Kong. When peace was restored, Mr. John Gray, FRCS, who had been appointed Surgica Adviser to the Hong Kong Government became acting Professor of Surgery and he was mainly responsible for putting the Department of Surgery on the road to what it is today. In 1948, Mr. F. E. Stock, O.B.E., F.R.C.S., was appointed to the Chair of Surgery and in 1964, Mr. G. B. Ong, O.B.E., M.B.B.S., F.R.C.S. (Eng. & Edin.), F.R.A.C.S., F.A.C.S., J.P., succeeded Professor Stock to the Chair of Surgery, Today, the Department of Surgery, University of Hong Kong is one we can all be very proud of, for in the words of Sir John Bruce in a recent editorial in the Journal of the Royal College of Surgeons of Edinburgh, 'There is no doubt that Ong's Clinic has become one of the most important surgical centre in the Far East, a mecca for surgical visitors from all over the world'.

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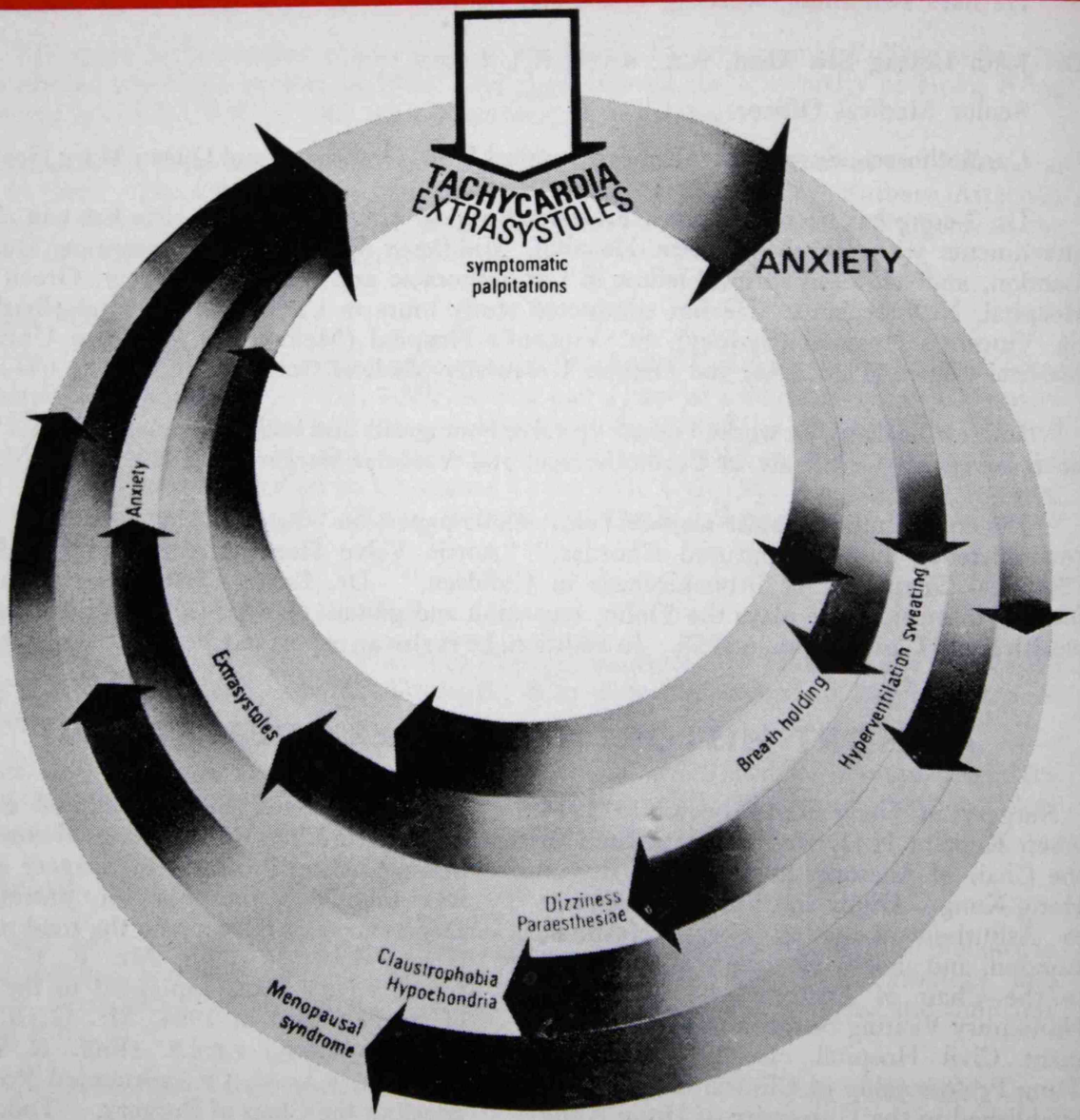

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FOOD CUSTOMS AND MICROBIAL FOOD POISONING

AN INAUGURAL LECTURE FROM THE CHAIR OF MICROBIOLOGY

By Professor C. T. Huang, M.B. (Lingnan), Ph.D. (Leeds), M.C. Path., delivered on 6th November, 1969

Mr. Vice-Chancellor, Mr. Dean, Ladies and Gentlemen, I am greatly honoured by the invitation from the Senate of the University of Hong Kong to deliver this Inaugural Lecture from the Chair of Microbiology. As a well organised science Microbiology is young. A co-incidence is that the Department of Microbiology of this University is also the koungest of the departments of the Faculty of Medicine. In the past, Microbiology was studied as a part of Pathology, but it became a distinct field of study about forty years ago. In recent years, much new materials has been added to the science of Microbiology itself. The subject is already so large that a beginning student can easily be lost in the maze of its detail. Indeed, Virology has emerged as an independent discipline. The need to train medical microbiologists is no less important than the need for training morbid anatomists, but I need not stress that for two of my colleagues, Professor J. B. Gibson (7) and Dr. W. C. Chan (1) have publicly expressed views on the importance of training prospective pathologists. I have little to add to what they said but I share their stand, their enchantments and their frustrations.

The scope of Microbiology is enormous even when the sphere is reduced to Medical Microbiology because it embraces the pathogenic parasites, fungi, bacteria, spirochaetes as well as the viruses. The choice of a subject for this address proved very difficult. I found an almost embarrassing richness of materials before me and an almost inexhaustible source of subjects and I have when considering this address limited myself to a subject in which I have always been interested but which is also of general interest. I thought it might be worthwhile to tell you something of the part played by micro-organisms in food poisoning and how we allow them to play their roles in causing diseases. The subject "Food customs and microbial food poisoning" introduces many of the microbial diseases which are common and are closely connected with our food customs and we are all interested in food. The terms food poisoning and food-borne infection are often used loosely. Microbial food poisoning properly refers to an illness caused by a poison produced by an organism present in the food. Food-borne infection is an illness caused by an infection produced by actual invasion of growth in and damage to the tissues of the host by pathogenic organism introduced in food.

Food poisoning must be as old as man himself. In the days of his dawning intelligence, when driven by hunger or delight of the eyes to experiment with strange foods, it was no doubt by bitter practical experience he had acquired a knowledge of good and evil and this also applied to his food. Owing to the natural power of resistance, his mistakes did not in all cases cause death. As men discovered for themselves the method of cooking, the chances of contracting gastrointestinal diseases were considerably lessened. Although we are no longer in the age of "eating hair and drinking blood (茹毛飲血)" as described by the Chinese historians in prehistoric mankind and although there has been a great advance in the knowledge of bacterial and parasitic diseases in the last century, yet certain food-borne microbial diseases still prevail in many countries of the world. They persist because of religious beliefs, long founded taboos, or social economic conditions. Many of them are derived from nothing more than habits of gastronomy of a certain population. The causes of these food-borne diseases are known, the dangers are recognised nad their consequences are avoidable: yet in many communities these dangerous eating customs are still fortresses impregnable to the attack of hygienists.

Many books on the subject of food poisoning or food-borne infection have been written but publications linking eating habits and food poisoning or food-borne infection

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are scarce. That micro-organisms can cause putrefaction of meat was mentioned in the Analects of Confucius —

食不厭精，膾不厭細。食饐而餲，魚餒而肉敗，不食，色惡不食，失飪不食，不時不食。割不正不食，不得其醬不食。肉雖多，不使勝食氣，惟酒無量，不及亂。沽酒市脯不食。不撤薑食。不多食。祭於公，不宿肉。祭肉不出三日，出三日不食之矣。食不言寢不語。雖疏食菜羹，瓜祭必齊如也。

（論語第十篇：鄉黨第八章）

The second sentence reads that "The master did not eat rice which had turned sour, nor fish or meat that had decomposed. He did not eat what was discoloured or what was of bad flavour, nor anything which was illcooked or not in season" and the 8th sentence reads that "When he had been assisting at the Prince's court sacrifice, he did not keep the meat he received overnight. The meat of his family sacrifice, he did not keep over three days. If kept over three days, people could not eat it." *Book X, Heung Tang, Chapter 8*

The first part shows that soured rice or putrefied meat is unsafe for consumption. The second part reveals that meat received from the Prince's court sacrifice putrefied much more quickly than that received from the sage's family sacrifice; because in the first instance the meat was bound to be handled by more people and was, therefore, exposed to greater contamination. However, there are exceptions. Putrefaction of food does not necessarily or always give rise to toxic substances involved in food poisoning. An example of wholesome food containing putrefactive bacteria and their products is the Limberger cheese.

Food-borne parasitic infections were known in ancient times because parasitic worms passed out from the bowel could readily be seen and recognised by the naked eye. I, therefore, use food-borne parasitic infections to introduce my address. Here I quote only a few of the many examples, and especially those occurring in China, for illustration. The commonest parasitic infection related to food habits in Hong Kong is clonorchiasis. According to Hou and Pang (13), 60% of the livers in their post-mortem records showed evidence of clonorchis infection. In an analysis of intestinal contents of over a thousand post-mortem cases in our department, we found 36.4% of them contained clonorchis eggs (17). Considering the complicated life-cycle of *Clonorchis sinensis* and its high incidence in Hong Kong the disease is clearly attributed to an eating habit of the people in this part of the world.

Clonorchis sinensis is found in the bile ducts of man and some other mammals but it requires a fresh water snail and a fresh water fish of the carp family as well as a mammal to complete its development from the larval to the adult stage. Human infection comes about by consumption of raw or undercooked fresh-water fish containing the metacercarial stage of the worm. The consequence of infection varies with the numbers of worms in the bile ducts and the duration of the infection. There may be no clinical symptoms at all if the infection is light, or there may be biliary obstruction leading to stasis of the bile flow and complicated by recurrent pyogenic cholangitis (5, 11). Evidence that it may lead to an adenomatous carcinoma of the liver has been presented by Hou (12). This is indeed a serious result. The worm does not multiply in man but the increase of the worm load is proportional to the indulgence in raw fish.

Definite evidence of clonorchiasis in the Chinese population can be traced at least as far back as the Ming Dynasty. Several years ago a Ming tomb of 1513 A.D. was excavated in the vicinity of Canton: large numbers of clonorchis ova were recovered from the caked faecal matters of the mummy (3). Thus, the infection existed in the Chinese population three hundred years before McConnel first discovered the worm at autopsy from a Chinese carpenter who died in Calcutta in 1875 (21).

Clonorchiasis is most common in South China, especially in the Kwangtung Province (廣東省). Though clonorchis has been found in dogs and cats all over China,

human infection is highest in the south. The southern Chinese indulge in eating raw fish in the forms of Yu-sen (魚生) or Yu-sen congee (魚生粥). Hsu and Chow (14) reported that in a certain county of the Chung Shan (中山縣) district of the Pearl River Delta, 100% infection was discovered among the villagers. Human manure containing the ova of the worm was thrown into fish ponds, where the snail and fish hosts were present. The larval stages of clonorchis could, therefore, develop. Fish can be reared cheaply in these ponds and it makes up the substantial part of the protein in the diet of the people, but the well established habit of eating it raw perpetuates a vicious cycle of man-snail-fish-man infection. In Hong Kong about 90% of the population originate from Kwangtung Province, and many people still maintain this long established custom of eating raw fish. Moreover, most fresh-water fish sold in the local markets is supplied from the nearby areas where clonorchiasis is endemic. The cysts of clonorchis are not very resistant to the temperature of proper cooking.

Paragonimiasis is another parasitic disease closely connected with an eating habit. *Paragonimus westermani* is a trematode which lives in the alveoli of the lung, sometimes in the bronchi and occasionally in other parts of the body, such as the wall of the intestine or in the abdominal cavity. The infection leads to destruction of the lung tissue with coughing up of blood and other symptoms resembling those of pulmonary tuberculosis.

Human infection with paragonimus is sporadic in China. It is particularly common in the South-eastern provinces such as Chekiang (浙江) and Fukien (福建). According to Hung *et. al.* (18) the incidence of paragonimiasis in a certain village in Shaoshing (紹興) of Chekiang Province was 71.6% of the population. The infection there parallels clonorchiasis in Kwangtung.

The lung fluke discharges its eggs into the sputum which then contaminates water. An aquatic snail is infected with the first larval stage. After further developments in the snail, the parasite encysts in the flesh of a flesh-water crab or crayfish. The final host can be any carnivorous animal including the tiger and the leopard. Human infection comes from eating raw crab or crayfish. People in the Chekiang Province traditionally eat crab-meat raw or undercooked. A cuisine known as "drunken crab" (醉蟹) is a local delicacy. Crab is soaked in weak wine containing about 10-14% alcohol. The alcohol changes the colour of the shell of the crustacean red, yet it is too weak to kill the cysts of the parasite in the crab-meat. The high incidence of infection in the Shaoshing district is attributed to its famous "Hua Dew" (花雕) wine brewed from millet. This sherry-like wine and the tender crab-meat have an irresistible appeal to many connoisseurs.

A parasite which had influenced man for 30 centuries and in part responsible for the ancient Jewish prohibition against pork, is *Trichinella spiralis.* It is a round worm and the adults are found in the small intestine of the host. The larvae laid by the female encyst in the striated muscles of the same host waiting as it were to be ingested by another carnivorous animal, usually the hog or the rat, so that the life-cycle can be continued. Ironically, the human host is a dead-end for the development of this parasite. In man the adults are located in the small intestine and they may give rise to enteritis simulating typhoid fever. If a large number of larvae encyst in the striated muscles, there may be muscular pain and dysfunction. If they encyst in the brain or the myocardium, the results can be more serious.

Trichinosis is common in the Slovakian countries and Central Europe where raw pork sausages "salami" or "wurzt" are local delicacies. In recent years the incidence of trichinosis is causing alarm in the United States because of increase immigrants from Central European countries. Although cysts of *Trichinella* have been found in a variety of animals in China yet only one doubtful human case was reported by Faust. Pork constitutes an important source of protein in the diet of the Chinese population, yet trichinosis and taeniasis solium both derived from eating raw pork are rare in China. I believe the way of cooking of pork either by cutting it into thin slices and frying in deep fat or by stewing in a pot, saves the Chinese from these two kinds of parasitic infection. The cysts of *T. spiralis* and *Taenia solium* are not very resistant to heat. They are killed by exposing

at 55-65°C for a few minutes.

Taenia saginata and *Taenia solium* are two tapeworms for which man is the sole natural final host. Cysticercus bovis, the larval stage of *T. saginata,* encysts in the musculature of cattle. *T. saginata* was known in China in ancient times. It was called the "one inch white worm" (寸白蟲). According to Tsao Yuen Fang's (巢元方) book *The causes and symptoms of diseases* (巢氏病源) written in 610 A.D. —

寸白者九蟲之一蟲內也。長一寸而色白，形小褊，因腑藏虛弱而能發動。或曰飲白酒以桑枝，貫牛肉炙食幷生粟所成。又云食生魚後，卽飲乳酪亦會生之。(見卷十八寸白蟲候)

"One inch white worm is one of the nine worms, it is one inch in length, whitish in colour, small and flat and is active when man's internal organs have become weak. Some people believed that it is produced through the drinking of white wine, or the eating of beef barbecued on twigs of the mulberry tree and the eating of uncooked maize. Taking cheese after eating raw fish also produces the same worm".

The entire length of *T. saginata* is about 10 or more metres. The gravid segment is about 2 cm long and is flat and ivory white. This segment is passed out singly or in chains from the bowel of the patient and it continues to wriggle after it is spontaneously detached from the main part and glides along for some time. Tsao's description of the "one inch white worm" was in fact the gravid segment of this cestode and his association of it with the eating of beef supports this supposition.

Beef is a popular food in Tibet and *T. saginata* is also common in that region. The Tibetans cut beef into large chunks and barbecue it over a bonfire. Since there is no control of human faecal pollution of the graze-land, a vicious cycle of infection of man-cattle-man goes on. *T. saginata* infection is not confined to Tibet. It occurs in any country where undercooked beef is tolerated and where there is no control of human faecal pollution of grazing land. For instance, in Kweichow Province (貴洲省), about 12-16 per cent. of the Miao tribesmen (苗縣) have been reported to be infected with *T. saginata.* They have the habit of eating "sour-beef" which is prepared by putting dried pickled beef with rice into an earthen-ware pot, earling it until the beef becomes sour and tender from fermentation of the rice. The tribesmen lived in the upper storeys of the huts while the ground floors were used to keep animals. Human excreta was allowed to fall from a lavatory upstairs onto the ground-floor cow shed. Cattle obtained their infection in this way (3).

In Hong Kong and in other parts of China, *T. saginata* infection has been reported more often than *T. solium* infection. In certain areas such as North China where the incidence of infection of pigs and cows with respective cyst stages is about equal, yet incidence of human infection with *T. saginata* is much greater. This is because raw beef is eaten more often and raw pork rarely. Since 1950 we have collected in our records more than seven cases of taeniasis saginata as against one single case of taeniasis solium. This can be attributed to the fact that the Chinese here have learned from western gastronomy to eat rare or undercooked beef steaks, The larger the size the steak, however expensive it is, the greater will be the danger of getting *T. saginata* infection.

Although taeniasis solium is generally rare in China, it is not uncommon in western Yunnan (雲南), and in certain areas of Kweichow. There the people are very fond of eating raw or half-cooked pork. Those who have been in Yunnan may remember with affection the famous "Over the bridge rice noodles" (過橋米粉). Pork is cut into very thin slices and is served with hot soupy rice noodles. Customers merely dip the thin slices of raw pork on the steaming noodles and so eat it half-cooked. It is very crisp indeed, but it is very dangerous. The danger of *T. solium* infection is that the adult worm as well as the cyst-stage can infect man. Certain native tribes in Yunnan eat their pork by burning away the hair-coat of the whole pig in a bonfire, then open up the animal and cut the flesh into small pieces. The meat is consumed after dipping into sauce. This reminds us

of the "Pig Bel" disease of the highlands of New Guinea which I shall describe in a moment

Anohter group of tapeworms which infect man because of a habit of eating are the broad tapeworms of the genus *Dibothriocephalus (Diphyllobothrium). D. latus* is a common tapeworm of man in cold regions. Though it has a somewhat different life-cycle from those I have mentioned, the infection with this worm is also due to eating raw fish. Salmon and trout are the second intermediate hosts. Because of its enormous length, a large part of the nutrition of the host is absorbed by the worm. The host suffers from vitamin deficiency and an anaemia resembling pernicious anaemia. Infection is common in those countries where smoked salmon, trout and caviar are delicacies. Tsao associated his one-inch white worm with eating of raw fish was, perhaps, referring to this parasite, because grossly it resembles closely to a taenia.

Human beings can be infected with the larval stages of other broad tapeworms which are parasites of lower animals. Infection comes from eating raw or partially cooked flesh of the intermediate hosts of the worms for instance frogs and snakes which harbour the second larval stage of the parasite known as sparganum. The ingested parasites will then burrow through the intestinal wall and finally re-encyst in the tissues without undergoing further development but may lead to cystic degeneration of the host's tissues. Weinstein *et. al.* (28) reported people in Korea were infected because of eating raw snake-meat and in Indonesia sparganosis occurs because tadpoles are eaten as delicacies (20). We have encountered two cases of sparganosis in Hong Kong and in one of them the patient had a history of eating frog-meat (15). Patients in Japan became infected with sparganosis because of eating raw or imperfectly cooked chicken containing the larvae (30).

I now leave the complex parasite and come to the subject of fod poisoning or food-borne bacterial infection and this too, by and large, can be related to food custom. Food-borne bacterial infection was discovered only after the development of bacteriological techniques. Although putrefied foods are as a rule unsafe, food without signs of putrefaction can be also dangerous. The danger can only be disclosed by bacteriological methods of examination.

Food-borne bacterial infection is classified into two big groups; the toxigenic and the infective types. The toxigenic group is due to ingestion of the toxin or product of the organism already preformed in the foodstuff. Strictly speaking, this is a type of intoxication. The infective type originates in ingestion of food contaminated by the organism which has multiplied to large numbers in the foodstuff before it was consumed. Botulism and staphylococcal food poisoning belong to the toxigenic category, and *Clostridium welchii* and *salmonella* food poisoning belong to the infective group.

Unlike food-borne parasitic infection which generally has a direct relationship to the eating habits of the host, food-borne bacterial infection usually result from accidental contamination of food by the causal agent before eating. But, as we shall see later, food customs and eating habits still bear some link to the frequent occurrence of food-borne bacterial infections.

Staphylococcal food poisoning is well known. Outbreaks occur every now and then in Hong Kong as elsewhere. Investigating an outbreak in the St. Stephen's Preparatory School in 1965 we examined the vomitus, throat swabs, stools and rectal swabs of a number of the patients who were admitted to the Casualty Department of Queen Mary Hospital with sharp though transient illness. *Staphylococcus aureus* phage type 29/79 was isolated from all, except two, of the specimens submitted for examination. This proved beyond doubt that it was a staphylococcal outbreak from a single source. Staphylococcal food poisoning occurs frequently when starchy food or cream products are eaten. Even a high salt content in food cannot stop the staphylococci from multiplying, because *Staph. aureus* can tolerate 6-10% NaCl concentration in a medium in which it can grow. Pastry, salad pressed with cream, cold ham contaminated with strains of *Staph. aureus* capable of producing enterotoxin are the usual sources of an outbreak.

An even more dramatic and certainly more serious form of bacterial food poisoning is botulism. The causal agent is an anaerobic spore-forming Gram-positive rod called *Clostridium botulinum*. It produces a very strong neurotoxin. This toxin has been purified to 30 million mouse LD50 per mg of the dried weight and it has been estimated that 1 oz. of botulinum toxin if appropriately applied could kill 200 million people which is more than the entire population of the United States or 50 times the present population of Hong Kong; provided of course there was a means to administer it personally to every one of the 200 million. Botulism is rare, but it is always tragic and in some respects it is still mysterious.

The toxin causes neuro-paralytic disease and it has affected man and animals in various parts of the world and generally as a result of ingestion of a foodstuff containing toxic metabolites from one of several known types of the organism, which normally inhabits the soil of certain regions. Few diseases reveal more tragically the ancient truth that in the midst of our life we are in death. Botulism does not spare the fit, the strong, and the venturesome. It strikes quickly and inexorably like a bolt from the blue. It often follows some hospitable or festive occasion; a party for friends, a holiday picnic, or ironically a funeral wake or other semi-religious ceremony at which the specially prepared but lethal delicacy is served.

A few examples of the horror of botulism are quoted here. In mid-August of 1922, amidst the tranquillity of lakes and mountain in Loch Maree in Scotland, a disaster struck the patrons of a lonely hotel for holiday makers. Eight victims who had shared a picnic lunch of sandwiches containing wild duck paste contaminated by *Cl. botulinum* type A toxin died. In 1924, the family of the Gerbers in Albany of Oregon State in America was completely wiped out by an outbreak of botulism. All the 12 members of the family died. The causal foodstuff was home canned string beans containing type A toxin. In 1960 in northern Honshu of Japan a comparable family tragedy was caused by type E botulism. The vehicle in this instance was a popular regional relish of rice patties containing diced vegetable and raw fish packed in pots and allowed to ferment for about three weeks—a delicacy known as "izushi". A grandmother who had made these cakes sampled one and died within 24 hours. As relatives and friends gathered for her funeral, they ate the remainder of the cakes and eleven of those mourners also died (6).

In food-borne bacterial food poisoning eating habits are no less important than in food-borne parasitic infections. Home canned food inadequately sterilised under conditions in which much of the oxygen is excluded contributes to botulism. Blood sausages known as "Blünze" prepared by stuffing blood into pig stomach and preserving the whole by smoking is an important vehicle of the disease. As a matter of fact, botulus means sausage in Latin. In 1793 a classical outbreak of botulism occurred in Wüzthemburgh which involved 13 persons of whom six died. It was said that Emperor Leo VII of Byzantine who was, as we are told, a weak minded ruler chiefly occupied with unimportant wars with the barbarians and struggles with churchmen managed nevertheless to forbid altogether the eating of blood sausages because of their harmfulness to health.

Botulism could be derived from fish. Eskimos of the North West Territories of Alaska and Labrador have been reported to eat raw, semi-rotten portions of the white whale called beluga and also of seals. The vehicle in Alaska was chiefly "Muktuk" which is an Eskimo delicacy prepared by cutting the skin and underlying blubber of beluga into chunks or strips and hung-up to dry. These pieces were then cured for several weeks or even months in the comparative warmth of the igloo, which permitted the spores of *Cl. botulinum* to germinate. Mouth sized pieces of the "Muktuk" were sliced off as needed. Two or three such pieces have been known to kill a hardy Eskimo male.

Another botulogenic vehicle variously called "salmon egg cheese" or "stink eggs" is traditionally popular in the North West Pacific coast of the New Hemisphere. It is a putrefied crude caviar comprising of eggs collected from salmon caught on their way up the coastal inlets and rivers in the late summer and fall spawning seasons. This nauseating

concoction usually eaten raw has been responsible since 1940 for 14 authentic outbreaks of botulism involving 34 persons of whom 19 died.

For a number of years there existed in the Sibo Minority Autonomous *Hsien* (錫伯族自治縣) in Chabuchar (察布查爾) of Sinkiang (新疆) a paralytic disease of undetermined etiology. From 1949-57, eighty-eight cases were reported with a death rate of 44.1%. The disease occurred especially in women and children. It has strict seasonal distribution between March and June with peak incidence in April. Though there were several nationalities in Chabuchar *Hsien*, the disease occurred almost exclusively among the Sibos and the only non-Sibo affected was one, who followed their customs and living habits.

In 1958, Wu *et. al.* (29) investigated into the epidemiology and disclosed that the disease was botulism. It was caused by eating of a fermented steamed bread known locally as "misofufu" used for preparing a flour-sauce.

Steamed bread was placed into a pot, covered with several layers of thick cloths, sometimes cotton padded trousers and placed near the fire-stove to ferment for 7-20 days (usually 14 days). The temperature within the pot was about 26-35°C. After the fermentation process, the bread was exposed to the sun for drying and then stored for use. The hardened fermented bread was then ground into powder and mixed with brine to make the "flour sauce", which was usually taken during the Sibo's festival in April.

Vast tract of virgin and pasture land in the Sinkiang Province was contaminated by *Cl. botulinum* sports and in Chabuchar there was no exception. Wheat used to make steamed bread was naturally contaminated. During the fermentation of the bread, the temperature inside the bread pile and the anaerobic condition favoured the growth, multiplication and production of toxin of the *Cl. botulinum* spores. Housewives who made the fermented bread usually tested the completeness of the fermentation process by tasting, and children frequently stole the hardened bread from the kitchen of their home and ate it as if for candies. It, thus, explains the high incidence of the disease among women and children. These are but some examples to illustrate how certain special cuisines can be closely associated with botulism.

Cl. welchii is another spore-bearing organism which is well known to cause food-borne infection. That it could give rise to food poisoning was reported as early as 1895 by Klein, but much of the epidemiological picture was elucidated by Hobbs *et. al.* in 1953 (10). After an incubation period of 8-24 hours, affected persons complained of abdominal pains and diarrhoea but rarely vomiting, and other signs of infection such as pyrexia and headache were absent. The medium of infection was almost invariably a cold or warmed-up meat dish, boiled, braised, steamed or stewed for 2-3 hours on the previous day or some hours before it was required and allowed to cool slowly in the kitchen or larder: the typical "hot gravy" dinner. The remains of the meat eaten by those affected were usually normal in appearance, taste, and smell, and only occasionally was in sour and gassing.

It was once thought that only the heat-resistant strains of *Cl. welchii* type A which survive the cooking process much better than the other strains could produce food poisoning. Recent evidence shows that if food is contaminated by a heat-sensitive strain of *Cl. welchii* type A after cooking this can also lead to food poisoning (26). Large numbers of actively multiplying *Cl. welchii* appeared to be necessary for the disease. The long incubation period suggests that some of the action of the organism is in the lower intestine. In many outbreaks, it has been shown that the common factor was large pieces of meat in the form of joints, poultry, mince, cubes, or slices allowed to cool slowly and usually cooked on large scale in institutional canteens. In joints greater than 6 pounds in weight heat penetration and heat loss are alike slow, and the organisms inside the joint instead of being sterilised by heat will multiply rapidly. Similarly, rolled meat, stews and meat pies which have not been cooked long enough can serve as favourable cultural media.

The increase of *Cl. welchii* type A food poisoning in England and Wales is attributed

to changes in the social economic pattern and eating customs of the people. Since the second World War, more women are working in factories or business firms and are compelled to eat in restaurants or canteens, and canned foods are more frequently used nowadays. The change in eating habits of the population can thus be related to the increase of outbreaks of food poisoning as a whole.

Another food-borne *Cl. welchii* infection is the disease known as "Pig Bel" in the New Guinea highlands (22). "Pig Bel" is the pidgin English name applied by Papuan medical orderlies to the prostrating belly aches which sometimes follow such pork-feasting in New Guinea. In Germany the same disease is known as "Darmbrand"; in the United States and England it is called *Cl. welchii* type C food poisoning. Whatever the name, the lattitude, or the longitude, the disease is a necrotizing jejunitis which carries a 50% mortality rate and predominantly affects children. The cases are caused by the beta-toxin producing type C strain of *Cl. welchii.* This disproves the widely held notion that only type A is of importance in human disease.

Pig feasting is an important ceremonial event in the social and cultural life of the native villages in New Guinea (23). Slaughtering methods are anything but hygienic. Cooking is done among hot stones placed in an earth-oven pit surrounded with green leaves which water is frequently poured. This cooking process lasts for two or three hours, and this must tbe regarded as insufficient for thorough cooking. The intestines are also cooked and eaten together with all other internal viscera and the intestines given a perfunctory rinse with river water. Some of the pork may be eaten immediately, but the bulk of it is carried away or stored until the next day, when it is consumed. In some areas a second cooking took place, but this was not always so. Thus, semi-cooked pig's meat and fat remained in the native huts was eatetn piecemeal over a period of two or three days.

Gorging on contaminated meat of this kind might be expected to precipitate a variety of enteric disturbances, and it seems clear the prevalence both of necrotizing jejunitis and diarrhoeal diseases rise sharply after a pig feast. Over indulgence at a feast may also predispose to a rapid multiplication of the betatoxin producing *Cl. welchii* type C already present in the intestinal tract of man.

Large outbreak of *Cl. welchii* food poisoning are rare in Hong Kong. Perhaps the way of cooking meat by the Chinese does not allow the organism to survive. But we must not be complacent, because Turner and Wong (27) showed that 63% of hospital patients in Hong Kong were carriers of heat-resistant strains of this organism. Further, in an examination in our laboratory of locally made sausages, heat-resistant strains of *Cl. welchii* which can cause food poisoning were isolated from 41.9% of liver sausages and 9.9% of pork sausages. These are often steamed over cooking rice and if left to be consumed overnight may enable the organism to multiply. The hygienic standard of preparing sausages locally is not without danger.

Salmonellosis provides the first important landmark in the bacteriological investigation of food poisoning. In 1883, Gaertner first isolated *Bacillus enteritidis (Salmonella enteritidis*) from a meat poisoning outbreak in Frankenhaüsen in Germany.

The reservoir of salmonellas seem to be almost inexhaustible. Even animal foodstuffs and organic fertilizer can be the sources of infection. Hardly a single year goes by without some fresh types being discovered. Of the many salmonellas derived from animal sources, *Salmonella choleraesuis* is by far the most important in China. It is widely distributed in that country where it is second only to *Salmonella typhi* in causing human infection with salmonella (16). Pigs are the main carrier of *S. choleraesuis* and processed pork or sausages the usual sources of infection in western countries (9). Since it is animals weaken by disease such as hog cholera or pneumonia that develop septicaemia due to this organism, pork and pig offal derived from uncontrolled butchery are dangerous for human consumption.

S. choleraesuis generally attack young or debilitated persons who may develop severe

parental and fatal infections. In sick hogs, *S. choleraesuis* is most commonly isolated from the mesenteric lymph-nodes, next from the liver and rarely from the meat. The liver, kidneys, lungs and intestine of pigs are very often used in Chinese cuisine and this practice is certainly one of the causes of *S. choleraesuis* infection in Chinese. Moreover, clotted pig blood is also eaten by people here. The clot is sliced into small cubes and steamed in rice gruel or soup. The temperature of the gruel may kill the organisms on the surface of the clot but cannot be relied upon to kill those within the cubes. When considering the incidence of trichinosis and taeniasis solium in China, and taking into account that the cysts of the parasites in the pig flesh are not more resistant to heat than is *S. choleraesuis,* it seems that the habit of eating offal and blood rather than pork is the main cause for the prevalence of *S. choleraesuis* infection in China. Confirmatory evidence is found in the fact of a low incidence in other regions of the world where pig offal is not included in the diet. In Israel where pork is abstained, *S. choleraesuis* is completely absent (24).

We all know that the Japanese are very fond of eating raw fish and sea food. Clonorchiasis was once very prevalent in that country. Because of rigid control of snails and prevention of contamination of fish ponds by human excreta, clonorchiasis in Japan has been reduced to a minimum, but the habit of eating raw fish and sea food has not been abandoned. In recent years, a new food-borne infection with symptoms of acute gastroenteritis similar to salmonellosis has been imputed to the custom of eating uncooked sea fish and shellfish in the form of "sushi" or "shirasuboshi" (semi-dried sardine). The bacterium involved is a vibrio called *Vibrio parahaemolyticus.* It has been isolated from stools of patients and intestinal contents of autopsy cases. It is a halophilic, Gram-negative marine bacterium found in sea mud, water and plankton and is carried by fish and shellfish (31). Outbreaks occur in the warm months especially because the organism brought into the kitchen in fish, contaminates cooking utensils such as chopping boards and has a chance to multiply rapidly at a summer temperature of 32°C. Raw fish or shellfish dishes prepared with these utensils can then become very heavily contaminated by the vibrios even if they are not already polluted. In 1962, fifty-eight outbreaks of "sushi" food poisoning occurred in Tokyo with 3,617 persons involved. All were infected with *V. parahaemolyticus.*

Little is known about food-borne fungal infection. Mushroom poisoning though mycotic in origin is not a food-borne infection, nor it is related to any custom of cooking or eating habit.

The picture would not be complete if no mention is made of viruses and food-borne infection. But there is no obvious relationship between any special food customs and food-borne viral infections, because it is more difficult to follow the chain of events and so there are limitations to the completeness of the record of epidemic food-borne viral infection (4). Primarily, viruses are too small to be seen with the light microscope and they multiply only in appropriate living host cells. Laboratory diagnosis of viral infections is still costly. Moreover, the incubation periods in virus diseases are frequently longer than those caused by bacteria. But recently there are a number of reports relating contamination of food or of eating utensils with the virus disease infectious hepatitis. In 1956, Ross (25) reported a hepatitis epidemic conveyed by oysters. Many other reports followed of infectious hepatitis being associated with the eating of shellfish such as oysters and clams which had been held in polluted inshore water awaiting sale. All the earlier outbreaks occurred in persons who ate the shellfish raw, but a recent study in Boston (19) suggested a significant association between hepatitis and the consumption of steamed shellfish.

To sum up, food-borne infections are due to contamination of food-stuffs by pathogenic organisms which are sometimes present before and sometimes introduced after cooking. Many of the examples I have given result from customs of eating food imperfectly cooked. The temperature of cooking may enable the agents to multiply and be insufficient to kill them; on the contrary it gives a misleading impression of safety, strengthened by customary eating habits or merely ignorance.

There is an ancient Chinese saying that food of fragrant smell, delicious taste,

strong wine and flesh meat are all pleasing to the mouth, but are harmful to health. No matter how pleasing to the mouth the "Yu-sen", the "drunken crabs", the "Blünze" and the "Mutuk" are, they can be and often are indeed harmful to health. But the dangers are not confined to exotic places and bizarre tastes in food. Dangers exist whenever food is prepared. Roast beef may be underdone to reduce shrinkage and make it go further: it can be highly risky for salmonellosis, tuberculosis, taeniasis etc. Hampton (8) demonstrated that heat penetrated very slowly into large pieces of meat such as joints of 6 pounds weight. The interior temperature never reached higher than 60°C. The safety of meat infected with tubercle bacilli or other pathogenic bacteria could not be quaranteed by ordinary cookikng heat, because this temperature is lower than the pasteurization temperature of 65°C.

Food consumed raw is, of course, the usual source of food-borne infections. Where nightsoil is used as fertilizer, there is a greater risk of the presence of intestinal pathogens that will affect man. Vegetables such as lettuce, radishes and strawberries, grown in ground subjected to ordinary pollution. It is customary for Europeans in the Orient to soak uncooked vegetable in a weak potassium permanganate solution for an hour, but usually several cooks have to be discharged before one is found who will actually carry out what he considers a silly notion rather than risk being caught not doing it. Though washing is no doubt more effective, frying is even better. For, actually immersion for 24-48 hours in 1:500 potassium permanganate solution is required to kill the cysts of *Entamoeba histolytica.*

Many municipalities have ordinances which states that no person who is affected with any disease in a communicable form or is a carrier of such diseases, shall work in any eating or drinking establishment or be hired there. However, an ordinance to prohibit a dangerous food custom is rarely implemented. There is an ordinance in Hong Kong prohibiting eating of raw fish, but it was established to control cholera and not for clonorchiasis (2), and is more honoured in the breach than in the observance. Indeed, we need more Emperor Leo VII these days.

One may argue that food poisoning including botulism has little importance as a cause of death. Car accidents of a single day in the United States claimed more victims than did food poisoning over several years. But we must not forget that with micro-organisms we are dealing with the resourceful, baffling and crafty adversaries that have repeatedly given us fair warnings and that they can adapt to new situations and exploit man's carelessness. Yet mankind is forgetful. "Blessed are the forgetful" said the philosopher Nietzsche in a cynical beatitude "for they get the better even of their blunder". I think we need to be reminded of our blunder and our complacency time and again. Though there is still much to be learned about microbial food poisoning, there is still much that is known and not yet applied. I am not intending to paint a gloomy picture of the foods we are accustomed to taking but I wish to point out to you that certain traditional, habitual or convenient ways of taking them could bring us to the door of death.

The prevention of food-borne illness and contamination of food with micro-organism of animal origin are complicated problems. Micro-organisms are widely distributed in nature. Their presence could be detected only by bacteriological methods and sometimes their prevention can only be achieved by vigilent public health control of food contamination and education in food hygiene.

It is natural to play down hazards, to ignore past lessons, to assume that lightning will not strike twice and to do nothing or ignore the evidence: this attitude may even affect the scientists who are well informed and warned of the danger. Health is a national asset; disease is a heavy liability, and human life is precious. It is simple arithmatic to calculate the number of man-hours lost in a factory whose employees are stricken by an outbreak of food poisoning derived from unsafe practice in its canteen. The slow-down of production and reduction of income follow, let alone the much more valuable time the hospital staff and laboratory technicians wasted in handling these preventable diseases. There are more women working in factories or in business firms in Hong Kong nowadays than ever

before. According to the Hong Kong Government Information Services, there were 196,824 female manual workers employed in industrial undertakings in the colony in 1967 as opposed to 58,454 in 1957. Eating in canteens or neighbouring restaurants is replacing meals at home. This change in social economic pattern is relative to those in western countries. It is only a matter of time that large outbreaks of *Cl. welchii* type A food poisoning that occurred in England and Walse may occur in Hong Kong.

"Health" declared Réne Sand "is purchasable. We can buy human life. Each country decides its own death tale." Shall we decide our own death tale in Hong Kong, or could we? The answer is yes. The simple fact is that the causes of most of the microbial food poisoning diseases are known and are preventable. But some one must determine the level of our communal investment in Microbiology, both in dollars and people, the amount spent for health education such as in food hygiene and the control of food handlers and specifically in the support for training of more microbiologists. The microbiologists have been criticised that they are simply consumer of dollars and producers of data. Comparing the value of the data they produce and the dollars they consume, the dividends from the investment should be very attractive and profitable.

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SOME BASIC FACTS ON GENETICS

by M. Chou, D. Chu and K. T. Tan

Introduction

The following article is not a treaties on the subject of genetics but rather an attempt to organise in a as simple and readable form as possible some basic facts on genetics and their influence on diseases. With each conquest of his environment, and with it a greater ability to contol the environmental factors in the causation of diseases, man is beginning to realise the significance of switching a greater part of the war against disease in the direction of genetical disorders.

Human diseases can be represented in a wide spectrum. At one end of the spectrum, environmental factors are mainly causative of the diseases while at the other end of the scale, genetic cause are wholly responsible, and in between, environmental factors and genetic defects play a mixed and varying role.

What are chromosomes

There are the vehicles that carry hereditary material and are found in the nuclei of the cells of the body. A chromosome is made up of units of hereditary material called genes arranged in a specific linear fashion and these genes are made up of deoxyribonucleic acid (D.N.A.). The position on a chromosome occupied by a gene is called a locus. At each locus, there may be alternative genes called alleles and at some loci there may be multiple alleles (ABO blood gps). When both chromosomes carry the same gene at the loci, the person is said to be homozygous at the locus. If the genes are different, they are heterozygous.

In man, the somatic cells have 46 or 23 pair of chromosomes. 22 pairs of these chromosomes are autosomes and are found in the male or the female. Each pair of chromosomes is identical, although each chromosome is different in genetic content from the other and each pair appears different from the other pairs. In addition to these 22 pairs of chromosomes, the female has a pair of chromosomes called X chromosomes while the male has an X chromosome and a Y chromosome.

In contrast to the somatic cells, the mature reproductive cell (i.e. a sperm or ovum) each contains only 23 chromosomes; halfing of the number of chromosomes takes place in meiosis so that when fertilisation occurs, each cell of the zygote will now have the normal complement of 23 pairs.

All ova carry an X-chromosome and when a sperm carrying a Y-chromosome unites with an ovum a male child is conceived (carrying X and Y chromosomes). When X-carrying sperm unites with a ovum, a female child is conceived.

Abnormalities in the sex chromosomes can be determined by scraping a few cells from the buccal mucosa, staining and examining it under the microscope.

Normal females with 2 X chromosome shave an area of darker staining called the Barr Body or sex chromatin body. Normal males with a pair of X Y chromosomes do not have this. Abnormal males with XXY chromosomes will have a Barr Body.

The presence of Y chromosome determines the sex of a person and the extra X chromosome in him will not eliminate the basically male traits in him although it may impart some female characteristics to him. Females with 3 X chromosomes will have two Barr Bodies, Females with 4 chromosomes will have 3 Barr Bodies and so on. Thus,

No. of X chromosomes in person = No. of Barr Bodies + I.

CYTOGENETIC DEFECTS

DEFECTS IN MEIOSIS

Meitoic non-disjunction, results in one gamete containing both partners of a particular

pair of chromosomes and another gamete containing neither.

If a reproductive cell containing both partners of a particular pair of chromosomes unites with a normal reproductive cell, the new cell will have 47 chromosomes with 3 chromosomes of that particular set of chromosome sinstead of the normal two and the condition is called trisomy. If a reproductive cell having 1 chromosome less than normal unites with a normal cell the new cell will have 45 chromosome and the condition is called monosomy. Monosomy and trisomy of this type occur quite frequently with mothers over the age of 35 yrs and appear to have no relation to the age of the father.

In trisomy 21, the patient may have mental retardation, a large tongue slanted oriental type of eyes (hence the name Mongoloids), abnormal palm and foot prints, poor muscle tone and heart defects. Trisomies can occur in other chromosomes and commonly occur also in the 17-18 chromosome group and the 13-15 chromosome group. These are associated with severe developmental malformations. The children usually do not survive the first year of life.

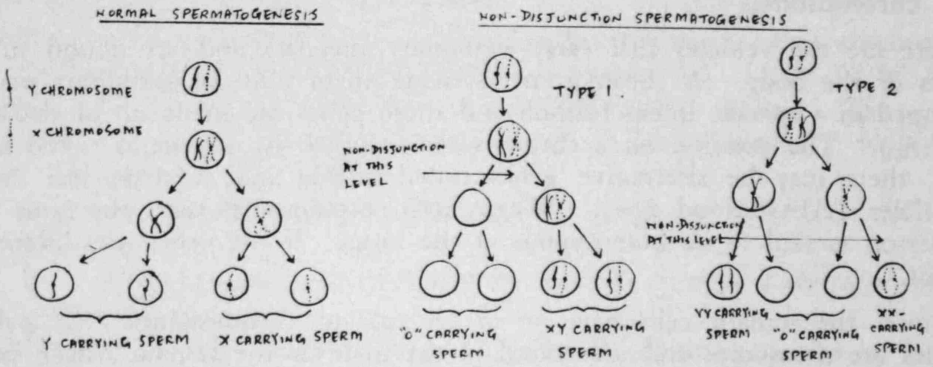


Fig. 1

Monosomy & Trisomy in the sex chromosomes are fund also.

When mating occurs, it can be seen that many genotypes are possible (a genotype is the fundamental hereditary constitution or assortment of genes)

Normal Sperm	*Abnormal ovum*		*Genotype*
X	XX	XXY	(Klinefelter's syndrome)
X	XX	XXX	
X	O	XO	(Turner's syndrome)
Y	O	YO	? inviable
Normal Ovum	*Abnormal sperm*		*Genotype*
X	O	XO	(Turner's Syndrome) or Monosomy X
X	XY	XXY	(Klinefelter's syndrome)
X	YY	XYY	
X	XX	XXX	(Trisomy X)

Monosomy and trisomy occurring in sex chromosomes are found in Turner's Syndrome (Monosomy X) and in Trisomy X respectively.

Monosomy X produces females who are abnormally short, do not menstruate, have immature sex structures and are sterile. Trisomy X produces females with a high incidence of mental retardation, who vary from normal fertile women to those closely resembling patients with Turner's Syndrome. (XO)

Klinefelter's Syndrome (XXY) patients are males who appear normal and may be fairly tall. They are sterile and have small testes. They have a high pitched voice and they may have abnormal development of breast and often mentally retarded. Males with XYY are usually over 6 ft. tall, extremely aggressive, fairly frequently criminally insane.

Defects in Mitosis

Chromosomal defect can also occur when the normal mechanism of mitosis is disturbed. Mitosis is the reduplication of somatic cell so that each daughter cell retains the identical chromosomal constitutions found in the parent cell.

Several types of chromosomal defects can occur during interference of normal mitosis and the 2 commonest are

1. Mitotic non-disjunction
2. Anaphase lag

The 'abnormal' mitotic mechanisms in early embryogenesis can therefore give rise to the condition of mosaicism in which some of the cells contain 47 chromosomes, other 46 and still some 45 etc. This can be seen clearly by the illustrated diagram below.

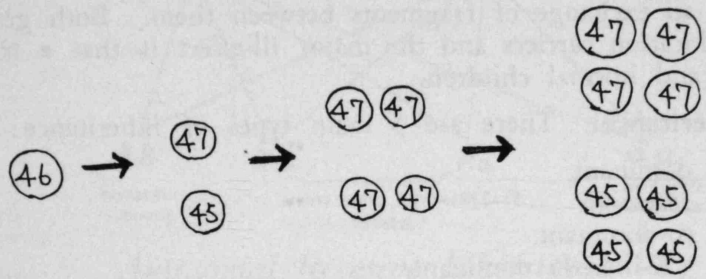


Fig. 2

Mosaicism in which half the person's cells are trisomic (47 chromosomes) and half are monosomic (45 chromosomes).

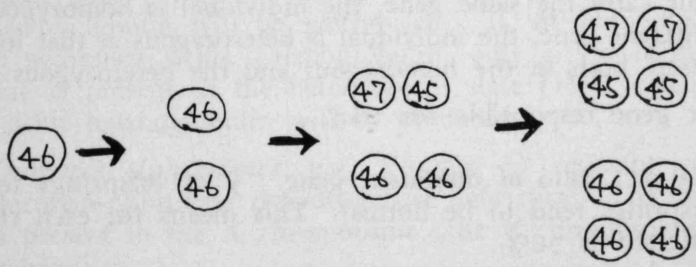


Fig. 3

Mosaicism in which half the cells are normal (46 chromosomes) and one quarter are trisomic (47 chromosomes) and one quarter monosomic (45 chromosomes).

Mosaicism occurs not only in sex chromosomes but also in the other chromosomes and the most common of this is mongol mosaicism in which part of the patients cells have the normal 46 chromosomes and part have three chromosome 21.

Mongol parents have a higher risk than normal of bearing mongoloid children; mental retardation here may be less than the type discussed earlier.

Defects in Mitosis and Meiosis

Other chromosomal abnormalities occur in mitosis and meiosis and only two of these are described below:

1. deletion.
2. translocation.

Deletion is actual loss of a part of chromosome. The best known type is one caused by the deletion of part of the chromosome in 4-5 chromosomes group. Affected children have a characteristic "cat Cry", small head, widely spaced eyes and are mentally retarded.

The other well-known type of deletion is found in the leukaemic cells of patients

with chronic myeloid leukeamia. Here part of the long arms of a chromosome of the 21-22 groups is lost and this deleted chromosome is called the Philadelphia chromosome. This Philadelphia chromosome does not seem to run in families.

Translocation is said to occur when 2 chromosomes exchange fragments between them. Sometimes when one of the products of exchange is very small, it becomes lost Translocations tend to occur mainly in chromosome groups 13-15 and 21-22. Although they can occur in any of the other chromosomes. The best known type is found in Down's Syndrome (Trisomy 21) where the extra chromosome 21 is attached to another chromosome in 13-15 groups or 22 chromosome.

In this way, translocation may occur and result in individual with 45 chromosomes in which one of the product of the exchange being very small and insignificant is lost. Translocation can also result in individual with 46 chromosomes but two chromosomes are abnormal because of an exchange of fragments between them. Both groups are clinically normal but are translocation carriers and the major ill-effect is that a translocation carrier may have abnormal and normal children.

Mode of Inheritance: There are 5 main types of inheritance:

a. autosomal dominant,
b. autosomal recessive,
c. autosomal co-dominant,
d. sex-linked (X-linked) dominant,
e. sex-linked (X-linked) recessive.

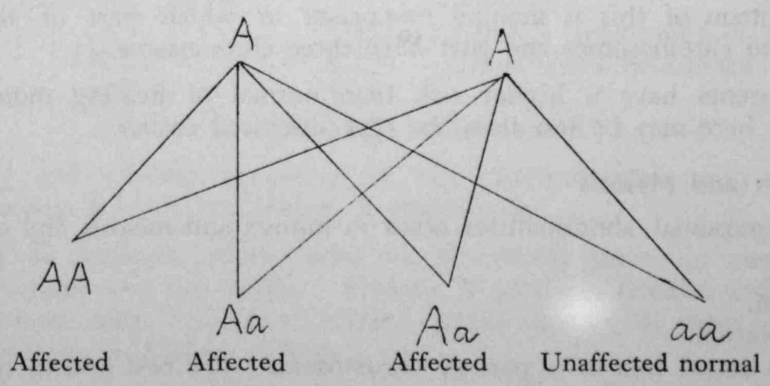
Autosomal Dominant Traits. The genes responsible for the traits are present in the autosomes, e.g. achondrophasia, neurofibromatosis and Huntington's chorea. As was said earlier, at any particular locus in a chromosome, there may be alternative genes. If both chromosomes of a pair carry the same gene, the individual is homozygous of that locus; if the locus carry the different gene, the individual is heterozygous at that locus. The dominant gene will manifest itself both in the homozygous and the heterozygous states.

A = dominant gene responsible for trait.
a = allele.

N. B. (1) The usual 1:1 ratio of dominant gene. $\frac{1}{2}$ of offsprings tend to be affected. $\frac{1}{2}$ of offsprings tend to be normal. This means for each child, the chance of being affected is 50%.

(2) There is skipping generation, i.e. the gene, through dominant, may not be completely manifested in a generation, but will appear in the next descendants.

(3) Gene may be so lethal that the affected individual may die before reproductive age, and the trait will not be transmitted. However, the trait will persist in a population because of spontaneous mutation.

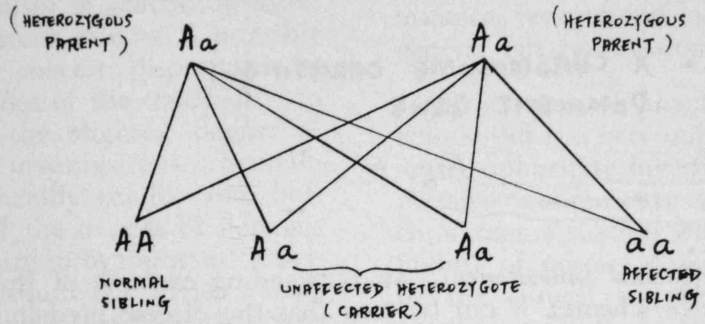


Autosomal Dominant Inheritance

Fig. 4

Autosomal Recessive Inheritance, e.g. phenylketonuria, albinism, Wilson's disease, galactosaemia, and fibrocystic disease of the pancreas. An autosomal recessive trait manifests only in the homozygous for the gene concerned and are clinically normal.

As can be seen from above, each child will have 50% chance of being a carrier, 25% chance of being normal and 25% chance of being affected. It has been found that consanguinius marriage (i.e. between blood relatives) tends to results in higher incidence of the recessive disease as the trait may run in the family tree. In some instances, the incidence in first cousin marriages in these parents is as high as 35% instead of the normal 0.1-0.4% in the U.K.



Autosomal Recesive Inheritance

Fig. 5

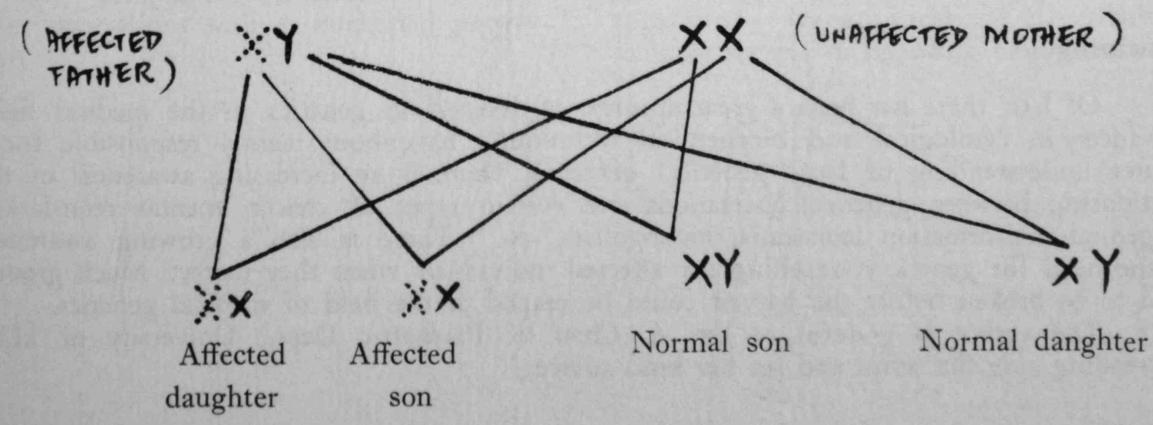
Autosomal co-dominant inheritance. This said to happen when 2 traits are both expressed in the heterozygous state, i.e. codominants. This can be illustrated as follows. If an individual is homozygous (HH) for the gene which synthesises normal haemoglobulin, then only normal haemoglobulin will be synthesised. If an individual homozygous (SS) for the gene which sythesises sickle haemoglobulin, only sickle form will be sythesised. However, if the gene is present in the heterozygous state (HS), equal amounts of normal haemoglobulin and sickle haemoglobulin will be produced.

Sex-linked Dominant Inheretance, e.g. Vitamin D resistant rickets due to renal phosphaturia and glucose-6-phosphate dehydrogenase deficiency. The dominant gene responsibl efor the trait is present in the X chromoosme (the Y chromosome so far has not been proven to carry any gene).

Heterozygous affected females will transmit the disease to half the sons and half the daughters.

Affected male will transmit the disease to all the daughters but not to the sons. From the above it can be seen that if the son is involved, a search for the disease should be looked for in the mother.

SEX LINKED DOMINANT INAERITANCE



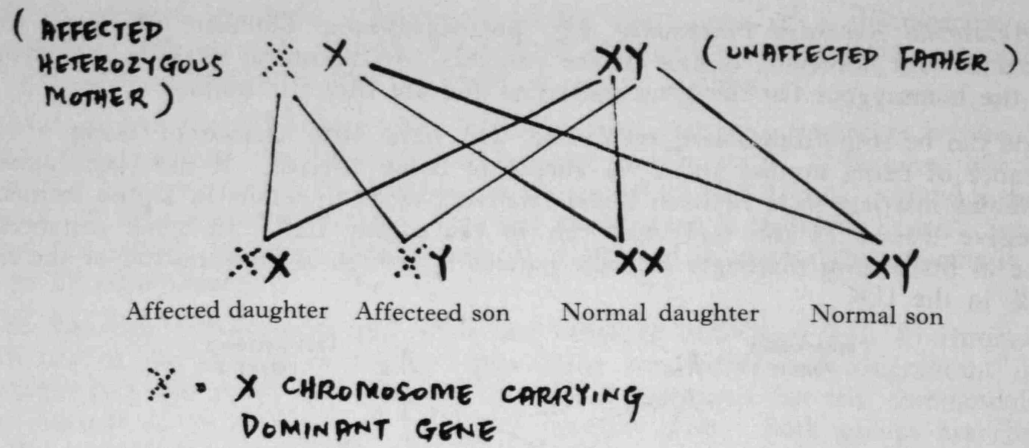
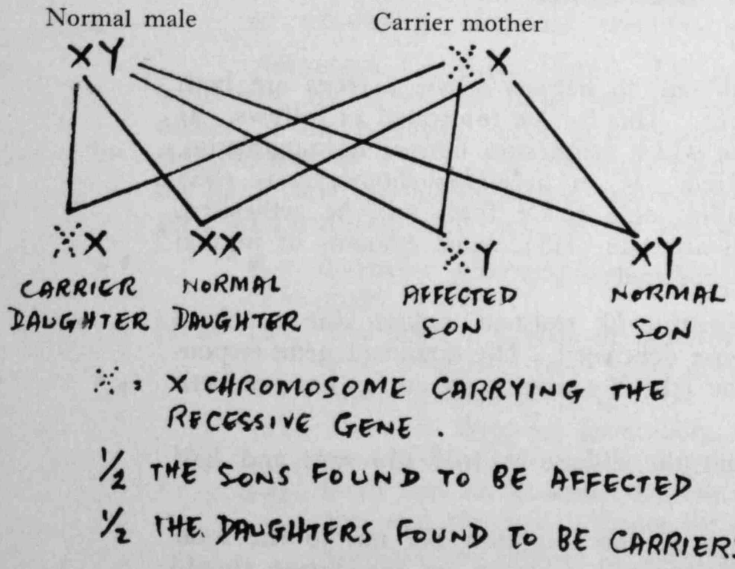


Fig. 6

Recessive Sex-linked Inheritance. An outstanding example of this hemophilia. From the above schemes, it can be seen that the disease predominately affects males and is transmitted by females.



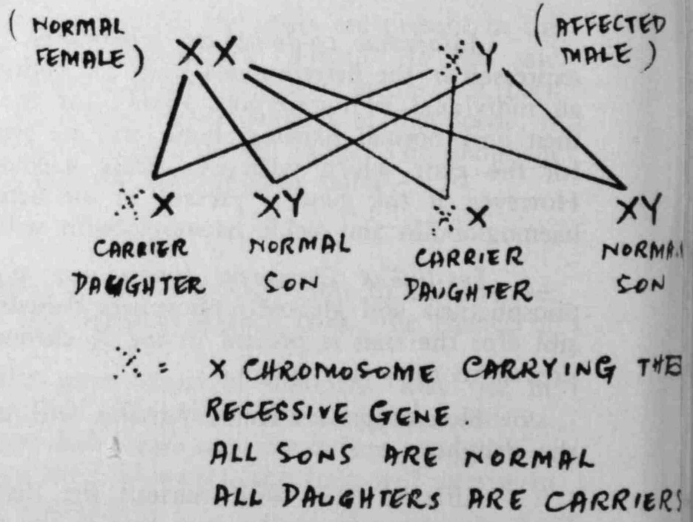


Fig. 7

Conclusion

Of late, there has been a great upsurge of interest in genetics in the medical field. Advances in cytological and biochemical techniquest have been mainly responsible for a greater understanding of basic genetical defects. There is an increasing awareness of the relationship between genetical aberrations and certain types of cancer, mental retardation, congenital malformation leukaemia, monogolism, etc. There is also a growing awareness of the need for genetic counselling for affected individuals when they marry. Much ground need to be broken before the harvest could be reaped in the field of medical genetics.

The author is grateful to Dr. A. Chau of Paediatric Dept., University of H.K. for reading over the script and for her kind advice.

HIRSUTISM

S. M. Chan

Hirutism is an excessive growth of body hair with a masculine type of distribution.

It could be constitutional or symptomatic. Constitutional hirsutism is genetically determined. In the western race, it is probably the source of keen concern disproportional to the true significance of the condition. In Chinese, however, the slightest degree of hirsutism warrants investigations. Symptomatic hirsutism generally results from hormonal imbalance of the ovaries or adrenals (primary or secondary to hypophyseal activity; congenital or acquired). Other causes or associations such as Stein-Leventhal Syndrome, juvenile myxoedema, Achard-Thier's Syndrome are less common. Iatrogenic causes should be borne in mind in making the aetiological diagnosis.

Several classifications of hirsutism have been attempted by different authorities, but none is very satisfactory, probably owing to the lack of understanding of hirsutism in relation to certain disease entities.

The management of patients with such complaint goes along two lines:

1. To exclude any possible organic cause
2. To treat any underlying cause, and/or to give any symptomatic measures.

History gives some hint. Constitutional hirsutism most often appears in late childhood or at the time of puberty, gradually increasing until stabilising in the third decade of life. Symptomatic hirsutism may have other associations such as menstrual irregularity.

During physical examination, hirsutism without other signs of virulism most commonly is of non-endocrine origin. The pattern of hair distribution is important, for instance, testosterone increases body hair in general but causes alopecia.

In any case of hirsutism, the urinary 17-ketosteroid is a very important guide. Other more sophisticate investigations such as suppressive or stimulative adrenal function tests, chromosome studies, will be directed by the finding of urinary 17-ketosteroid as well as by the clinical picture of the patient in general.

The treatment of hirsutism, except in the very occasional cases amenable to specific endocrinologic therapy, is unsatisfactory.

There are several means by which hirsutism could be symptomatically controlled to some extent:

1. Mechanical means: electrolysis, bleaching, plucking, chemical depilators so on. Shaving is the best, the popular belief that it stimulates hair growth has no scientific proof.

2. Hormonal therapy: oestrogen, by decreasing gonadotrophic hormones, hence decreasing ovarian function with some possible decrease in androgen production, may modify hirsutism.

3. SKF 7690 (17 alpha-methyl-beta-nortestosterone), an experimental antiandrogen at target-organ level (i.e. pilosebaceous apparatus). Its empirical use has resulted in some success in retarding hair growth.

PROSPECTS OF THE MEDICAL CAREER IN HONG KONG

This article aims to give its readers (Medical Students in particular) a general survey on the prospects of various "sub-fields" in the Medical Career in Hong Kong. We owe much thanks to Professor A. J. S. McFADZEAN and Dr. P. H. TENG who have kindly provided material for this article.

INTERNSHIP:

After passing his final M.B.B.S. Examniation, a medical graduate is required by the General Medical Council to do a year's internship before he is eligible for full registration. During this period he has to complete two appointments of 6 months each in medicine and surgery or their equivalents. For this purpose obstetrics is regarded as the equivalent of medicine or of surgery but it may not be combined with gynaecology which is the equivalent of surgery. Further a combination of medical and surgical sub-specialities is frowned upon. The monthly remuneration for an intern is now $1,200 but he is charged $150 per month for rent and domestic services. Because he is still learning an intern is expected to work hard and he has to do round-the-clock duties over a 24 to 32-hour period. Here probably lies the reason why there has been some misunderstanding that interns are paid only a small salary but have to work long and tedious hours. It should be readily appreciated that in order to gain experience, he must necessarily attend to emergency and casualty cases, and follow up the progress of his patients so as to observe and treat changes in their conditions. There is however no question whatsoever that he has to do such long duties every day, but perhaps once or twice a week by rotation with others.

When an intern finishes his year and becomes registered, he can join a University Department, or the Medical and Health Department, or one of the Government assisted or private hospitals or he can go straight into private practice.

CAREER IN THE UNIVERSITY DEPARTMENT:

Those who wish to make their careers in a Department of the Medical Faculty must possess, in addition to professional competence, an interest in teaching and in research. In these latter two activities lies the major satisfaction of a University career. The facilities in the Faculty which are available for research are unrivalled in the Colony. Each Department is adequately housed and very well equipped and the close proximity of the Medical Library to both Pre-Clinical and Clinical Departments is a most attractive additional feature.

The Pre-Clinical Departments of the Faculty are Anatomy, Physiology, Biochemistry and Pharmacology and the Clinical Departments are Medicine, Paediatrics, Surgery, Orthopaedic Surgery, Obstetrics and Gynaecology, Pathology and Microbiology. It is hoped that in the academic year 1970-71 the Department of Preventive and Social Medicine will have a full-time staff and that a Department of Psychiatry will be created.

THE PRE-CLINICAL DEPARTMENTS:

Because of the nature and content of the undergraduate course in Biochemistry a medical graduate would be at a distinct disadvantage in competition with a science graduate for a vacancy in this Department consequently he is unlikely to consider making a career in Biochemistry. But in the 3 other Pre-Clinical Departments the medical graduate would know an advantage for it cannot be denied that these subjects are the better taught by those who are acquainted with their ultimate application. Rarely do medical graduates in Hong Kong consider making a career in the Pre-Clinical Departments. There are many reasons for this not the least of which is the cruel differential in income between those who follow such a course and those engaged in clinical practice. However, every year has had its quota of graduates who, for one reason or another, were singularly unsuited for the responsibilities attached to clinical practice and many of these would have been well-advised to have made their career in a Pre-Clinical Department. Anatomists, physiologists

and pharmacologists are in very short supply the world over and consequently there is a bright future for the competent in any of these fields. This is a vastly different prospect from that obtaining in clinical practice where the competition in all areas is of the keenest.

In a Pre-Clinical Department, the successful applicant, in the first instance, is appointed Assistant Lecturer which is a probationary appointment. Within the first two years the appointee is assessed by the Board of Selection as to his suitability for appointment as Lecturer.

THE CLINICAL DEPARTMENTS:

In the Clinical Departments a formal training scheme for Clinical Lecturers has been in operation since 1965. On entry the successful applicant is appointed Lecturer and after a period of usually 3 years the trainee proceeds overseas for a period of 2 years for further training in the chosen specialty and, as an incidental, to obtain the higher diploma of the appropriate Royal College. Arrangements are usually made for the trainee to be appointed as an Honorary Registrar in an appropriate Clinical Department. The period overseas may be financed from a Commonwealth or other scholarship but if the latter be of a value less than the former the University will provide funds to bring the trainee's income up to the level of a Commonwealth Scholarship. If a trainee does not succeed in obtaining a scholarship then the University will provide funds equal to the value of a Commonwealth Scholarship. On return to Hong Kong, provided the appropriate higher diplama has been obtained, the trainee crosses the bar which lies between the 5th and 6th point on the Clinical Lecturers' scale and becomes eligible for a clinical award. The record of the performances in the examinations of the Royal Colleges of graduates trained in the University Clinical Departments is an enviable one.

STUDY LEAVES:

The University recognises the academic isolation which is known in Hong Kong and ample provisions have been made to offset its effects. All members of the teaching staff of the Faculty earn long leave. Long leave, in whole or in part, and any approved extension thereto may be designated study leave. If a member of the staff wishes to spend study leave outside of Hong Kong the University will be prepared to consider an application for the provision of a passage to and from the selected country. In addition the China Medical Board of New York has been most generous in awarding Fellowships to members of the Faculty for tudy in the United States. The University also recognises the value of attending International Conferences. Members of the Faculty may receive substantial financial assistance towards the cost of attending such conferences and in recent years the sum of money allocated for this purpose has been greatly increased.

CAREER IN THE GOVERNMENT'S MEDICAL & HEALTH DEPARTMENT: TRAINING:

In the Medical and Health Department one can according to one's interest and inclination apply to be trained in a clinical speciality such as medicine, surgery, obstetrics and gynaecology, pathology, radiology, anaesthesiology, psychiatry, tuberculosis, ophthalmology, ear, nose and throat surgery, dermatology, and forensic pathology. Before he is posted to a clinical unit as a trainee he is usually required to do one year of general duties such as out-patients or casualty. This year of general duties is designed to broaden the trainee's general experience before he starts specialising and is also necessary because often he has to wait for his turn since there are usually other applicants on the list. After usually 4 years of post-graduate training, and if his work is considered satisfactory by the Post-graduate Training Panel, on the recommendation of the Chief of the Unit under whom he has served, he will be considered for study leave abroad in order to obtain his higher qualification. This opportunity quite understandably is further dependent on the availability of funds and the staffing situation in the Department. In this connection it may be mentioned that the Primary Examinations for the Fellowship of the Royal Colleges of Edinburgh and Australia and the Fellowship of the Faculty of Anaesthetists of Australia have been

held in Hong Kong and the Final Examination of the Fellowship of the Royal Australasian College of Surgeons will be held for the first time in Singapore next year. If at any time during the period when his work is regularly reviewed a trainee is regarded as unsuitable, he will be taken off the training programme and transferred to general or other duties.

PROMOTION & SALARY SCALE:

A medical and health officer now joins the service at $2,629 a month with annual incremental increases. While in training, like the intern, and for the same reasons, he too has to work hard and sometimes long hours. After he returns with a specialist qualification the next step in his promotion prospects will be a senior medical and health officer's post at a monthly salary of $4,947. There are at present 57 senior medical and health officer's post located in different streams, and for promotion, length of service and satisfactory work are taken into consideration. A senior medical and health officer in a speciality can aspire to become a specialist. All vacancies in specialist posts are advertised and application is open to all who qualify. There are altogether 39 specialist posts. It has recently been recommended that more posts for senior medical officers and specialists be created. The monthly salary for a specialist has also been re-adjusted recently, he now starts off with $6,100, then after a few years he may get on to $6,700 and eventually $7,200 after another few years.

Recently Government has introduced a scheme for housing allowance: $850 per month for married male medical and health officers with families, $700 per month for married male medical and health officers without families, and $500 per month for single medical and health officers on salaries on or above $3,424. These allowances however are not given to those officers who have privately owned accommodation or Co-operative Society flats, and others who are in departmental quarters. Medical and health officers on a salary below $3,424 are given a special allowance of $300 per month.

OTHER POSTS:

If the graduate is not interested in specialising in a clinical subject then he has three other openings in the Medical and Health Department. He can request for general duties in which case he will be posted to a *general clinic, a "health" job,* or a *casualty department.* After a number of years he will be put in charge of one of the larger clinics as a senior medical and health officer and later perhaps one of the hospitals as a principal medical and health officer. His work will then be partly administrative. Besides out-patients and casualty departments, there are also the *families clinics* for government employees and their dependents, the *prison medical service,* the *clinic launches* which call at the outlying districts and islands, and the *Medical Examination Board* where physical examinations of candidates for the public service are conducted. Or he can join the *health service* and then progress will be from health officer to senior health officer, principal medical and health officer, assistant director and deputy director. The main duties and functions of a health officer are to investigate infectious diseases contacts, conduct inoculation campaigns and collect epidemiological data and vital statistics. Health posts are distributed on a geographical basis with an officer in charge of each of the 3 main regions, Hong Kong, Kowloon and and New Territories and others in charge of districts within the regions. There are also health posts under the Urban Council including an Assistant Directorship and, the Deputy Director, Health' is in fact the Vice-Chairman of the Urban Council. In the Urban Council, there are additional health functions, such as environmental hygiene, food hygiene and control of sanitary nuisances. There are 3 types of specialised health jobs. There are industrial health officers who are responsible for the inspection of factories, assessment of workman's compensation in case of injury, prevention and control of occupational disease etc. Then there are port health officers whose duties include inspection of ships and aircraft and all aspects of quarantine work. The many maternity and child health centres are staffed by health officers who are responsible for the organization of ante- and post-natal care of mothers and infant welfare including regular examination and immunisation of new born babies and health education for the mothers. There is also a school health service which

provides inspection of schools and children regarding living, accommodation, recreation and and toilet facilities and also undertake to detect and prevent infectious diseases among the pupils and to assess their growth and development, physical defects and incidence of diseases. Health officers are sent abroad to study for the D.P.H. which is now usually taken in Singapore or New Zealand, and other diplomas such asa the D.I.H. and D.C.H.

If the question of choosing between curative and preventive medicine for a career has to be weighed then the decision must necessarily be made after carefully considering one's interest and aptitude. It should be remembered that from the point of view of service to the community, preventive medicine is just as essential and rewarding as curative medicine. As to the other question of whether Government service is to be preferred to private practice or vice versa again it all depends on the individual. General practice entails long hours and night duty too and the busy practitioners get even less time off than the hospital staff because they are on their own. In institutional work there are other attractions such as teaching and research. As regards remuneration it is generally said that private practice offers much more. This is perhaps the main reason why doctors leave the service after some years, some having done general duties and others having specialised. It is also a fact that for the past 2-3 year a number of officers have left to emigrate to other countries abroad. In addition to doctors who resign, there are others who ask to retire early on attaining the retiring age of 55 year. The Medical and Health Department depends largely on local graduates joining to fill its vacancies and it is clear that shortage will result from an imbalance between resignations and retirements on one side of the scale and recruitment on the other.

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WHAT IS A MEDICAL TRAINING?

"Medical training has for certain types of people a ripening influence that no other field of education possesses. Aside from the habits of hard work that it demands, it embraces a broad survey of the biological field, enforces a considered consultation of the fundamental science, and, on the human side, brings the thoughtful student face to face with the emotional struggles, the misery, the courage and cowardice, of his fellow creatures — to say nothing of the familiarity it gives him with sociological conditions, vice, crime and poverty. There is in it a balanced education of the mind and the spirit which, in those strong enough to take it, hardens the intellect and deepens the sympathy for human suffering and misfortune".

— Dr. Hans Zinsser.

THE REASONS

'The decision by men and women to study medicine and become a doctor is influenced by personal experiences, by chance and frequently by the desire to follow a family tradition. Some study medicine because of compassion for humanity, others select it as a profession because they are fond of science, still others are drawn by prospects of an assured income or by a rosy picture of medical life. Fortunately medical students the world over have always been imbued with a basic ideal to serve mankind' (Noah D. Fabricomt, M.D.)

"Why do you choose medicine?" The reasons may be as numerable as there are medical students. Be it a genuine love for the science, a saintly call to serve mankind or a mere crave from money and status, the outcome is the same—all will become doctors one day. (provided that one doesn't quit on the way). It is most comforting to recall that the initial stimulus that drove many famous doctors into medicine may be just as triva! as ours. Nonetheless, once they were in medicine, they learned to love and explore the field with their inquisite minds. It is not the least surprising that they evantually emerged as prominent doctors.

Dr. Merrill Moore. (*Psychiatrist*)

Several factors led Merrill Moore to a medical carerr. For one, there had been at least eight or nine physicians in his family. More important influences, as Moore stated, were the illnesses of his aunt and his father. His aunt had epilepsy and her seizures were a routine yet frightening part of their family life. His father, a talented leader in Southern literary and public life, had a genuine depression that lasted a few years. When a child, he considered their suffering unnecessary and wondered: "How could it have been prevented?" and "What could be done?"

His interests at college were literary, yet he held to science as to a life preserver. While an undergraduate, he realized that some of the best people he knew were physicians, of steadfast integrities and strong humanistic qualities. In 1924, when he was 21, Moore had no wish to do anything but medicine and he entered Vanderbilt Medical School.

Dr. George W. Crile. (*surgeon*)

Humor occasionally plays a role in the selection of a serious lifework. Some time before he studied medicine, George W. Crile's interest was stimulated by an amusing obstetric experience. The village physician called Crile one evening to ask whether Crile would watch a prospective mother while he made a call on a patient requiring immediate attention. Crile agreed. Events moved along rapidly. It was the first maternity experience for the mother—to-be, as well as for Crile, who expected the village physiciand to return in time for the delivery. To his great relief, a reinforcement arrived at midnight in the person of a thin, aged midwife carrying a small black bag.

About 2 a.m. matters seemed to be reaching a crisis. Convinced that there were fatal complications ahead, Crile kept close watch on the old midwife's face. Suddenly

she exclaimed, "Well, Doc, don't you think we'd better quill her?" Although he had no idea of what she meant, Crille quickly approved. She removed a goose quill and a box of snuff from the little black bag, filled the quill with snuff, and inserted one end of it into the patient's nostril while placing the other end in her own mouth. The old woman blew hard. A tremendous sneeze followed, and the baby arrived precipitately. Thus was George W. Crile first encouraged to become a doctor.

Dr. Wilfred Grenfell. (*Surgeon*)

When young Wilfred T. Grenfell first began to display an interest in medicine, his father urged him to discuss the matter with their country family doctor. The old doctor had an enormous practice and was eminently successful. In those days this was measured in part by the number of horses he drove, in part by the number of miles he travelled over rural roads.

What impressed Grenfell most during his visit of medical inquiry—as he recalls in his book, "A Labrador Doctor"—was that the old doctor brought down from one of his shelves a large jar, out of which he produced a pickled human brian.

"I was thrilled with entirely new emotions. I had never thought of man's body as a machine. That this weird, white, puckered-up mass could be the producer or transmitter of all that made man, that it controlled our physical strength and growth, and our response to life. . . . why it was absolutely marvellous. . . . My father saw at once on my return that I had found my real interest, and put before me two alternative plans, one to go to Oxford, where my brother had just entered, or to join him in London and take up work in the London Hospital and University, preparatory to going in for medicine. I chose the latter at once—a decision I have never regretted."

Dr. Hans Zinsser. (*Bacteriologist*)

For a time after graduating from college, Hans Zinsser had considerable difficulty in choosing a career. Although his early ambitions were toward literature, Zinsser questioned his own talents as a writer. His teachers advised him to study medicine. They believed that four years of rigid discipline would contribute to his maturity—he was only twenty at the time—and that it would lead him into medical biology, a field they thought where he naturally fitted. He selected medicine as a way of life because he was fond of science itself.

So do not be ashamed next time when people ask "Why do you choose medicine?" even if your cause is but a most trivial one. Whatsoever that drove or lured you into the profession does not necessarily count. It is your attitude towards the training as a whole that determines your ultimate success as a doctor.

HIPPOCRATIC HUDDLE

Slipping out one evening for a bridge game with the boys, the surgeon tossed his wife the most high sounding excuse he coule think of "Very important case," he said solemnly, "There are 3 doctors there already."

MEDICAL EDUCATION

My 8-year-old daughter answered the doorbell. No, her daddy wasn't ni, she informed the caller" He's at this hospital, doing an appendectomy."

"My," said the caller, "that's a big word for a little girl. Do you know what it means?"

"Sure I do"' she answered promptly, "It means a hundred and fifty dollars."

A TALK WITH OUR NEW PROESSOR OF ANATOMY

Rebecca

I heaved a long sign of relief. This was the eighth time that I asked to see Professor and found him free at last. My curiosity to know something about the new Professor would be satisfied (and I hope, so is yours).

Professor Lisowski, how comes that you took up teaching Anatomy as your profession?

In 1947, I graduated from the Royal College of Surgeons, Ireland. There I received my medical training. But I had difficultly in choosing the subject I would follow. Both Anatomy and Pathology were appealing to me. After a talk with my Professor of Anatomy, I made up my mind. While I was a student I became a demonstrator in Anatomy.

What is your attitude towards Anatomy?

Anatomy is an old subject but it has been changed considerably. Before, facts were mixed up with suppositions. In the late 17th century, light dawned on Anatomy. And subsequently great advances have been made in every field, particularly by scientists in France, Germany and Austria and later in England, America and Japan. Human structure has been greatly clarified. But now, Anatomy becomes reorientated with emphasis on the functional aspect. This gives function its due importance, for both structure and function are intimately related. Also the boundaries between the preclinical sciences are disappearing and there is more of a synthetic approach.

In your opinion, how should the student study Anatomy?

Crtical thinking is indispensable in the study of Anatomy. Knowledge from books should be correlated with experimental findings in dissections, histology and neuroanatomy practicals.

How do you find H.K., the place, the climate and the students?

H.K. is a beautiful place. I think I shall get used to the climate. I haven't the chance to be acquainted with the students here yet. But I chanced to meet some Hong Kong medical students in England. They left a favourable impression in my mind.

I am sure you have taken a brief survey of the Department. Are you satisfied with it? What are your plans?

The 2 museums are rich in material. I understand, it is the work of Professor Chang and his staff. Tribute should be given to them, especially to Professor Chang who deserves the fame he enjoys. I have my plans. But unfortunately, the budget is limited and we shall have to see. However, the staff and I hope to continue research on growth studies, growth patterns of soft tissues, comparative primatology (I have brought 26 dead Jilada monkeys with me) and electronic microscopic research. It is my intention that the work is cooperative.

For the 1st year students, a tutorial system will be introduced. 20 students are assigned to a tutor who will guide them both in the study of gross Anatomy and dissections. After covering each region, a test will be given to see how the students progress. So there will be no lectures on gross Anatomy. If possible, I hope to expand the tutorial system, covering histology and neurology as well. Changes in the 2nd Year are contemplated later.

Professor, do you find time to enjoy yourself inspite of the tight schedule?

Of course, I am quite busy now with meeting my staff and preparing the teaching, planning for future research. But once they are organised, I think I am able to reserve a little time for reading. Historical works and books dealing with the problems of developing countries are my favourite topics.

Finally, I wish to add that Anatomy is not an isolated subject. At all times, the Department is ready to co-operate with the other preclinical and clinical Departments in order to benefit the medical curriculum.

HONG KONG UNIVERSITY MEDICAL SOCIETY ANNUAL REPORT (1968-1969)

The Hong Kong University Medical Society has successfully passed another academic year. Of the notable events that occurred during the past twelve months, those relating to University Reform were most prominent. The efforts of our students working both in the Medical Society and in the Students' Union have been instrumental in bringing about urgently needed changes and have paved the way for future improvements in the structure of the University.

The past year has also seen the Society embarking onto the publishing of a monthly newspaper "Caduceus" which is the same name used in one of its pre-war journals. Thanks to the ardent workers who participated in the founding of the newspaper and those who constantly contribute to it, the revival of an old publication has indeed been auspicious and present indications are that it will continue to grow in the years ahead.

In late September, our Society acted as host to the General Assembly of the Asian Regional Medical Student Association for the second time in three years. Delegates came from the seven member countries and had fruitful discussions on joint projects to be conducted by medical students in this region. The Organizing Committee, undaunted by the limited time and money available, helped to make the conference a splendid success.

In the field of sports, medical students have again proved their ability by laying claim to the Omega Rose Bowl.

Although achievements have been made in these and other areas, there is still much room for advancement. We shall continue to press for better teaching in the University and improved conditions of work for interns. The Elixir Loan Fund is still small and ways of increasing it must be found. Lastly, it cannot be over-emphasised that the accomplishments of the Society have depended and will continue to depend on the effort of each of its members.

The following is a summary of the events during the past year.

STUDENT WELFARE

1. University Reform

After a series of discussions on University Reform both here and in the Students' Union which entailed the holding of two Extraordinary General Meetings by our Socitey, proposals were formulated which were handed to the Dean for consideration. Some requests have since been accepted and implemented. The Dean's Undergrad Committee has served as a channel of communication between students and staff. A student representative now sits on the Faculty Appeals Committee. There is also student representation on the Faculty Library Committee.

2. Elixir Loan Fund

11 out of 15 applicants received a total of $8,000. The distribution was as follows:

1 student	.....	$1,500
2 students	.....	$1,000
2 students	.....	$ 750
6 students	.....	$ 500

3. Canteen and Co-op

The Canteen is open for business from 8 a.m. to 8 p.m. daily except on Sundays and Saturday afternoons and the Internal Affairs Secretary and the Student Health Committee of the Students' Union have kept a constant check on the quality of service. The Society has provided money to stock the Co-op with stationery and other goods.

4. Society Office

The Society was much honoured when, in early December, the Dean provided it with a room in the Medical Centre to be used as the Society Office.

5. Medical Fraternity Committee

Since its inception in 1968, the Medical Fraternity Committee has organized numerous projects to promote better understanding among students in the Faculty. The work

carried out include a aFreshman Information Service, a Guided Tour for New Clinical Students and starting this year, Tutorials during the summer for first year students.

6. Medical Students' Hostel

Through the generosity of Professor McFadzean and Professor Ong, a television set was installed in the hostel in March this year. Regarding the relationship between the hostel and the Medical Society, the Council has decided that the interests of the residents will at all times be represented through their class representative in the Council.

7. Miscellaneous

Lockers in the Surgery Museum were provided for senior and specialty clerks through the kindness of Professor Ong. Negotiations with the Department of Medicine for the use of their lockers in Queen Mary Hospital are continuing. Society Christmas Cards and key rings, ties, etc. were sold to members. Past examination papers were distributed.

SOCIAL ACTIVITIES

1. Barbecue

The annual barbecue was held on December 6, 1968 at the Sport Centre. The function was attended by over a hundred students and about 30 staff members. 2nd year emerged as winners in the inter-class singing competition in which Professor Gibson and Dr. Hsieh were adjudicators.

2. Christmas Carolling

About 40 members of the Society went to sing carols in Sandy Bay Children's Convalescent Home and Grantham Hospital on December 23, 1968. Our members were warmly received and they distributed gifts to the children in these hospitals. Students of the five classes had earlier donated a total of $287.50 to buy toys and sweets for the children.

3. Medic-Arts Get-Together

This inter-faculty gathering, started last year, was again a success this year. It was held on January 18, 1969 when it was attended by about 50 ladies from the Faculty of Arts and everyone present had an enjoyable evening.

4. Medical Ball

This annual function, the biggest on our social calendar, was held at the Mandarin Hotel on June 7, 1969. Thanks to the Annual Ball Committee who spent so much tmie and effort preparing the project, a total of about $7,000 was raised to benefit the Elixir Loan Fund.

5. Launch Picnic

The gods were kind on September 5, 1969 when, for the first time in four years, our launch picnic took place on a bright sunny day. About 100 students had a delightful time swimming, playing cards and joining in a game of bingo.

6. Medic Nite

The last function of the year was held on October 21, 1969 at the Loke Yew Hall. Final year (1969-70) emerged as winners in the interclass drama competition. The evening ended with the presentation of souvenirs and awards to our sportsmen.

SPORTS

1. Interfaculty Competitions

Our members once again showed their prowess on the field by capturing the Omega Rose Bowl, the symbol of supremacy in interfaculty sports. They achieved these remarkable results:

Champions in: Badminton
Hocky (men & women)
Softball

Runner-up in: Table-tennis
Basketball

Overall Champions: Medical Society—Owner of Omega Rose Bowl 1969-70

2. Interclass Competitions

The Braga Cup, awarded to the interclass champions, was won by 2nd year. 4th year was runner-up. The individual results were as follows:

	Champion	*Runner-up*
Soccer	4th year	2nd year
Hockey	2nd year	4th year
Lacrosse	2nd year	4th year
Basketball	1st year	4th year
Volleyball	3rd year	1st year
Table-tennis (men)	2nd year	3rd year

(women) ...	2nd year	4th year
Badminton		
(men)	3rd year	4th year
(women) ...	2nd year	1st year
Tug-of-war	2nd year	3rd year
Netball	2nd year	3rd year

3. Sportsman of the Year

Th etitle of Sportsman of the Year went to Mr. Wong Chun Kuen who was awarded the Kirk Memorial Cup.

ACADEMIC AND CULTURAL ACTIVITIES

1. Presidential Address

The Presidential Address entitled "Geographic Patology seen from Hong Kong" was delivered by Professor J. B. Gibson on May 9, 1969. A group photograph was taken before the speech. The Society presented souvenirs on this occasion to Professor K. S. Francis Chang and Dr. R. Boden who were leaving the university.

2. Talks

The Medical Fraternity Committee arranged a lecture by a visiting Australian gynaecologist on Birth Control and two talks by practitioners of Chinese medicine.

3. Debates

Interfaculty Debates: The Society was represented by three first year students who were eventually second runner-up in the competition.

Interclass Debates: Final year emerged as winners of the Field Cup after an exciting debate with 4th year on "Legalizing Abortion in Hong Kong." We would like to thank all the members of staff who acted as judges in the debates.

PUBLICATIONS

1. "Elixir"

Two issues of "Elixir" were published and, as in the past, all proceeds were contributed to the Elixir Loan Fund.

2. "Caduceus"

A monthly newspaper under the name of "Caduceus" has been published since January this year. The contents of the newspaper include news and feature articles on a variety of topics. It is distributed free of charge to Society members, medical practitioners in Hong Kong and medical schools abroad.

EXTERNAL RELATIONS

1. Asian Regional Medical Student Association

When India and then Singapore, the originally scheduled hosts of the 4th General Assembly of ARMSA, found themselves unable to accomplish the task, the Society undertook to do it in order that the work of ARMSA would not be disrupted. The conference was attended by delegates from the seven member countries and an observer from Japan. In the coming year, the Society will be responsible for the Standing Committee on Medical Education and one representative will be the Board Member without portfolio in the ARMSA Executive Board.

2. Visitors

During the year, the Society extended its hospitality to visiting medical students who were either here on short visits or who came here to do clinical clerkships. In April, the Society entertained a group of eight medical students from the University of Malaysia who were here for a visit of ten days.

In conclusion, the Society is much indebted to Professor McFadzean, Dean of the Faculty; Professor J. B. Gibson, President of the Society; Dr. C. H. Leong, Vice-President; Dr. A. van Langenberg, Honorary Treasurer; Dr. Frank Cheng, Associate Members' Representative Dr. K. S. Lai Honorary Advisor to the Elixir Editorial Board and Rudy Khoo, Honorary Advisor to the Caduceus Editorial Board for their constant support and encouragement throughout the year.

Message from the Chairman

Student welfare is nowadays one of the most talked about subjects in our university. Welfare is of course important to everybody and one cannot blame the students for emphasizing it.

However, if we would reflect conscientiously at some quiet times, we could not help wondering if we have already had more welfare than most of the people in our local community. Look at the world around us and we will see that just to be given a chance to study in a university is already a far greater blessing than what many others can dream of, and we will soon realise how much more should be done to others instead of to ourselves.

As medical students we are trained for a profession that brings us intimately close to the sick and suffering. We deserve the respect and confidence of our patients only when we have, besides sound medical knowledge, a compassionate heart for them; and the best way to achieve this is by starting to think less about our own selves.

STEPHEN NG
Chairman
Hong Kong University Medical Society

CONTRIBUTIONS TO THE MEDICAL SOCIETY ELIXIR LOAN FUND

Since the publication of last issue of the Elixir the following donations were received (up to Janurary 31, 1969) and for which it is gratefully acknowledged.

Professor G. B. Ong	$100.00
Mr. R. Oblitas	$ 15.00
Dr. Mak Siu Sing	$10 .00
Dr. Peter C. Y. Lee	$ 10.00
Dr. K. W. Chaun	$ 32.00
Dr. Lim Tit Mooi	$ 17.00

For those who wish to contribute to the ELIXIR LOAN FUND kindly forward your donation to

The Financial Manager
ELIXIR
c/o Medical Students' Centre
Sassoon Road
Hong Kong

Cheques should be crossed and made payable to the 'ELIXIR' Account, Medical Society, University of Hong Kong.

A PHYSICIAN'S PRAYER

By Father James Keller, M. M.

A PHYSICIAN'S PRAYER

Thank you, O Lord, for the privilege of being a doctor—for letting me serve as Your instrument in ministering to the sick and afflicted.

May I always treat with reverence the human life, which You have brought into being.

Keep me constantly alert to see that the sacred right to live is never violated for even the least individual.

Deepen my love for people so that I will always give of myself gladly and generously to those stricken with illness and suffering.

Help me to listen patiently, diagnose carefully, prescribe conscientiously and follow through faithfully.

Teach me to blend gentleness with skill, to be a doctor with a heart as well as a mind.

Let me be calm without being cold, patient without being weak, and strong without being proud.

Help me, Lord, to give encouragement without overconfidence, to tell the truth without being blunt.

May I be prompt to relieve pain, quick to hold out the hand of honest hope.

Inspire me to show always a special tenderness for the poor and forgotten, for those who are broken in spirit as well as in body.

Grant that I may continually bring to my work the same soothing compassion which You so generously displayed centuries ago in healing the sick of Galilee.

And finally, O Divine Doctor, through my service to the sick, may I merit the heavenly reward which You promised in these thrilling words: "Come you blessed of my Fahter, possess you the kingdom prepared for you from the foundation of the world." (*Matt.* **25**:**24**)

Father Keller was born in Oakland, Cal., in 1900 and was ordained a Roman Catholic priest in 1925. He is the founder and director of The Christophers, Inc., and resides in New York. His most recent book is "Stop, Look and Live."

* Reprinted with kind permission from WHAT'S NEW

Answer to Pictorial Quiz

FIG. 1. **Osteogenesis Imperfecta**

This is due to some congenital defect in the evolution of the connective tissue cells. There is aboromal tendency for bones to fracture the malunion results in gross deformity of the long bones of the limbs. Note also the blue sclerotics. Otosclerosis commonly developes in the third decade. This disease is inherited as autosomal dominant.

FIG. 2. **Amoebic Abscess of Liver**

Note fluid level in abscess on right subphrenic area.

FIG. 3. **Chronic Gouty Arthritis with Tophi.**

FIG. 4. **Tuberous sclerosis**—adenoma sebaceum.

FIG. 5. **Meningomyelocoele**—In this condition, the normally developed spinal cord of cauda equina lies in the sac. Clinically, transmitted impulse can be sought from the lumbosacral swelling to the anterior fontanelle. The cord or nerves can often be seen as shadow on transillumination.

FIG. 6. **Rodent Ulcer**—90% of the basal cell carcinoma are found on the face, usually above a line from the lobe of the ear to the corner of the mouth. The picture demonstrates the characteristic raised rolled edge and central ulceration of the tumour.

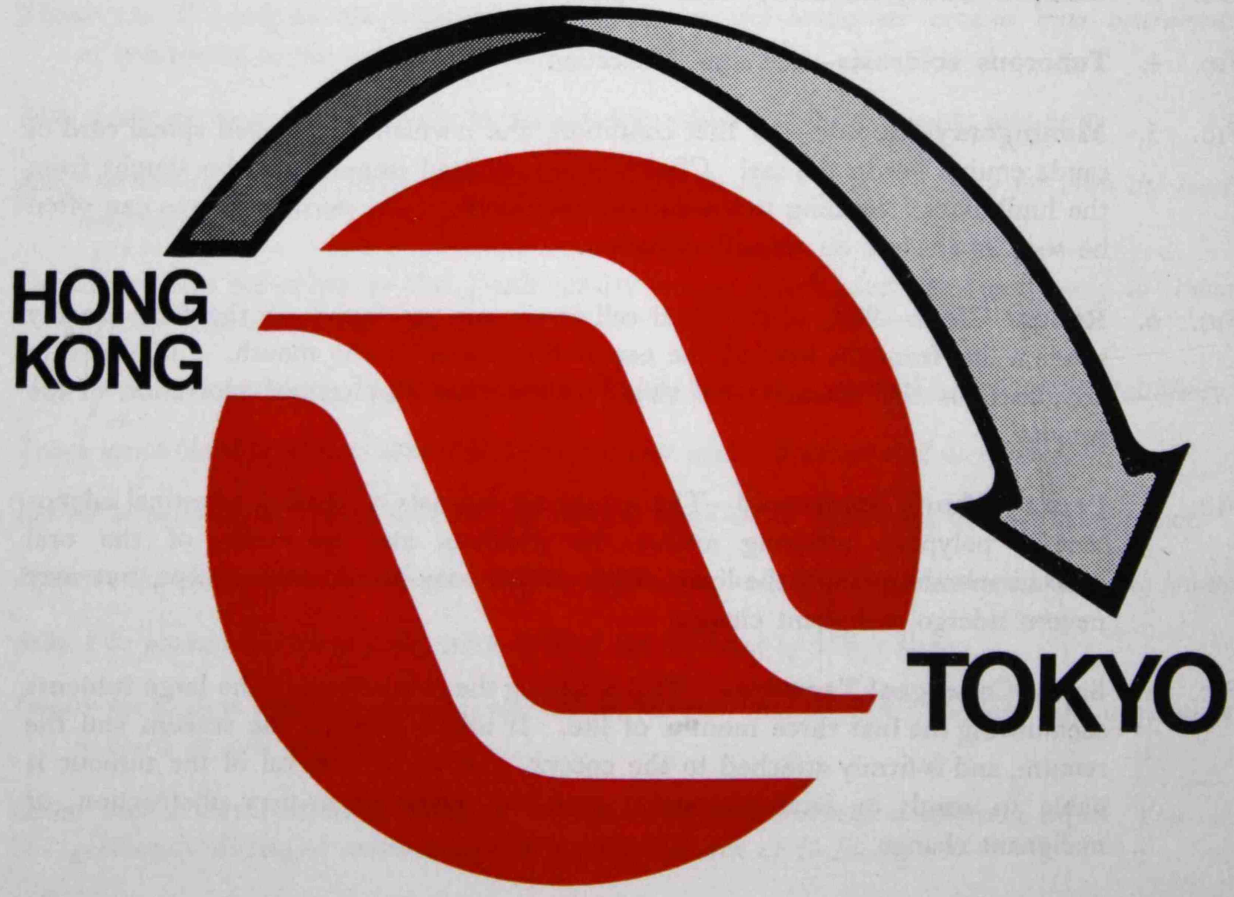
FIG. 7. **Peutz-Jegher's Syndrome**—The syndrome consists of familial intestinal adenomatous polyposis affecting mainly the jejunum, and melanosis of the oral mucous membrane and the lips. Such polyps may bleed, intussuscept, but may neveru ndergo malignant change.

FIG. 8. **Sacro-Coccygeal Teratoma**—This is among the commonest of the large tumours seen during the first three months of life. It arises between the scarum and the rectum, and is firmly attached to the coccyx. Delay in removal of the tumour is liable to result in fatal ulceration, infection, rectal or urinary obstruction, or malignant change.

FIG. 9. **Papilloma of Buttock**—The papilloma consists of a central axis of connective tissue, blood vessels and lymphatics, and the surface is covered by suqamous epithelium. The congenital form is a warty growth of brownish colour, but large excrescences may be present.

FIG. 10. **Acromegaly**—Erosion of pituitary Fossa.

Fly Northwest to Tokyo nonstop every day.



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ANGEL'S CHORUS

Thorn

"You' re the only reason I want to get well."

Ever since I was a little boy, my impression of an angel is a creature wearing a white robe with a pair of white wings at the back with a halo around the head. But when I grow up, I found that the angels wear all sorts of colourful uniforms: white, blue, red and yellow; and instead of the halo they wear all sorts of fancy kerchieves. If you don't believe it, come to Queen Mary Hospital and have a look.

* * *

It has been repeatedly remarked that the staff-student relationship is not very satisfactory, it seems that the angel-student relationship is even worse. The higher the rank she is, the less friendly she become! There is no shadow of doubt about this statement, I can assure and reassure you.

* * *

The angels in red are on the whole quite friendly towards the medical students, with certain exceptions of course. They are willing to lend you a hand and stand by your side on request. But perceiving their heavy burden of work, we seldom ask for their help but turn to our equal counterpart, that is students of the fair sex.

* * *

On the other hand, you may be greeted by the angels with an exclamation, "Here come the medical students again!" Every now and then you may be greeted by more hostile words. Can the Medical Fraternity Committee do something about it?

* * *

Although medical students belong to the lowest class of creature in the hospital, they may not be so in the eyes of some angels.

The aetiology of this thought, which is contradictory to almost everybody's in the hospital, and so to say is abnormal, is a foreign body in their hearts—cupid's little arrow.

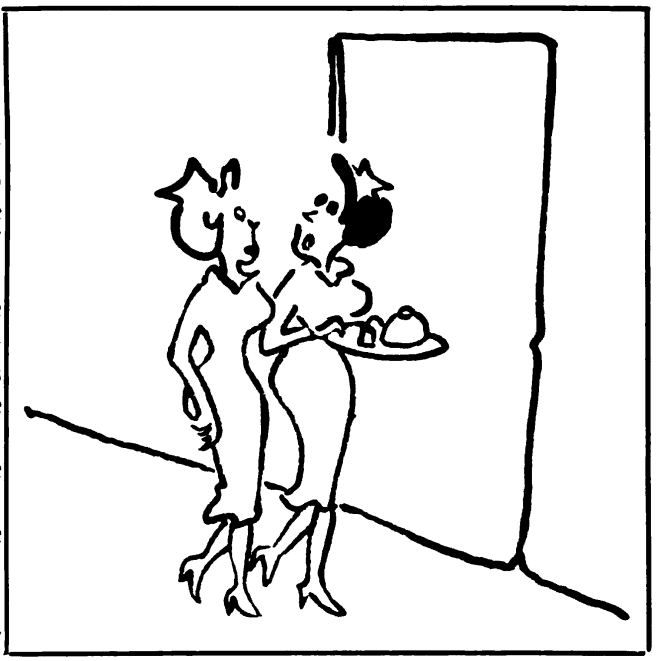
Even without that bit of foreign body in their hearts, the angels occasionally do not classify the medical students as the lowest class, by virtue of their mistakes, of course. From time to time, the medical students attending O.T. are mistaken as the bosses coming around to supervise the surgeons in their operations because they always intrude into the O. T. in the middle of the operation and leave whenever they like. Thus you may be taken as supervising the Professor's operation one day! Splendid, isn't it? What else has one got to say save "Everything is possible under the sun"!?

* * *

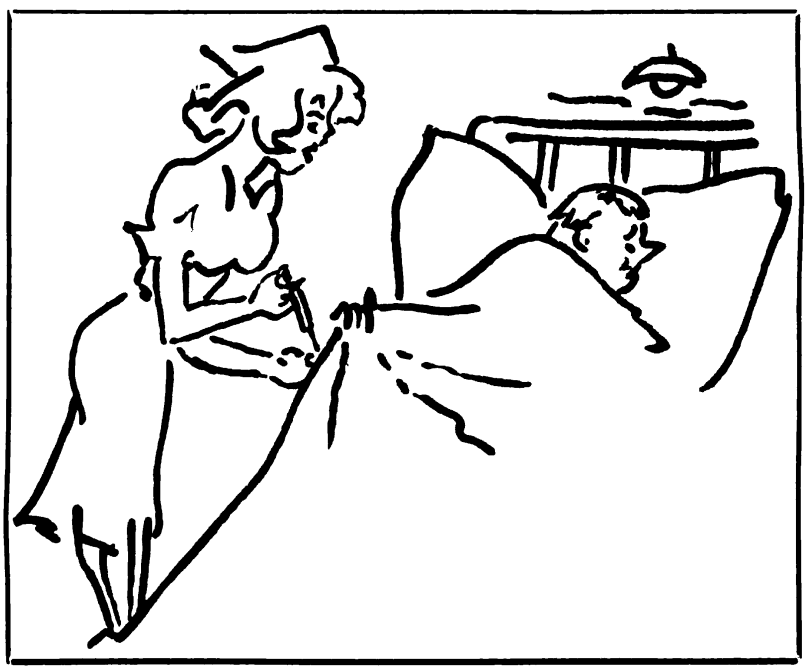
Although the presence of an angel may help your physical examination, sometimes their presence may be an obstacle to the correct diagnosis. A young man has missed an extremely loud murmur simply because the ward was graced by the presence of a fairly pretty angel.

* * *

The angels are really angels to medical students during the ward closure period prior to final examination. Please take the sound advice of receiving their informations with a bit of doubt, for a LEFT hydrocoele may turn up despite their tips about a case of RIGHT inguinal hernia.



"That cute intern asked me to movie to-nite, but I am broke!"



"Now this won't hurt. . . DID it?"

THE FRATERNITY COMMITTEE

Lam Wah Kit

☐ The Fraternity Committee of the Medical Society, now just over one year of age, aims to serve the following functions:—

1. to provide freshmen with information and advice on academic and social affairs,
2. to foster a spirit of fraternity between junior and senior members in the Medical Faculty, and
3. to promote society consciousness among members.

☐ Freshmen Information Service. This was held in the Physiology Theatre on 29th August afternoon. The 90% turn-up of the freshmen was very encouraging. The occasion was graced by the presence of Professor Cheng of Physiology. The enthusiastic support from the seniors proved beyond doubt that 'fraternity' does exist among us medical students. The senior, touched by the freshmen's eagerness to learn, found it difficult to keep back anything, including their old books, microscopes and skeletons. The freshmen, out of touch with 'notes' for so many months, devoured our information notes on textbooks, names of Professors etc. like anything. This is a happy day for all who were present, juniors and seniors alike.

☐ 'All play and no work makes John a a bright boy'. This is true when the holiday is coming to an end. Thus on 19th September, a picnic to Cheung Chau ( ) was arranged for the freshmen. A fine day it was, and a huge group we were. It is gratifying to reflect that, despite the elapse of three long weeks, about 50% of the freshmen still remembered the day of picnic. They never would regret having remembered that, for it was a day on which they succeeded in the impossible mission of getting to know their future classmates and colleagues. With the help of games and name cards, they were able to talk to one another like old friends at the end of the day.

☐ At the very beginning of the term, we went to chair the election of their class committee. Most of them knew one another all right, but they lacked the skill of firing questions at the candidates. They took it in a couple of seconds (our presence was of great help, no doubt) and the candidates would have had a most difficult time indeed were it not for the lack of time.

☐ From our experience, the first year is capable of rendering tremendous service to the various activities held by the Medical Society. But we must first of all get to know them and uncover the hidden talents. To do this, we asked them to fill in a form concerning their personal details and abilities. Very soon, we will be able to see new faces in the various standing committees and teams.

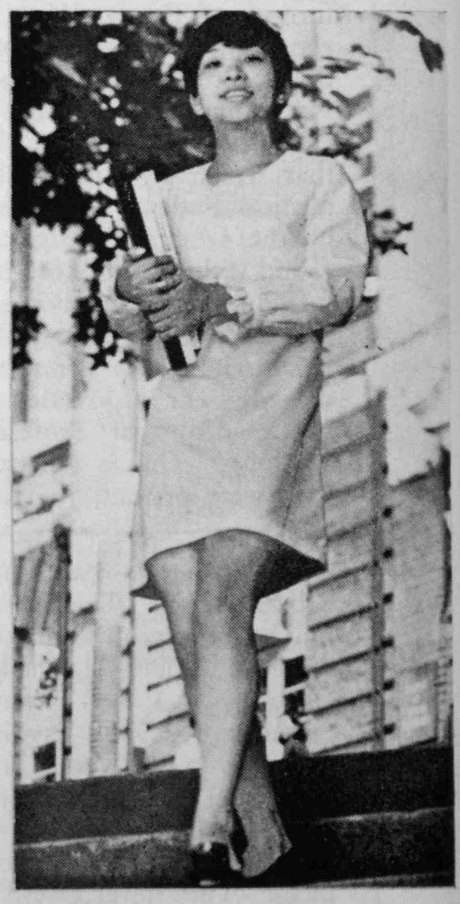
☐ Under the Constitution of the Fraternity Standing Committee, we have to carry out the scheme that one senior guides and advises 3-4 freshmen on academic and social affairs throughout the academic year. In early November, their class was divided into 30 groups at random, and each assigned to a 3rd year or 4th year senior. Their participation was 100%. On the part of the seniors, they were so enthusiastic that 1st year really needed considerable expansion. It is hoped that this important scheme will be as successful as ever.

☐ Our another regular job is to arrange film-shows and talks for all members of the society. The first film-show arranged was on the topic of 'Valvuloplasty of Mitral Stenosis' on 24th October, and was well received.

☐ A friendly soccer match was planned (1st year vs. 2nd or 3rd year). However, the Sports Centre nowadays is so jammed with interhostel games that we find it impossible to push ourselves in. It will be held when things are better.

Two programmes are coming in the academic year. When the 2nd year step in their clinical years, we will be most ready to tell them our experience so freshly obtained. When the summer holiday comes, tutorials will be conducted for 1st year. Finally, at the end of the Committee's session, a survey will be made to see the response and remarks from those under the scheme.

people everywhere...



rely on *Brand's Essence of Chicken to give them that extra strength and keep them in good health

Spirit of my Mother

M. L.

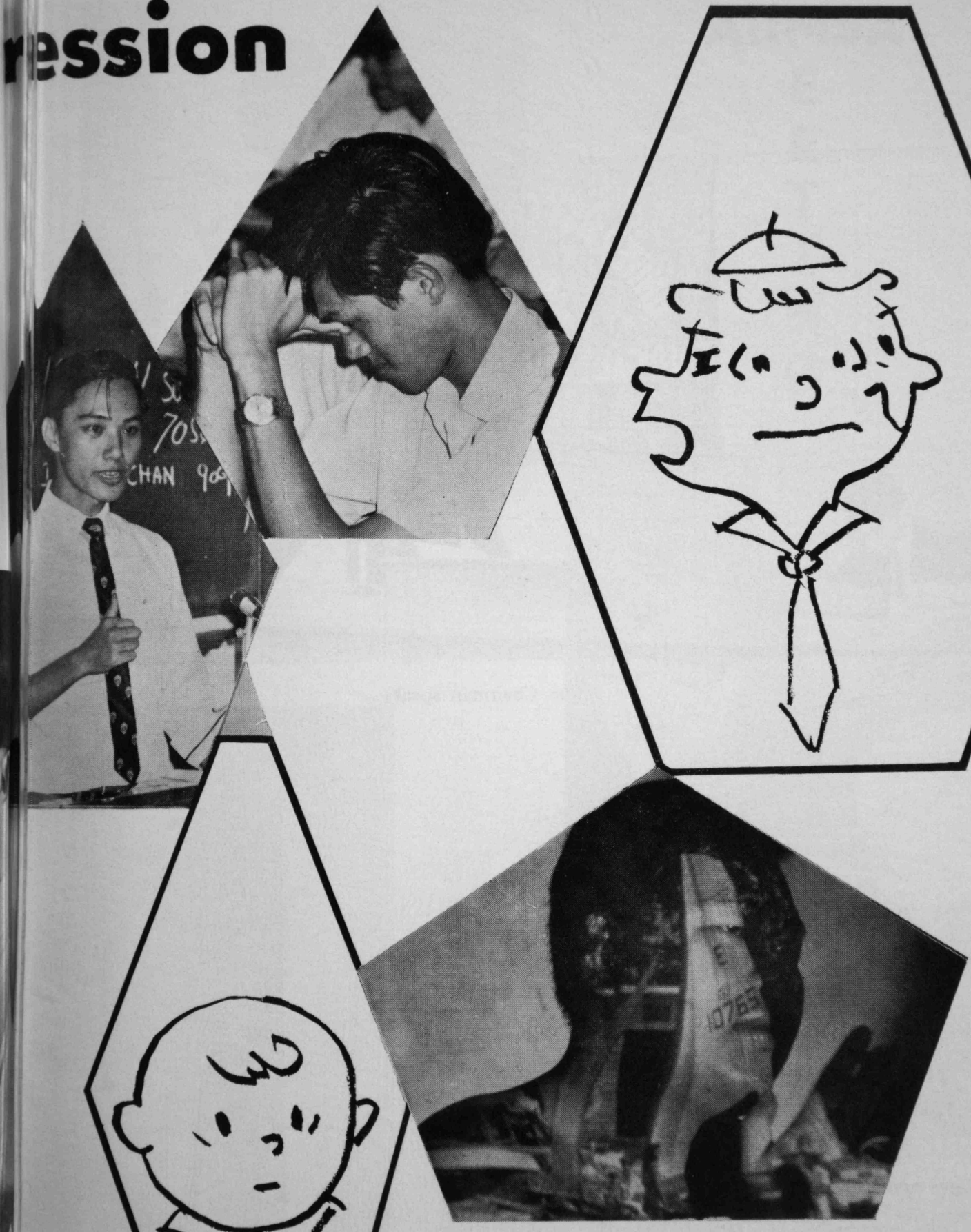
I saw her shadow once more clear
And then she was no more again.

Once more she came back and kissed me
(They called it illusion but I was sane)
Gone-by years were lost in one swift moment
And I a cradled-child again.
She held me gently, ruffled my hair,
Over her bosom I wept and smiled.
All that bereaved was gone in an instance,
All anguish and fear exiled.
She talked with her eyes—they talked of love,
No spoken word was said;
She spoke with her eyes—they spoke of love,
There was no more the world could add.
Once more the fermament was brightness,
Once more birds sang with glee,
Once more the sun was master
And everything a sweet rose to me.
No more could I desire
With the world beneath my feet,
I in my rocking cradle
Besides her dainty seat.
Out of darkness came the light,
Out of shadow came delight.
Then like many a time it happened before
The vision faded out of sight.
It was incredible, but it was true,
I held her tightly, I held in vain!
One sweet moment—then she was gone. . .
She was, then she was no more again!

Once more I am in the maze of stark presence,
They call this reality but I am delirious . . .

Facal

ression

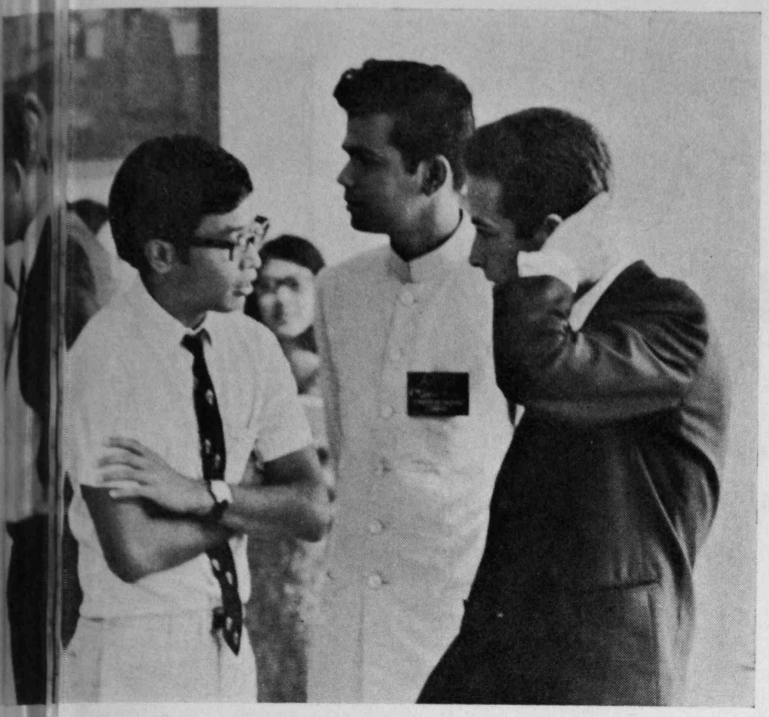


The Chairman speaks

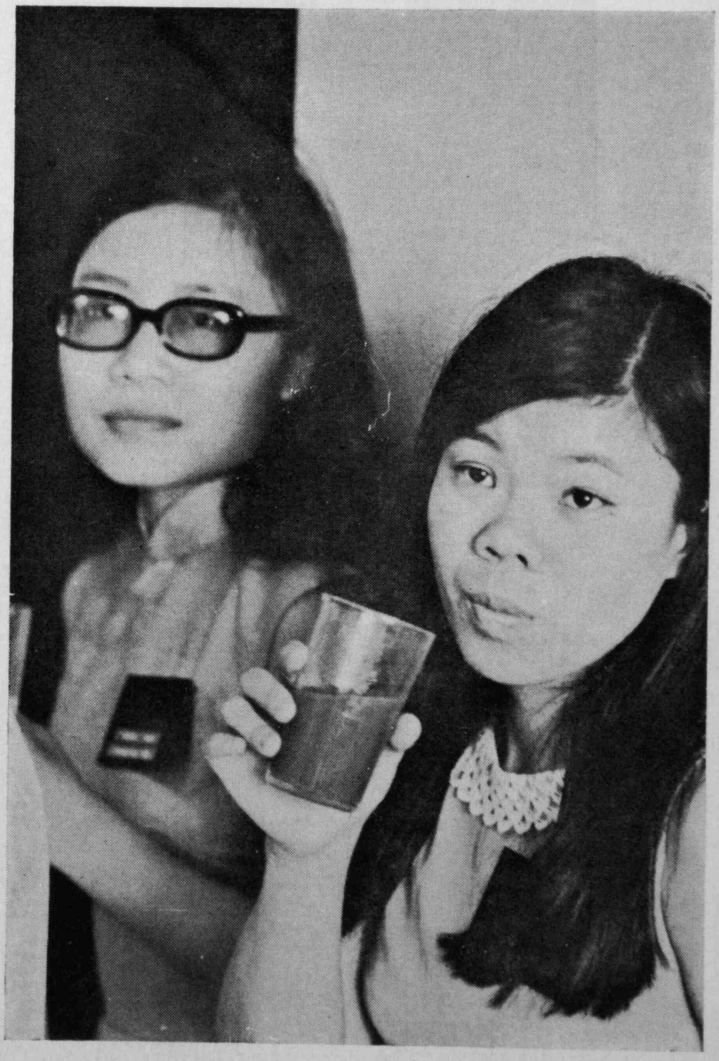
ARMSA MEETING

A Singapore delegate

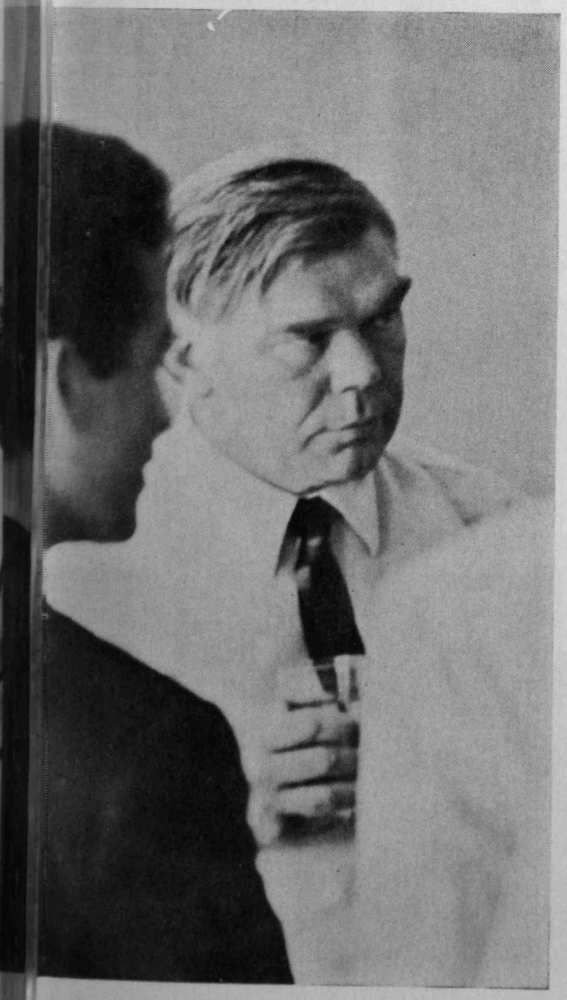
ARMSA MEETING



? Are You saying something about the girls?

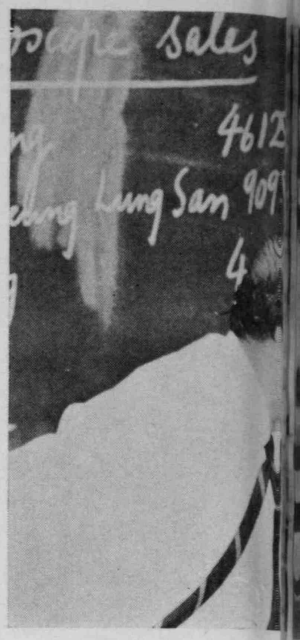


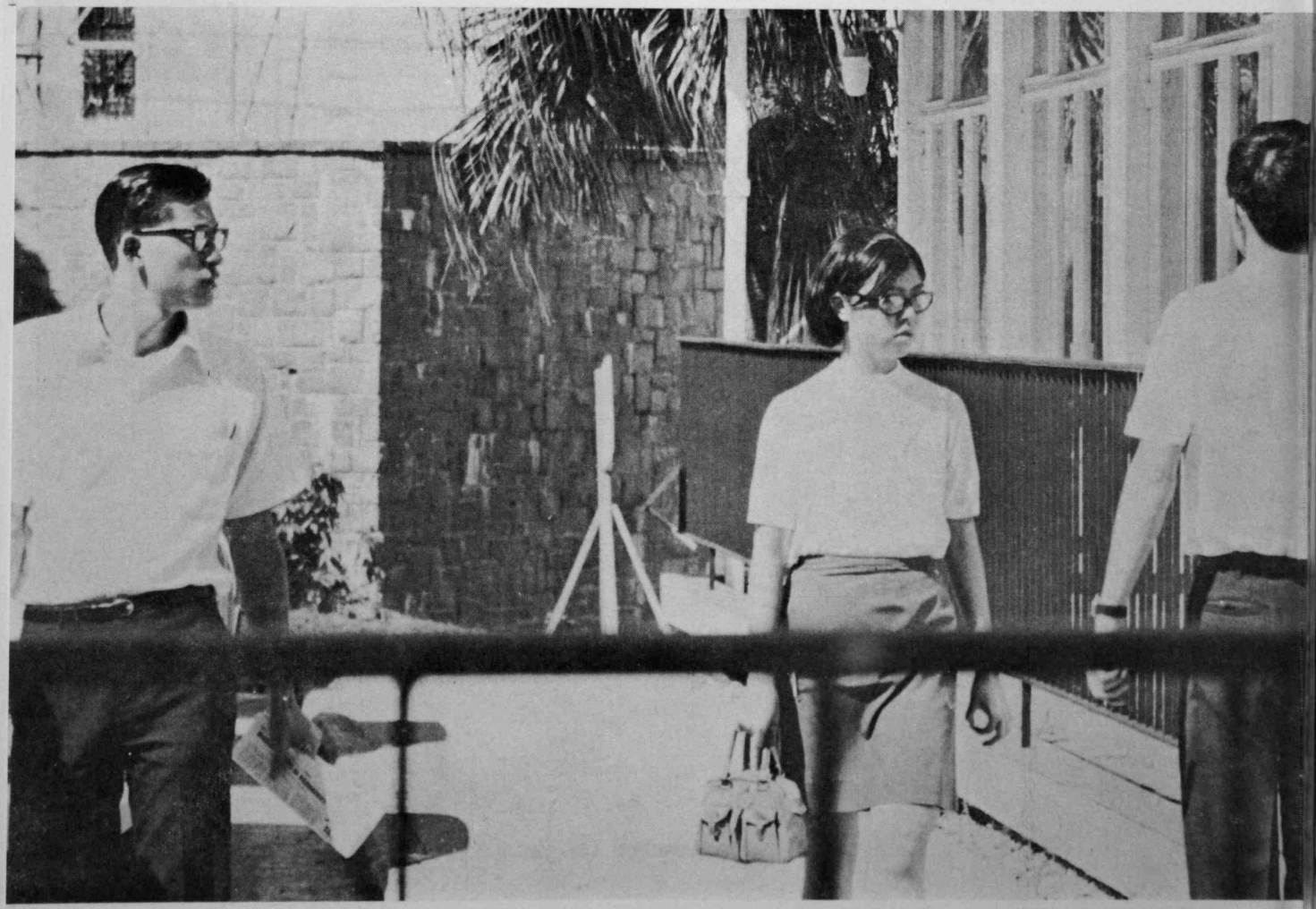
"Drink to me only with thine eyes"



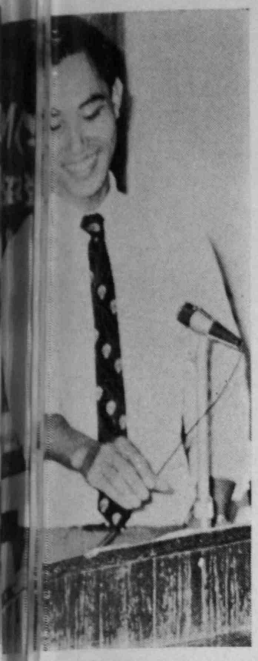
"I've researched for years!"

Once upon a time, I was
also a green horn . . . .



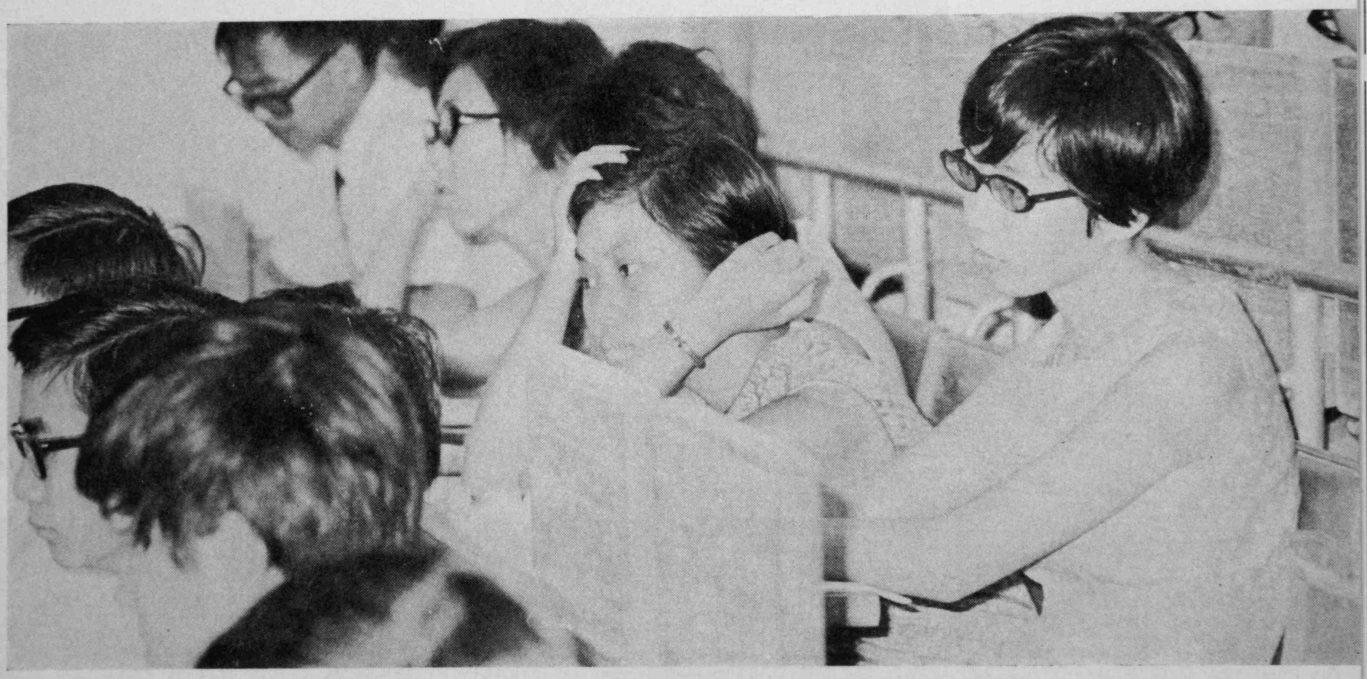


相　逢　何　必　曾　相　識



HEARTY WELCOME TO THE NEWCOMERS

'Do you get it! I've just been demonstrating the action potentials in the cutaneous neves!

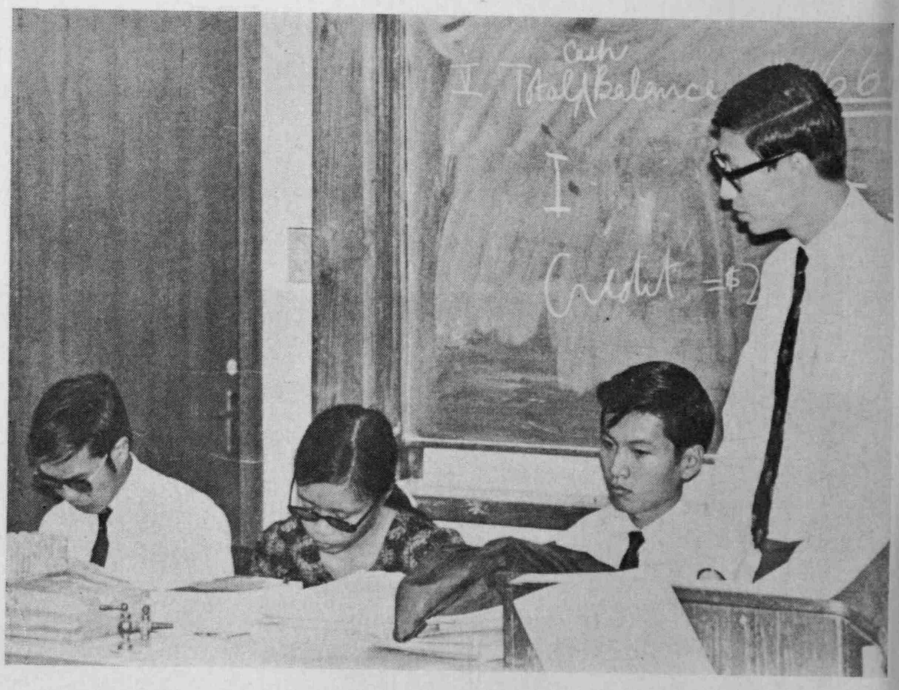


I wonder whether the life of a medical student is as wonderful as he says

FRESHMEN WELCOME PARTY

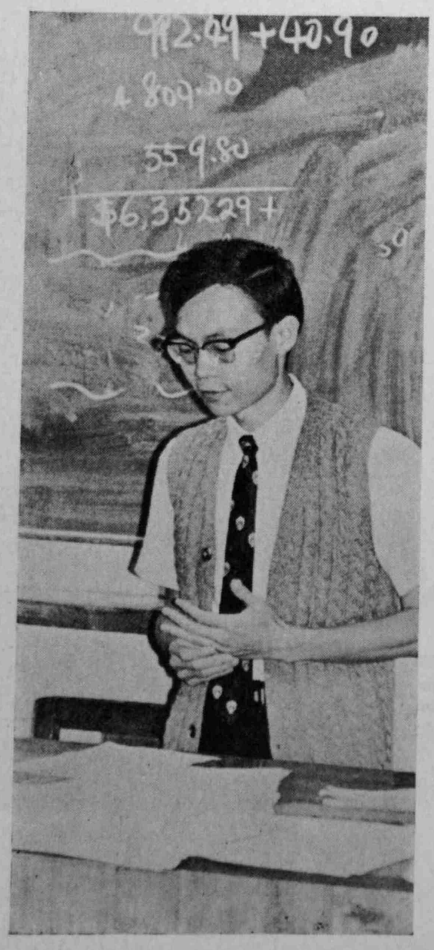
A M G

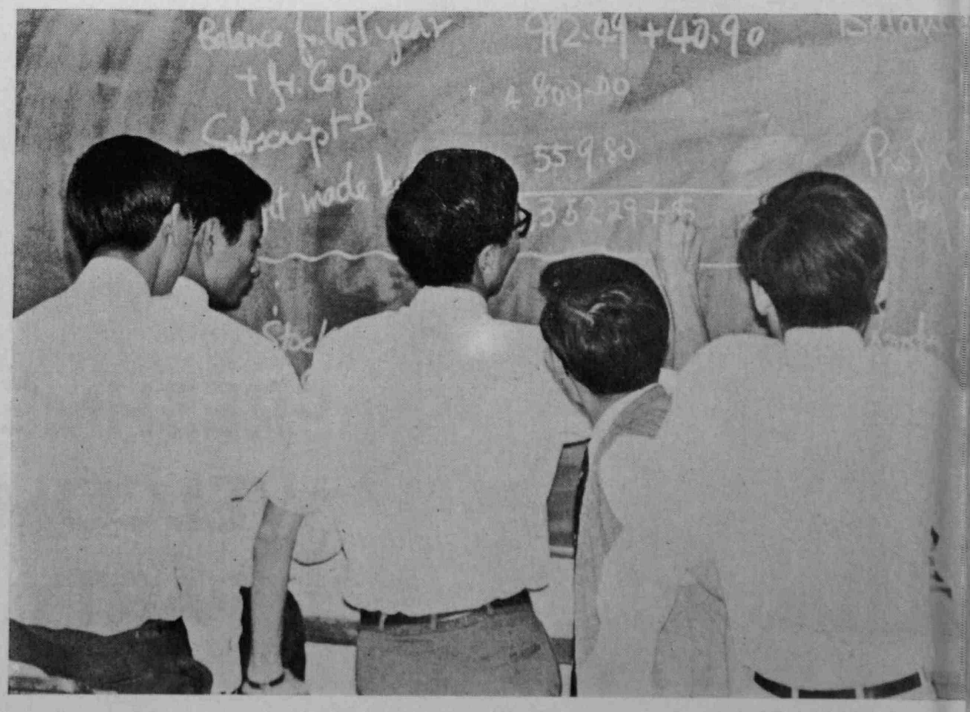
"I met Alice on bus this morning, and she smiled to me."



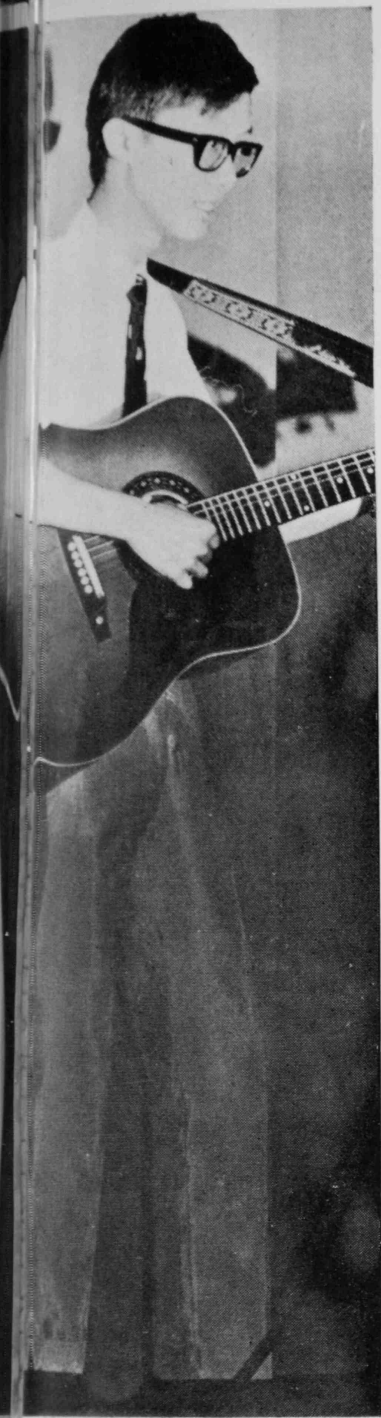
The difference between the boss & his (馬 仔 ?) .....

Girls, watch out !
(See his ringfinger)



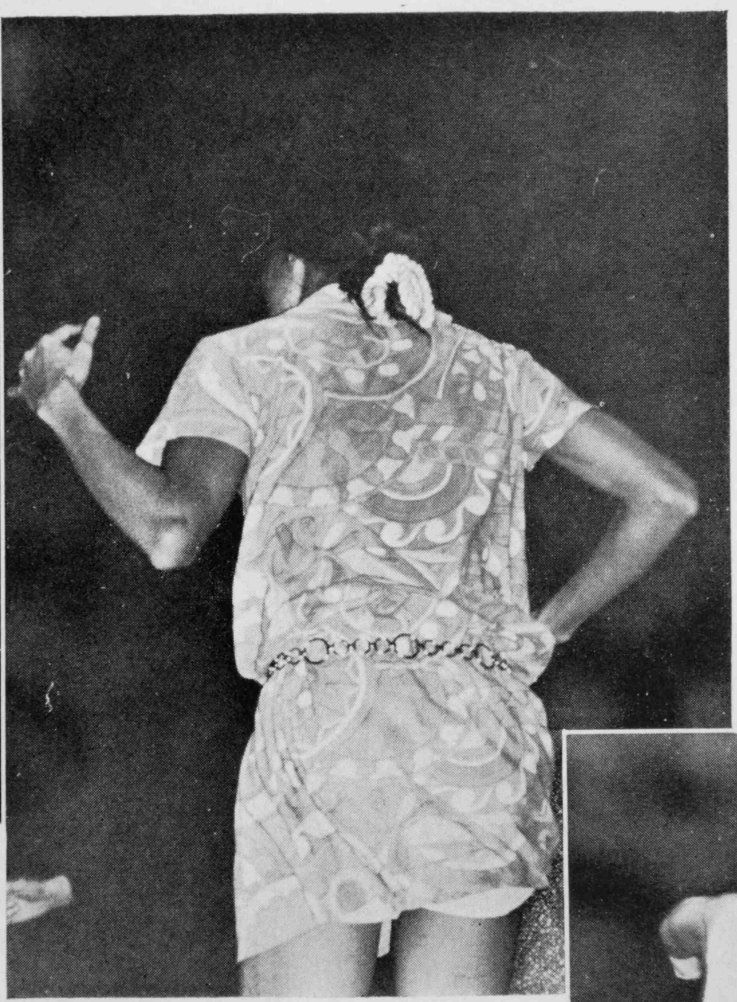


Who said that the Medics aren't keen on mathematics?



"A rose will bloom . . . . "

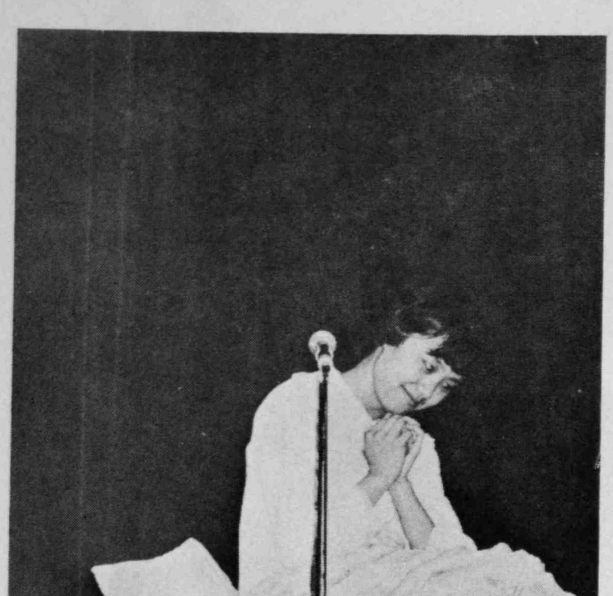
"Romeo Darling, I'm Coming."



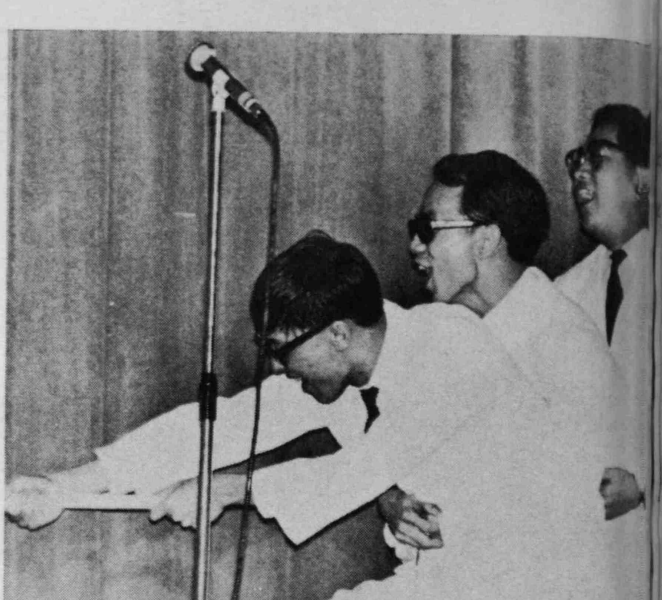
"But you don't go away like that, Julict dear."

MADDER THAN THE HARE

THE MEDIC NIGHT

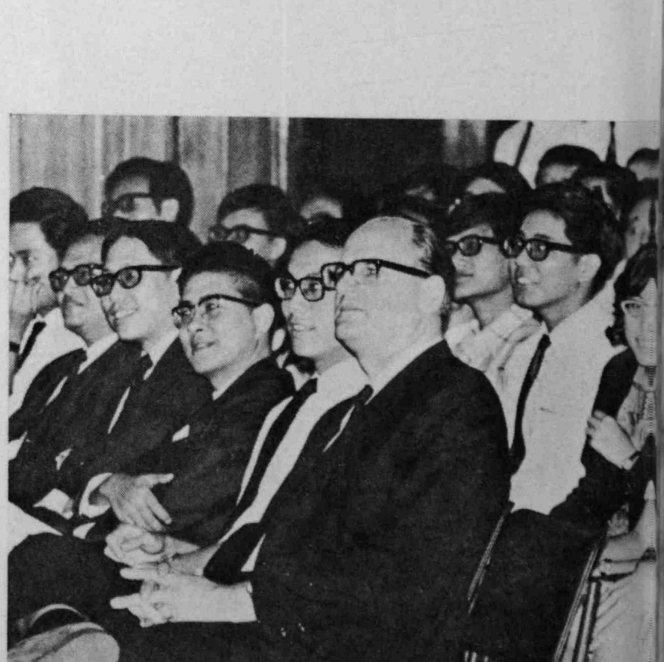


唔制，我好怕醜㗎。



唉，冇力啦！重唔出㗎。

If I give may heart to you . . . . . .



Enjoy yourself to night

MINI MOBILE

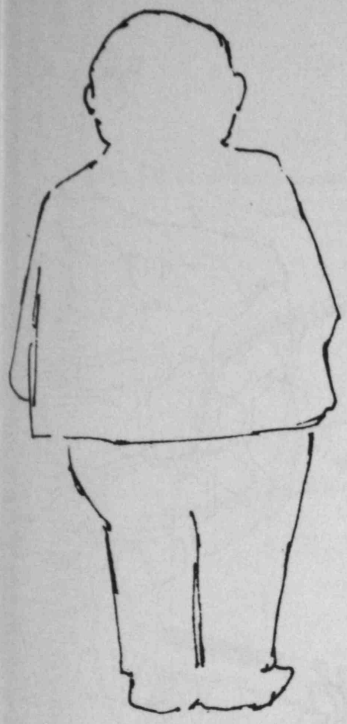
PAUL AND MINI

Guess who was chased by the police,

All the way to T. Y. H. ?

Policeman: "Nurse, the young man we were chasing after ran into the O. T."

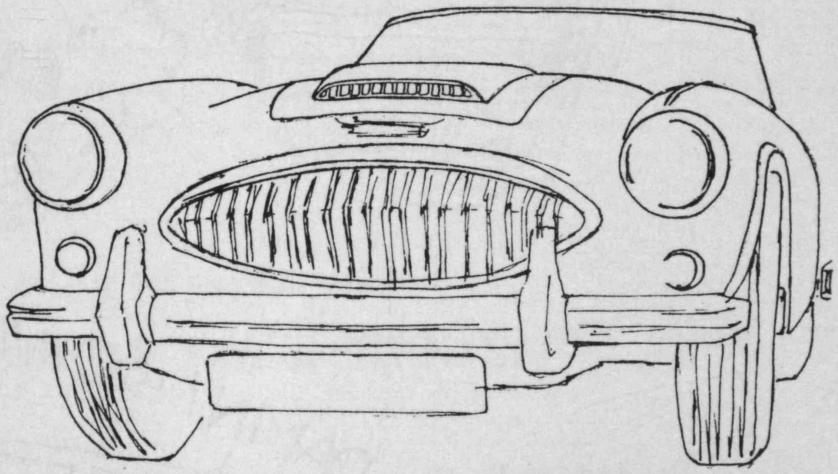
Nurse: "Then you have to wait. That particular young man has just started a L. S. C. S."

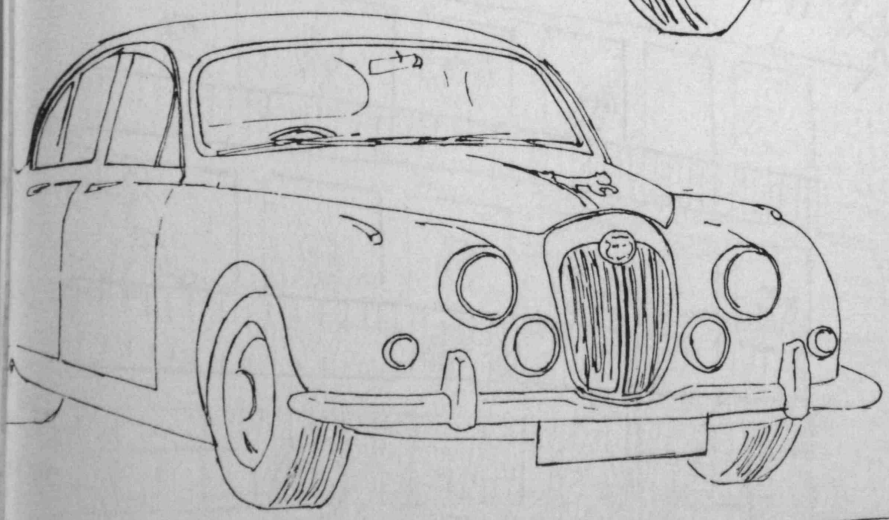


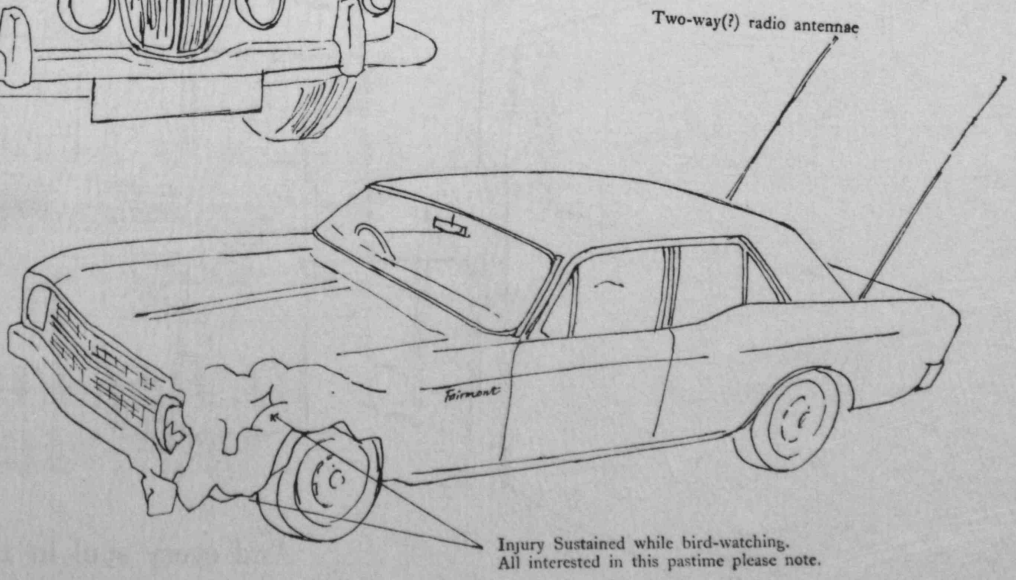
Students are known to the Staff usually because they are outstandingly good or remarkably poor in their work.

Nor so for this one.

He is famous for his flect.

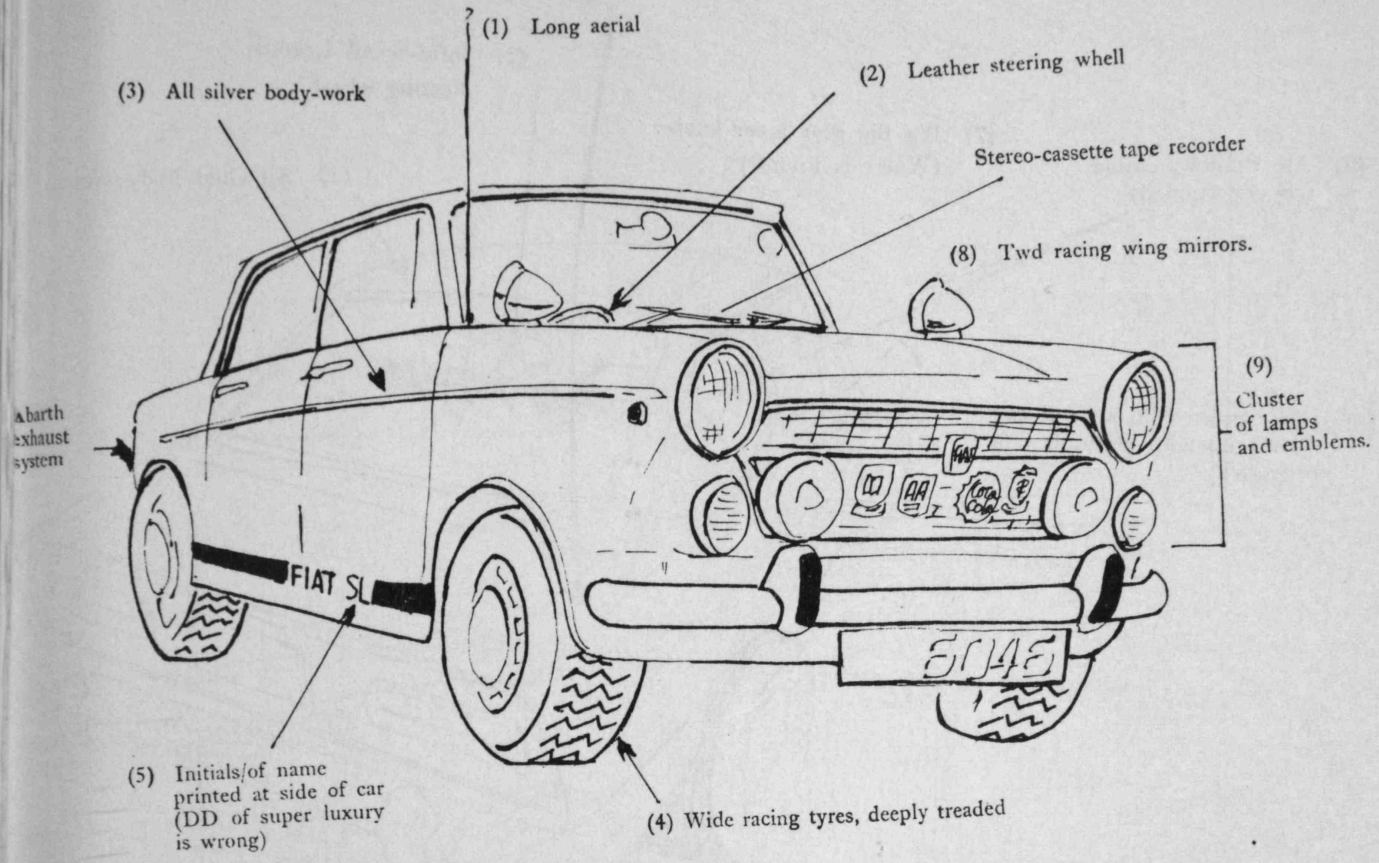




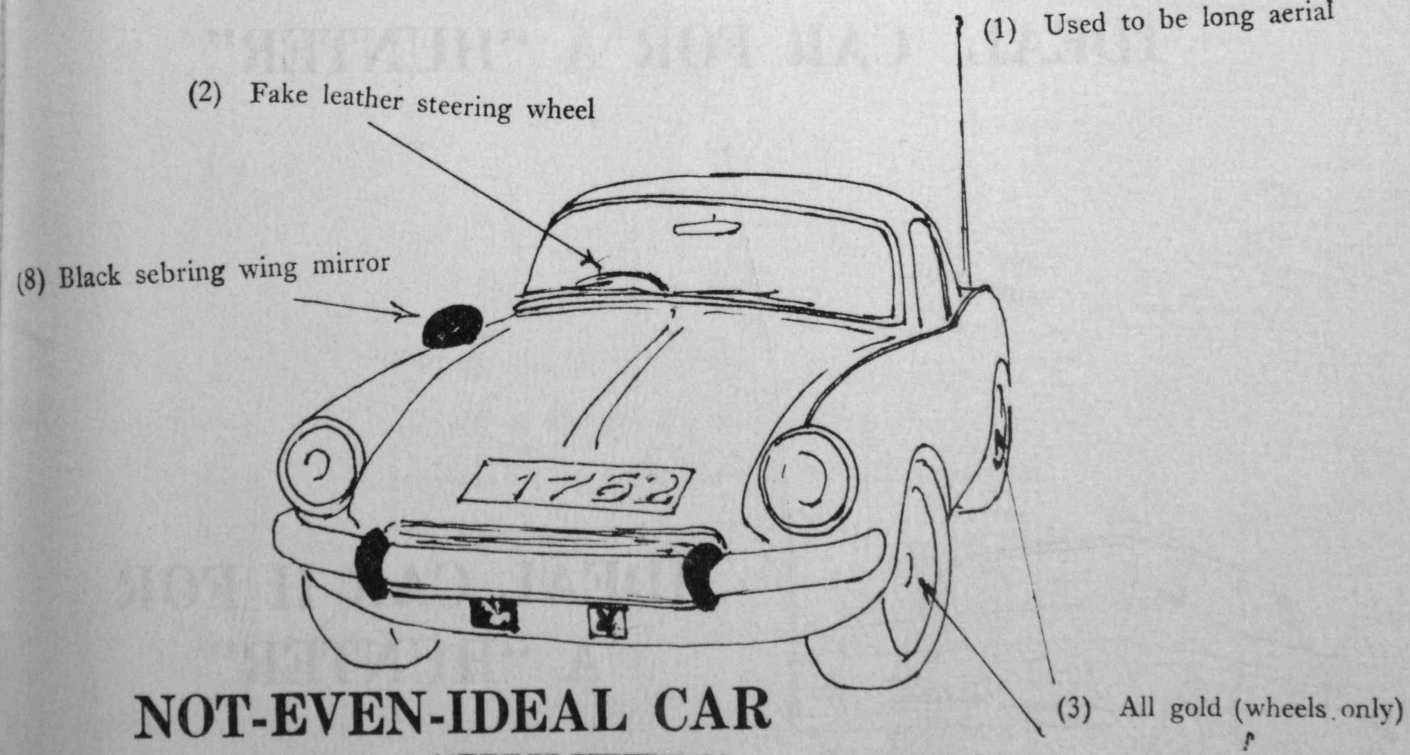


Very Early . . . .

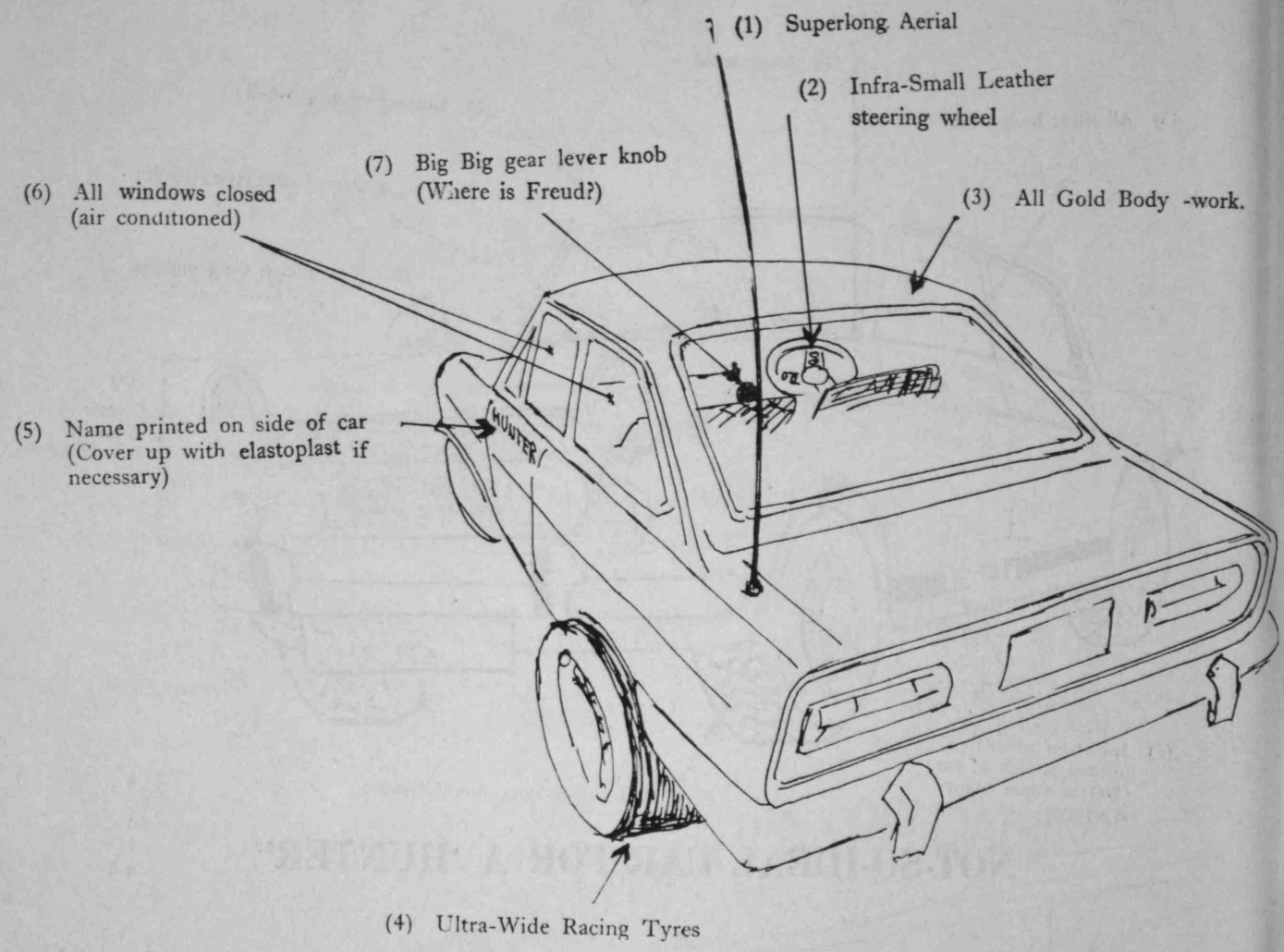
And every soul in the centre . . . .



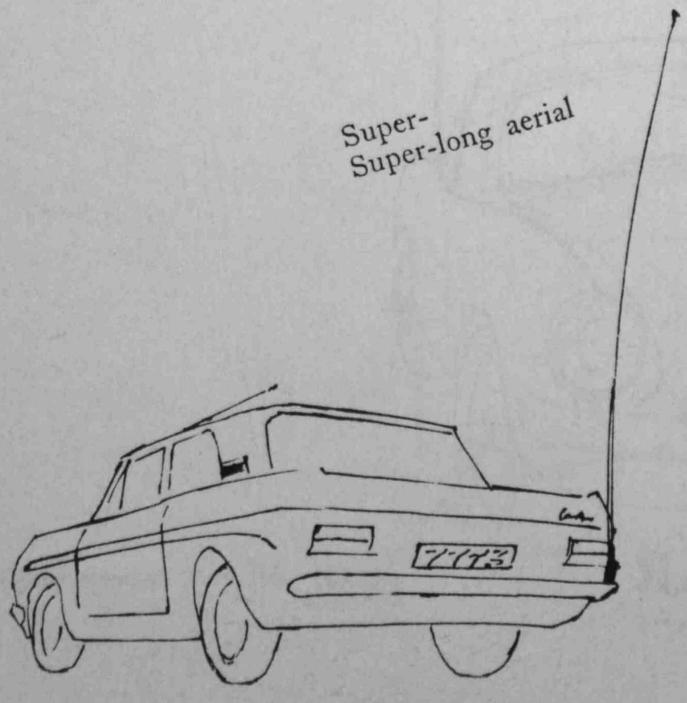
NOT-SO-IDEAL CAR FOR A 'HUNTER"



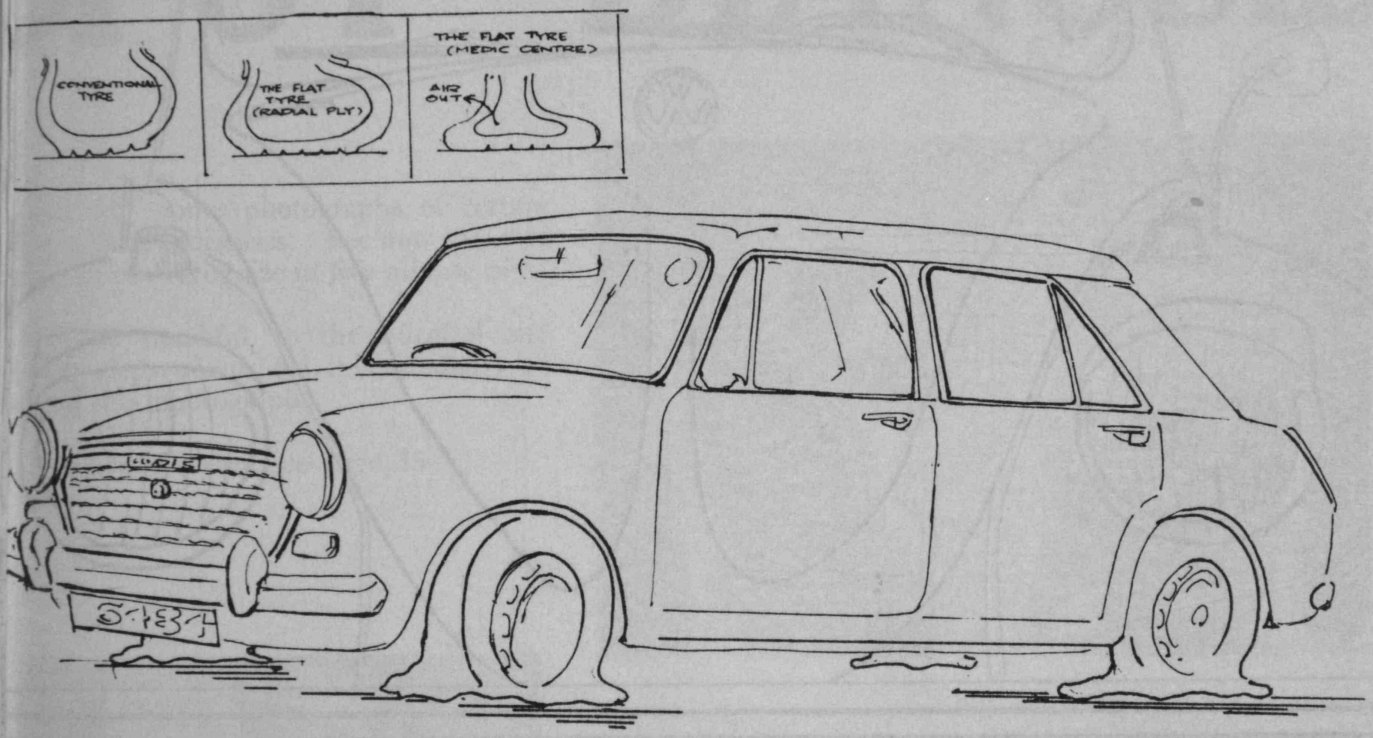
NOT-EVEN-IDEAL CAR FOR A "HUNTER"



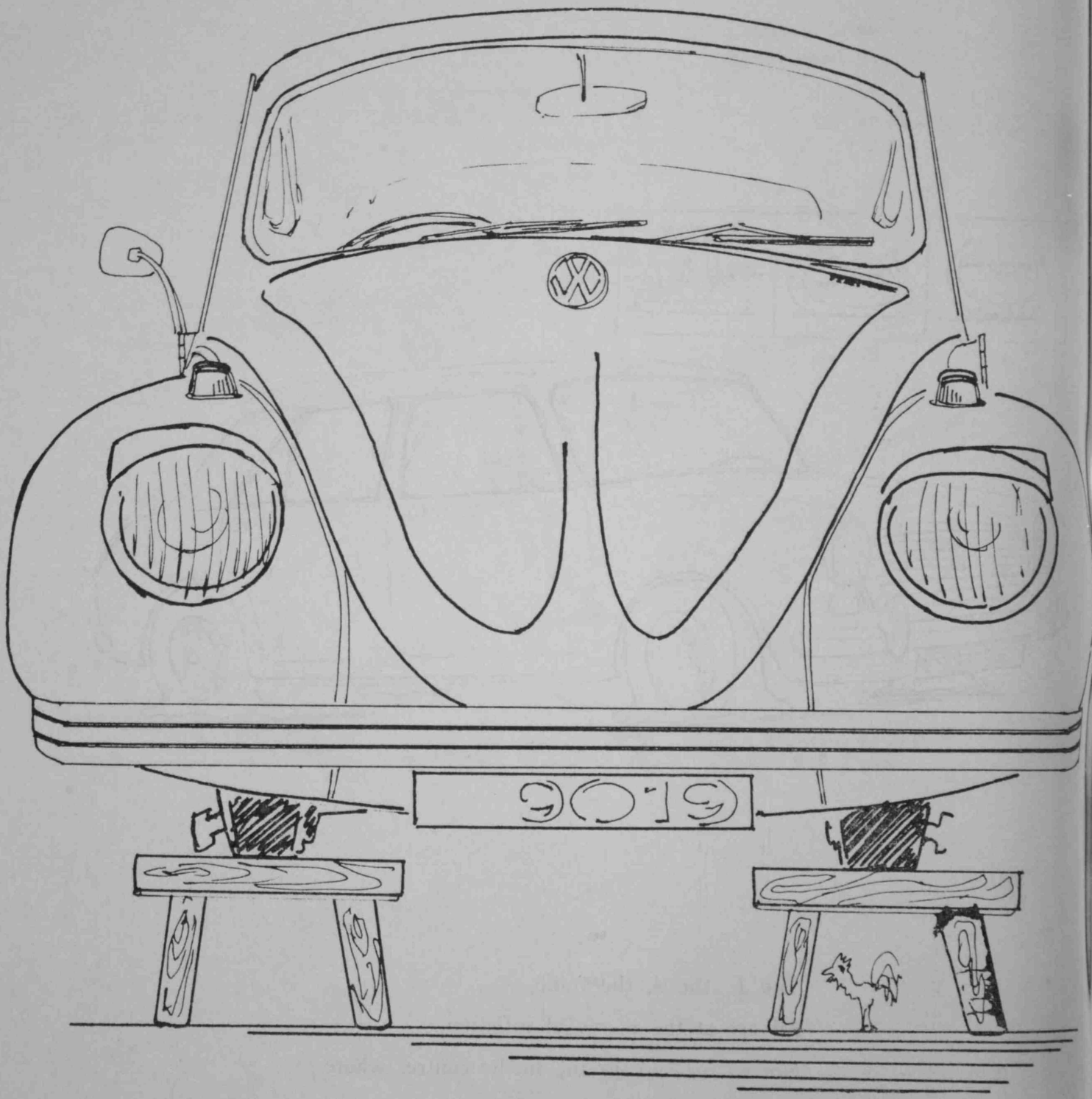
IDEAL CAR FOR A "HUNTER"



IDEAL CAR II FOR A "HUNTER"



The £, the $, the franc,
All are at the mercy of inflation,
Not so for cars in the medic centre, where
Deflation reigns supreme.



FINIS

PICTORIAL QUIZ:

SPOT DIANOSIS

Here are some photographs of certain ..tinct clinical diseases. See now many of ..em you can recognize in five minuts time.

We are thankful to the Surgical and ..edical departments for this kindness in ..nding this photographs.

For answer please see page 55

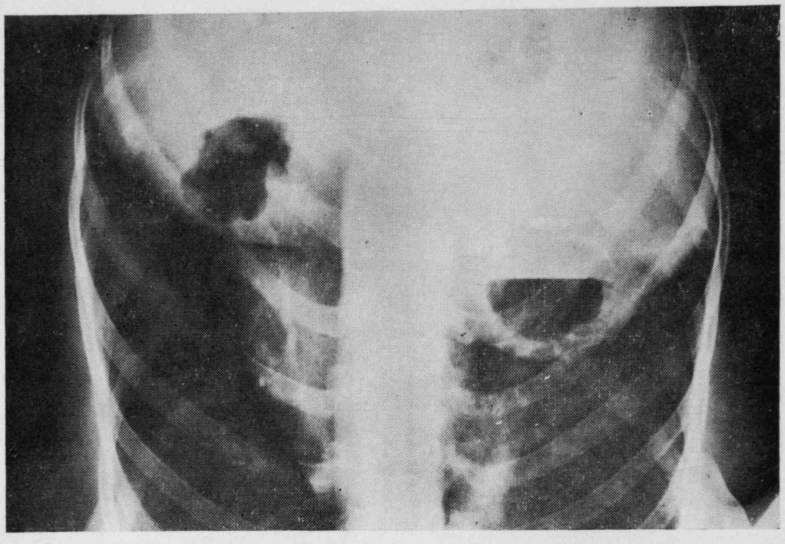


Fig 2

Fig 1

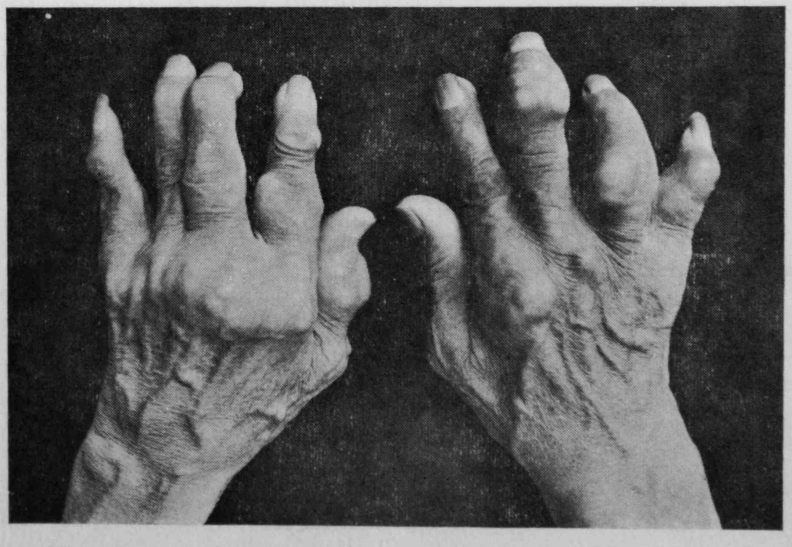


Fig 3

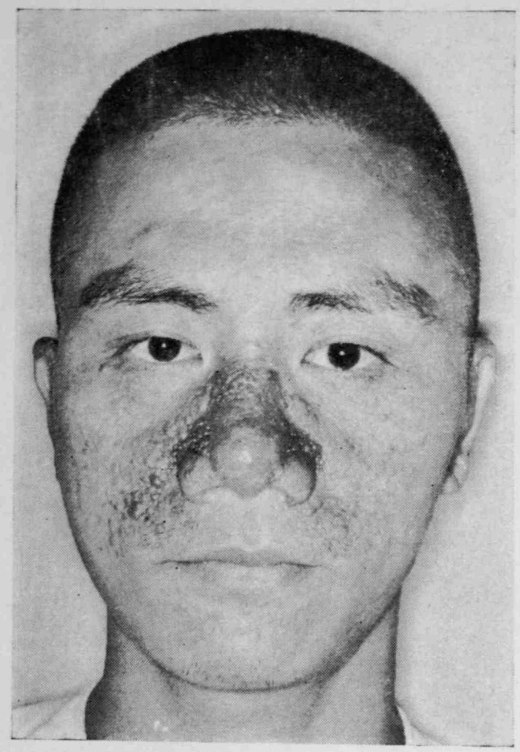


Fig 4

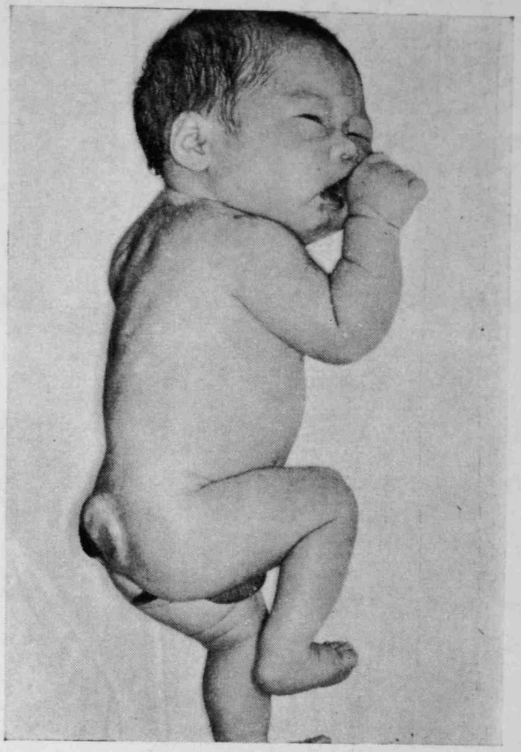


Fig 5

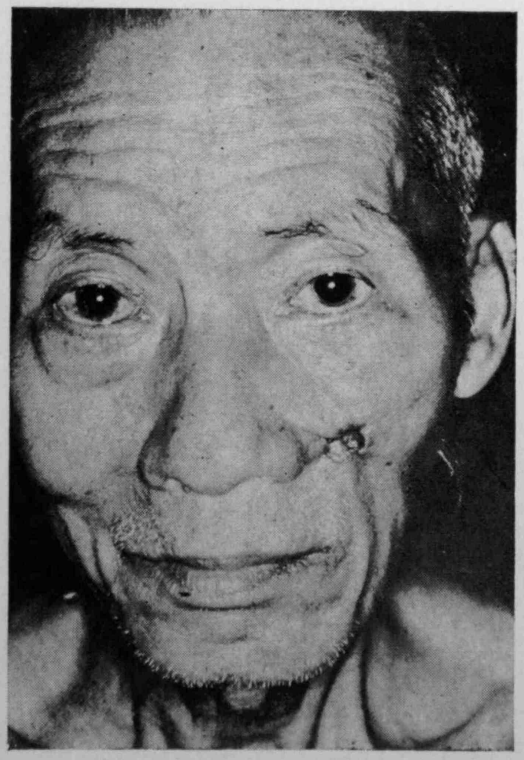


Fig 6

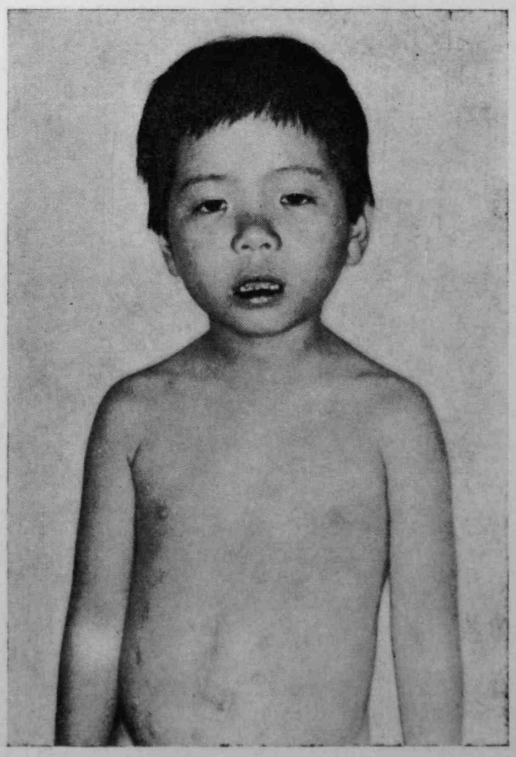


Fig 7

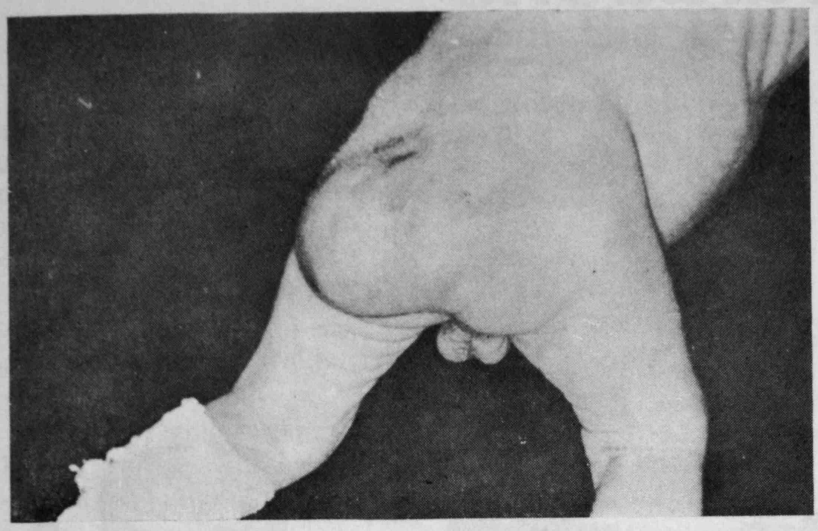


Fig 8

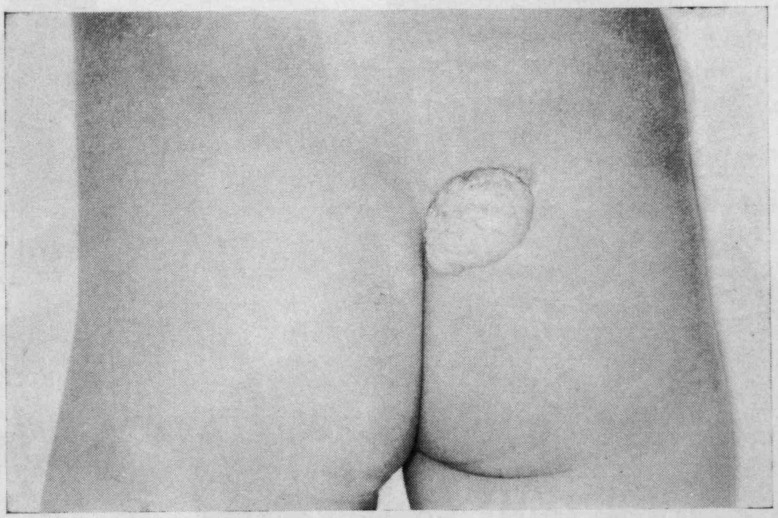


Fig 9

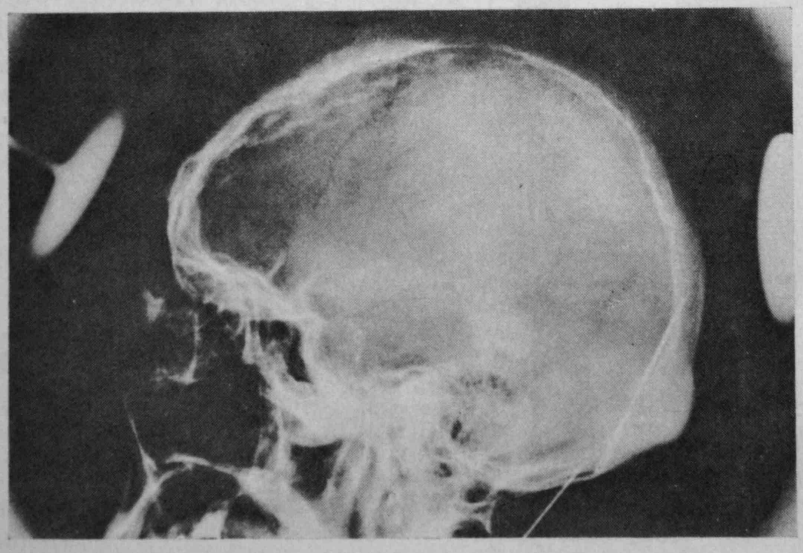


Fig 10

The May & Baker family of cough preparations

That hot water bottle might keep out the cold but it won't stop her cough. A bottle of 'Phensedyl' linctus would have more effect.

When his cough becomes more than a polite "ahem" he's in trouble. He has enough on his tray without bottles of cough linctus as well. 'Phensedyl'* capsules for him, and all coughing workers.

The coughing offspring. Fruit flavoured 'Tixylix'** will gently soothe away their coughs.

*trade mark
M&B brand Medical Proc

'Phensedyl' Linctus
contains Promethazine Hydrochloride B.P., Codeine Phosphate B.P. and Ephedrine Hydrochloride B.P.

'Phensedyl' Capsules
contains Noscapine B.P. instead of Codeine.

'Tixylix'
children's cough linctus contains Promethazine Hydrochloride B.P., Pholcodine B.P. Phenylpropanolamine Hydrochloride B.P.C.

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Dagenham Essex
RM10 7XS England

News From the Gazette

(1st November, 1969)

PERSONALIA

Dr. S. M. Bard, Director of the University Health Service, has been admitted to membership of the Royal Society of Health.

Professor Daphne Chun was appointed Visiting Professor of Obstetrics and Gynaecology at the University of Vermont, U.S.A., for September and October 1969.

Professor C. Elaine Field attended the fourth Singapore/Malaysia Congress of Medicine from August 15 to 17, 1969, and delivered a paper entitled 'A long-term follow-up of Bronchiectasis from childhood'.

Professor A. J. S. McFadzean has been appointed a member of the Medical Council of Hong Kong for three years from July 8, 1969.

Professor G. B. Ong has been awarded a Hunterian Professorship by the Council of the Royal College of Surgeons of England for a lecture on 'Colocystoplasty for bladder carcinoma after radical total cystectomy' to be delivered on February 12, 1970.

Dr. Irene F. Osmund, Assistant Director of the University Health Service, attended a conference of the British Student Health Association held at the University of Birmingham from July 14 to 18, 1969.

COURT

Gifts

The Standard/Sing Tao 'Fat Choy' Drive, through Sin Pohn Amalgamated (H.K.) Ltd.: $50,000 to establish a loan fund for medical students.

Dr. Jerome Wei Ping Lo: an annual grant to establish a loan fund for medical students.

FACULTY OF MEDICINE

Appointments

Rosie Young Tse Tse, M.D. (Hong Kong), F.R.C.P. (Edinburgh), M.R.C.P. (London), Senior Lecturer, appointed Reader in Medicine from July 1, 1969.

(Mrs.) Huang Chan Shuk-Tze, M.B. (National Chung Cheng Medical College), Lecturer, appointed Senior Lecturer in Anatomy from July 1, 1969.

Lai Kai Sum, M.B.,B.S. (Hong Kong), Ph.D. (Edinburgh), M.R.C.P. (Edinburgh), Lecturer, appointed Senior Lecturer in Medicine from August 1, 1969.

(Miss) Liu Hin-Ching, B.Sc. (Sun Yai-sen), Ph.D. (Hong Kong), Lecturer, appointed Senior Lecturer in Anatomy from August 1, 1969.

(Mrs.) Teoh Chan Ching Haan, M.B. (Lingnan), Dip.Bact. (Manchester), Ph.D. (Hong Kong), Lecturer, appointed Senior Lecturer in Microbiology from August 1, 1969.

Constant Cheng Po Kong, M.B.,B.S. (Hong Kong), Assistant Lecturer, appointed Lecturer in Physiology from August 1, 1969.

Shih Chi-Ching, M.B. (National Taiwan), appointed Lecturer in Pathology from September 29, 1969.

(Miss) Lee Wai Tsun, M.B.,B.S. (Hong Kong), F.R.C.S. (Edinburgh) appointed Lecture in Surgery from September 20, 1969.

Mohankamur Adiseshiah, M.B., B.S. (London), M.R.C.P. (London), F.R.C.S. (England), appointed Temporary Lecturer in Surgery for one year from October 15, 1969.

Luke Chu Ping-chong, Dip.Med. (Chekiang, China), Demonstrator, appointed Assistant Lecturer in Anatomy from August 1, 1969.

Susanna Wong Siu-Chun, B.Sc. (Hong Kong), appointed Assistant Lecturer in Biochemistry from January 1, 1970.

Resignation

T. C. Yu, Lecturer in Medicine, from November 27, 1969.

External Examiners

Professor John R. Anderson, B.Sc., M.D., M.R.C.P., F.C.Path., Professor of Pathology in Glasgow University at the Western Infirmary, appointed External Examiner in Pathology for three years from 1970 to 1972.

Professor R. E. O. Williams, M.D., M.R.C.P., F.C.Path., Head of the Wright-Fleming Institute of Microbiology and Dean of the St. Mary's Hospital Medical School, appointed External Examiner in Microbiology for three years from 1970 to 1972.

Professor Sir John Bruce, C.B.E., M.B., Ch.B., D.Sc., F.R.C.S., Regius Professor of Clinical Surgery at the University of Edinburgh, appointed External Examiner in Surgery at the Final Examination to be held in November, 1969.

Prize

The Mun Gold Medal in Psychiatry has been awarded to Andrew Hua Su-Ping.

PUBLICATIONS

Department of Biochemistry

M. C. S. Lai, K. S. Au, and Doris Edna Gray: 'Alkaloids of *Melodinus suaveolens* and their excretion as a common end-product in the rat', *Biochemical Pharmacology* Vol. 18, 1553 (1969).

E. O'F. Walsh, C. H. Lee Peng, and S. C. Wong: 'Sensitivity to insulin *in vitro* is morphine-dependent in muscle of chronically morphinized rat', *Biochemical Pharmacolgy* Vol. 18, 1529 (1969).

S. C. Wong and E. O'F. Walsh: 'Effect of morphine of the hormonal control of metabolism. V. Morphineinduced changes in sensitivity of the glucose-uptake system of muscle to extracellular potassium', *Biochemical Pharmacology* Vol. 18, 1979 (1969).

Department of Medicine

T. K. Chan (with A. J. Bowdler): 'The time course of red cell lysis in hypotonic electrolyte solutions', *Journal of Physiology* Vol. 201, pp. 437-452 (April 1969).

T. C. King (with C. R. Lowe, P. L. Pelmear, H. Campbell, R. A. N. Hitchens, and T. Khosla): 'Bronchitis in two integrated steel works', *British Journal of Preventive and Social Medicine* Vol. 22, pp. 1-11 (January 1968).

A. J. S. McFadzean, D. Todd, S. C. Tso, and Rosie T. T. Young (with W. J. Irvine): 'Pernicious anaemia in the Chinese: a clinical and immunological study', *Clinical and Experimental Immunology* Vol. 4, pp. 375-386 (April 1969).

Departments of Medicine, Biochemistry, and Obstetrics and Gynaecology

D. Todd, N. C. S. Lai, Carol A. Braga, and H. N. Soo: 'Alpha thalassaemia in Chinese: cord blood studies', *British Jurnal of Haematology* Vol. 16, pp. 551-566 (June 1969).

Department of Microbiology

C. T. Huang and C. H. Chan-Teoh: 'Typhoid H-agglutinins in clonorchis infestated guinea pigs', *Japanese Journal of Medical Science and Biology* Vol. 22, No. 1, pp. 43-50 (1969).

Department of Orthopaedic Surgery

A. R. Hodgson and A. Yau: 'Vordere operative Zugange zur Wirbelsaule', *Actuelle Chirurgie* 3, pp. 151-160 (1969).

Department of Pathology

W. C. Chan: 'The role of the lymph node permeability factor in nephrotoxic nephritis in rats', *Journal of Pathology* Vol. 97, No. 3, pp. 568-572 (March 1969).

T. Sun and J. B. Gibson: 'Antigens of *Clonorchis sinensis* in experimental and human inflections', *American Journal of Tropical Medicine and Hygiene* Vol. 18, No. 2, pp. 241-252 (March 1969).

P. C. Wong and J. B. Gibson: 'The effect of methylcellulose on the Phagocytosis of *Mycobacterium lepraemurium*', *Leprosy Review* Vol. 40, pp. 83-86 (June 1969).

Department of Paediatrics

C. Y. Yeung and C. Elaine Field: 'Phenobarbitone therapy in neonatal hyperbilirubinaemia', *Lancet* Vol. II, pp. 135-139 (July 1969).

Departments of Paediatrics, and Obstetrics and Gynaecology

R. H. P. Fung, K. K. Yeung, and G. S. Chung: 'Screening of pyruvate kinase deficiency and G6PD deficiency in Chinese newborn in Hong Kong', *Archives of Disease in Childhood* Vol. 44, No. 235, pp. 373-376 (June 1969).

Departments of Paediatrics and Pathology

J. Belamaric and Alice S. Chau: 'Medulloblastoma in newborn sisters', *Journal of Neurosurgery* Vol. 30, No. 1, pp. 76-79 (January 1969).

Department of Physiology

C. C. Liang (with J. H. Quastel): 'Uptake of acetylcholine in rat brain cortex slices', *Biochemical Pharmacology* Vol. 18, No. 5, 1169-1185 (May 1969).

C. C. Liang (with J. H. Quastel): 'Effects of drugs on the uptake of acetylcholine in rat brain cortex slices', *Biochemical Pharmacology* Vol. 18, No. 5, pp. 1187-1194 (May 1969).

Department of Surgery

F. C. Y. Cheng (with J. Spencer, G. P. Burns, A. G. Cox, and R. B. Welbourn): 'Differences between males and females in the Hollander insulin test', *Gut* Vol. 10, No. 4, pp. 307-310 (April 1969).

G. B. Ong: 'Principles of minor surgery', *Pye's Surgical Handicraft* Chapter XXXIV, 19th Edition, pp. 473-487 (ed. J. Kyle) (John Wright and Sons Limited 1969).

G. B. Ong: 'Carcinoma of the hypopharynx and cervical oesophagus', *Progress in Clinical Surgery* Series III, pp. 155-178 (ed. R. Smith) J. and A. Churchill Limited 1969).

Breakthrough!

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Basle, Switzerland

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Effective medical treatment for trigeminal neuralgia

Control of epilepsy

Comprehensive anti-epileptic control—seizures and epileptic personality and behavioural disturbances

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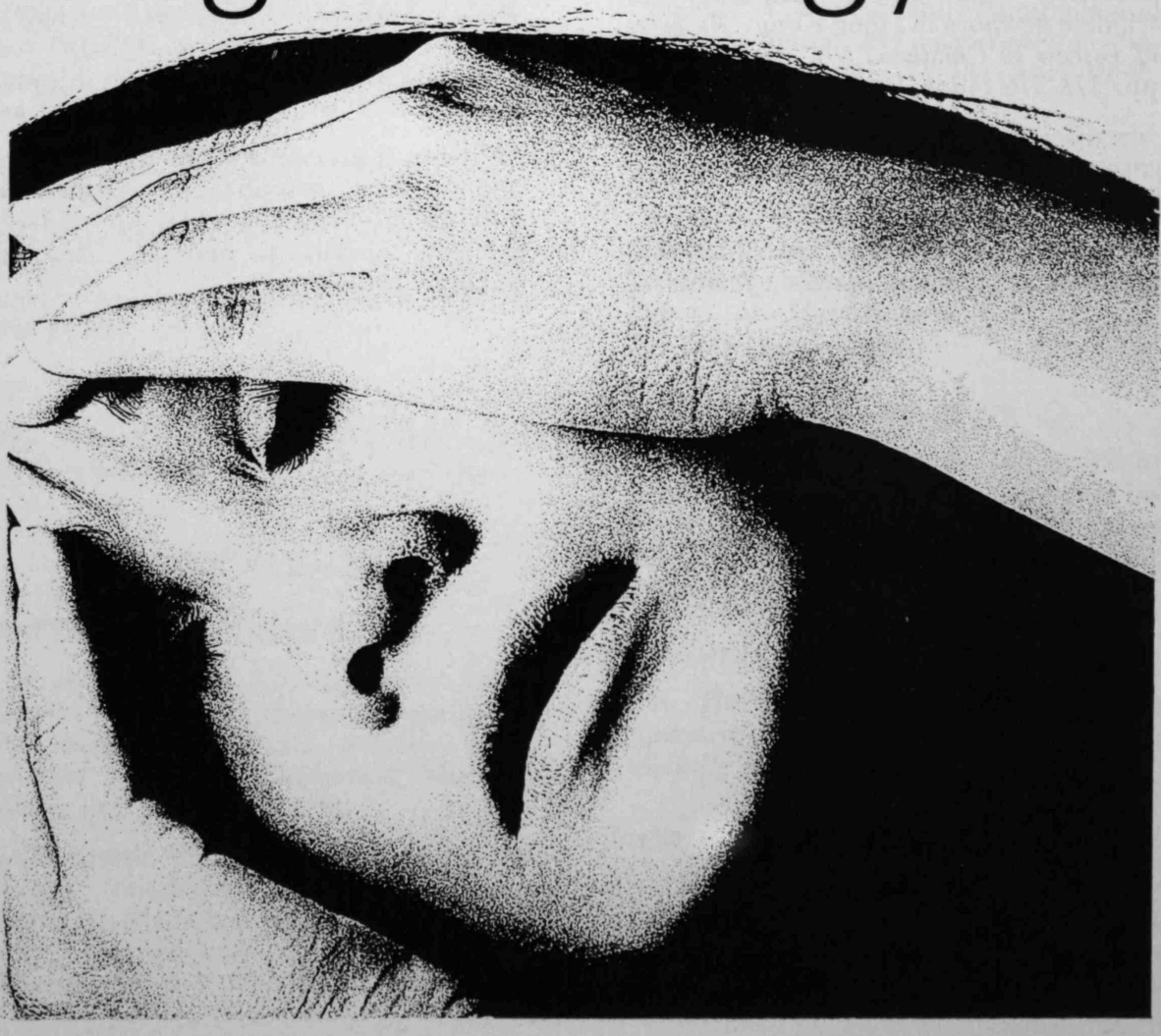


老人與我

青

「金錢至上」，古今一也。太史公不云乎？「天下熙熙，皆爲利來，天下攘攘，皆爲利往。」唯其以利爲上，故社會之一切，亦以利衡量，此本文作者之所以深痛惡絕，惘然神傷；蓋疾德操之敗壞，痛文明之蒙汚也。若老氏之絕巧弃利，返樸歸眞，可謂合作者之志矣！

——編者識

偶然隨着數友人，到大嶼山一小村遊玩去。下車後，只見一片水光山色，公路兩旁是疏落的農家和水田。這裏，樹木並非茂盛，田中也只有稻米，番薯和芋等，不見種有蔬菜。在路旁與耕者閒談起來，才知道種菜比稻米要多下四、五倍工夫，種稻只在插秧和收割時忙些，若種蔬菜，則平時也要很忙的。在這村裏，青年人十九都到香港或九龍工廠工作，鄉間只是老人和小孩，小孩多只六七歲，最多十一、二歲，因此不能供給種植蔬菜所需的生產力。有些家庭更只有七十多歲的老人家，靠耕一兩幅瘦田來糊口。這些農民，生活眞是清苦！他們勤勞樸素的特質，並非市區可找到的！

沿着小路，踏着衰黃的野草，來到一約丁方二丈的打穀場；有一老人，穿着陳舊發黃的汗衣，汚髒的黑布短褲，戴着草帽在掃穀。我們便坐在場邊，和他聊天，要替他掃穀，他也不推辭的讓我們去掃，他一方面忙於其他工夫，一方面教我們怎樣打、曬、和磨穀。他那雄壯沉渾的聲音，爽朗的笑聲，雖是七十而還矯捷的身體，他那懇切而無求，自尊而不自大的態度，簡直使我起敬。回想我在日常生活碰到的某些人，貪圖「少做工夫，多嘆世界」而不惜卑躬屈膝，以諂媚事人，甚或用明爭暗奪的手段，來達到目的！和這老者比較一下，使我覺得他們多麼卑下，多麼腐朽。

別了老人，走到一村屋簷下，見一老婆婆正在煮飯，我們上前和她攀談，本來想只是招呼一下便算，她卻好客地邀請我們到屋內，使我們不禁爲我們的敷衍態度而慚愧，屋內四壁空洞，只由一些木板造成，一張板床，兩張木櫈及一小桌子，便是一切的傢具了！此屋僅丁方一丈，卻是老婆婆和四個孫兒安身之所。閒談間，她又叫孫兒將僅餘一個的熟木瓜摘下來，切開要我們吃，她的誠意令我們覺得：不吃是罪過，而給回木瓜錢是侮辱！我又不禁想到市區中那些一切行動、友誼和愛情都建築在錢一字上的人，那些付出任何一些也要收回足夠代價的人，這些人充塞於我們生活中的每一角落而使我們無從逃避。

文明啊！是否這是得到你的代價？我不禁惘然。但再想深一層，不是的，文明並未帶來人性的墮落，事實上：一個以「金錢至上」來作衡量一切事物的社會，必然會做成道德、人格、情操及靈魂的下墮，以致產生可以用金錢收買到這些事物的現象。想到這不健全社會制度的犧牲品——我不禁惘然。

傲

Sillel

傳曰：「哀莫大於心死，辱莫大於心奴。」豈虛語邪！青年人之可愛，可敬，在乎有理想，肯奮鬪。誠如本文作者所言：「如果處處妥協，以求苟且偷生，存在還有甚麼意義？」是故「人生最痛苦的事，莫過於看見正義被戰勝，眞理被埋沒，而不能挽救！」旨哉斯言！孟子曰：「大人者，不失其赤子之心也。」作者庶幾得之。

—— 編 者 識

那一天，偶然的和你單獨在一起。

你說：「還是收斂一下你的鋒芒罷，多言引來的只不過是煩惱。」

我說我不能，因爲我還有一顆年青的心。

「難道年青人就要肆無忌憚的反叛？」

「不，我的意思是年青人有的是理想，有的是抱負，看見不合理，就要挺身而出，路見不平，就要拔刀相助。」

「但你不見有很多事是很難改變的嗎？生命本來就是無可奈何！」

「我最反對的就是這樣的投降主義。我認爲人生的意義在爲一個目標，一個理想，作不斷的奮鬥，絕不退縮，絕不爲魔鬼所引誘。如果處處妥協，以求苟且偷生，存在還有什麼意義？你還記得文天祥的話嗎？『人生自古誰無死，留取丹心照汗青！』」

「不要唱高調好不好?!」你的神情有些不屑。

「我絕不以爲這樣是唱高調。這只不過是價值觀念的問題。人類之爲高等動物，是在其能用思想及理智，去控制最原始的求生、求偶、求食等慾念。我心目中，以爲人生最痛苦的事，莫過於看見正義被戰勝，眞理被埋沒，而不能挽救！」

「可是你卻知不知道你的作風，已引起不少人的不滿？做人還是要圓滑些好！」

我笑了：「在我的字典中，圓滑卽是墮落！我不要赤子之心也失去！況且，你須知道：一隻在鴨羣中的鶴，就算把腿斬去，也是不會有朋友的。」

「你這種觀念，總會有一天被現實改轉過來。」你搖了搖頭。

「我承認有這樣的可能。不過，目前我還是像一塊在海邊的四尖八角的石頭，不斷地受着潮水的冲擊，風雨的吹打，但我將會堅持屹立——直至我倒下爲止——但那時生命之火也會熄滅了！」

你嘆了一口氣，走了開去。

先生在西醫書院之年，是其革命思想成熟時期，這固是先生不懈努力所致。他鑽研書籍，研究革命思想，從事革命工作的具體的計劃，使他對自己的使命有了透徹的了解，深入的體會與堅強的信心。但是，在這些主觀的因素外，客觀的環境——先生大學時代的背景——對他這時期的思想與研討的影響，也有重大的意義。先生的故鄉廣東香山縣翠亨村，處於珠江三角洲，該地域正是清末革命的發祥地，太平天國之亂，亦肇端於此。太平天國雖亡，反清思想卻已深入民心。國父幼年嘗聞洪秀全事蹟，並很崇拜太平軍抗拒清廷的精神，幷見對反清思想的潛伏人心，清政府委實束手無策。

先生對當時國家的處境，大概有兩種看法。其一：先生在三民主義演說中曾道：「我們民族是受什麼禍害呢？所受的禍害是從那裏來的呢？是從列強來的。所受的禍害詳細的說：一、是受政治力的壓迫。二、是受經濟力的壓迫，三、是受到列強人口增加的壓迫。」由此可見他對列強的壓迫我國是大爲憤激的。一八八四年十月，中法戰爭中，有法軍艦因攻台受創而到港修理，當時中國工人堅拒爲之工作，法商船抵港，艇民亦拒絕爲其修理卸貨，國父這時正肄業於皇仁書院，對港華人奮勇消極抗敵之行爲，大受感動，由是更激發起其民族意識與救國救民之決心。

其二：當時部份人士由於國家受到列強欺凌壓迫，因而產生仇恨心理，遷怒一切與洋人有關之事物，以致義和團肇禍，其實，凡事我們不能把一切歸咎他人，「人必先自侮而後人侮之」，中國之於國際間地位日低，聲譽日下，引起列強的垂涎，主要乃由於清政府本身腐敗無能。先生眼光遠大，有見及此，更覺推翻滿清爲當前急務。欲脫離列強的掌握，中國必須發奮圖强，必須推翻滿清，革新中華。同時若把清廷與外國政府比較起來，先生覺得我國對列强政府的優良之處，更有細心研究學習的必要，應取人之所長以補己之不足，而不該心存偏激仇視。先生早年留學檀香山，對當地治安與繁榮有深刻印象。在港求學時期，他感到香港雖然開埠未久，但在英人管轄下，有負責任之政府，於是治安良好，秩序井然，比之故鄉治安混亂，公共事業無人管理，實有天淵之別，因此先生所得的結論是中國國內民生疾苦，主要是因爲缺乏一個爲民衆服務，以民衆利益爲前提的政府。相反地，當時的政府，既不留意民生，且又吏治貪婪腐敗，習以爲常，只顧個人利益，不惜魚肉良民，妄加搜刮。由是先生更確定了他一向的想法，認爲目前急務，便是爲中國建立一良好政府。民國十二年他在香港大學演說時謂：「吾曾與英國朋友閒談，僉云良好之政府，並非生與俱來，須人事造成之。數百年前，英國官僚多係腐敗，迨後人心一振，良好政府遂得以產出。由是吾之革命思想愈堅，深知中國無良好政府，辦事必不能成。迨畢業而後，在社會上行走，遂毅然脫離醫學，轉以救國爲前提。惟吾人之宗旨，無非欲得一良好政府而已。」由是觀之，西方教育與在港的一段時期，實給先生很大的啓示，難怪先生曾云：「香港及香港大學，乃我智識之誕生地也。」又云：「革命思想係從香港得來。」先生既爲先知先覺之士，在其致力革命計劃時，更加上外在環境的影響，遂使先生革命意志日益堅强，革命精神，日益滋長。

綜合言之，中山先生之政治革命思想，雖溯源久遠，但在博濟醫院與西醫書院肄業的一段短暫時間，對先生革命意志、決心之培養，與革命思想、主張之擴展充實，卻有極大的影響。在大學學業結束之際，先生革命之志已堅牢鞏固、革命思想的萌芽已滋長成熟，並且盤根深錯，枝葉日茂，其堅穩能抵禦無數風暴而百折不撓。甲午戰後，中國爲日本所敗，先生遂棄醫而致力革命，積極領導中華人民在動盪時代中掙扎奮鬥，追尋一個三民主義的理想政府，爲中國在國際上爭取平等的地位。

（本文原載學生會中文學會會刊「東方」第十六期，編者經作者授權，將內容部份修改，謹案于此。）

先生轉入西醫書院，蓋「以其學科較優，地較自由，可以鼓吹革命。」西醫書院是香港大學前身，爲粵人何啓等香港傳道會中人所創辦，以栽培醫學與科學人才。該院雖然組織簡單，但有良好的師資與設備，師生間學習研討的態度，尤爲懇切。在學期間，先生接受的是注重科學實驗的現代教育，更受到西方思想、文化的薰陶，這對日後先生的思想與革命事業，影響極大。

中山先生的大學時代，各學科均有超卓優異的成績，因此最後終以榮譽成績畢業，深得師友們器重。陳少白興中會革命史要記載云：「孫先生求學的用心，實爲我所僅見。在雅麗氏學校（卽西醫學院）讀書，平時無論什麽學科，都是滿分。到了二十七歲畢業的時候，其中祇有一科是九十幾分，校中教員與考試官，就爲他開了一個會議，覺得這個學生是本校中最好的學生，學科大部份是滿分，祇有一科稍爲欠缺，似乎是美中不足。會議結果，他們就送給他幾分，使他得到滿分的榮譽。」這樣優秀的學生，難怪該校教務長康德黎對他有深刻的印象，日後當先生倫敦蒙難時，更不惜奔走予以拯救。

由於中山先生懷抱經國救民之志，所以在習醫外，對多方面的學識，亦勤加研習。讀書是先生一生最大的嗜好。先生嗜閱讀，主要是爲充實自己，非爲炫耀他人。其好讀書，數十年如一日，日後雖疲於奔走革命，仍不稍忘讀書，求學時期更博覽羣籍，涉獵多方面的智識，對歷史、哲學、進化論、農學、天算、輿地各方面均有研究，尤其留心外國富國強兵之術與各種有關革命之社會科學：如法國革命、政治理論與思想、國際法、軍事學、海軍建設、財政學等。對我國的文化傳統、經史國學、他也有作深入的探討和認識，並曾跟隨區鳳墀、陳仲堯二位先生學習國學，是以先生在這方面亦有相當修養。日後其革命言論與著作，如三民主義、五權憲法、知難行易等，皆爲這時期博學多聞的成果。先生好學不倦的精神與廣博的學問根基，實在值得我們欽佩。

大學時代的孫中山先生，讀書不忘革命，常致力於宣傳工作，藉着與師友、同學與民衆聚集的機會，發表談話，討論甚至演講，鼓吹革命，更利用報章、雜誌，發表文章與評論，宣傳推翻滿清、革新中國的主張。由於先生積極鼓吹革命，人們乃呼之曰「洪秀全」，同時又以他和楊鶴齡、陳少白，尤少紈最爲要好，且四人皆主張反清，所以便稱他們爲「四大寇」。是時的宣傳工作，在總理遺教心理建設第八章有志竟成篇中亦有記載：「……數年之間，每於學課餘暇，致力於革命之鼓吹，常往來於香港澳門之間，大放厥辭，無所忌諱，時聞而附和者，在香港祇有陳少白、尤少紈、楊鶴齡三人，而上海歸客，則陸皓東而已；若其他之交遊聞吾言者，不以爲大逆不道而避之，則以爲中風病狂相視也。予與陳、尤、楊三人，常往香港，朝夕往還，所談者莫不爲革命之言論，所懷者莫不爲革命之思想，所研究者莫不爲革命之問題，四人相依甚密，非談革命無以爲歡，數年如一日，故港澳之間，戚友交遊，皆呼予等爲四大寇。此爲予革命言論之時代也。」先生這時雖未獲熱烈支持與響應，但卻已負起了領導作用，喚醒國人對清廷多年統治壓迫的潛着反抗意志，提起國人對中國前途的關懷。若干關心國運的人士也在是時和先生建立了友誼，這對日後的革命事業，無疑有極大幫助。此時與先生聚談革命的友好，除了以上提及的楊、尤、陳三人外，還有王孟琴、何隆簡、楊迺安、江英華、楊衢雲等。此外，關心國家前途的改良派人士，如何啓、鄭觀應等，亦與先生時相往來，何、鄭二人初時還寄望清廷，盼能改良當時行政，挽救時局，故並不主張反清，但也終對清廷感到失望，改而趨於贊同革命運動；觀何氏日後對革命事業的幫助，可見先生的革命宣傳對當時的影響。

孫中山先生的學醫與革命

——革命思想的成長與革命言論的發展——

自彊

大學時代，爲中山先生革命思想成長，革命言論發展之期也。易曰：觀乎天文以察時變，觀乎人文以化成天下。先生之大學時代，正值滿室昏庸，列強窺伺；兼且清吏橫暴，民不聊生。先生仰觀天時，知優勝劣敗，天演公例，非推倒滿清，無以救危亡之中國；俯察民艱，知民主政治必需，人民生計待決，非有一完善之主義，無以避歐美失敗之覆轍。遂發憤向學，於習醫外，有關國計民生之典籍，無所不閱，卒融會而貫通，創立三民主義；幷能散播革命思想，奠定日後大事之基礎。「崧高維嶽，駿極于天！」先生之謂歟！豈我輩所能及哉！

——編者識

推翻專制，建立共和，是孫中山先生的偉大功業。這重大使命的完成，自有其多方面的因素。先生早年負笈檀香山，後又曾肄業於香港拔萃、皇仁書院，習醫於廣州博濟醫院及香港西醫書院，親自體會中西文化的傳統。先生的求學時期，實爲其革命事業奠下了良好鞏固的根基；其大學時代，更是綜合了中國固有文化傳統，與西方科學、政治、思想研究的時期，成爲中山先生革命思想發展成熟的重要階段。

先生少時就立志行醫與救國。行醫之志，早萌於檀香山求學之時。「不爲良相，當爲良醫。」這句范文正公的名言，當時一位教會司鐸曾對先生說過。先生對行醫濟世，拯救危病之神聖工作，早已有嚮往傾慕之心，返國後，遂入廣州博濟醫院習醫。後來先生感懸壺濟世，受惠者到底有限，而政治的力量卻深入普遍地影響到全國人民。在清政府統治下，國民皆處於水深火熱之中，中國更面臨危亡之厄運，挽救國民脫離危難，實爲比行醫更有意義、更急切的工作。一八八五年，中法戰爭中，馮子材雖敗法軍於鎮南關，然清廷昧於時機，苟且貪安，竟屈辱談和，許越南爲法保護國。國父目睹清廷顢頇無能，喪權辱國，大爲憤激，革命之志遂由斯而定，嘗曰：「醫生只救人數命，反滿救人無量數，吾此生舍反滿莫屬矣。」先生既欲從事革命，認爲醫生的工作，既可得大衆信任，又能深入接觸各階層人物，實爲理想的職業。從此，救國與習醫並行之志，便成爲中山先生此後事業的目標。

一八八六年，先生入博濟醫院習醫。是時該院已有五十多年歷史，爲遠東西醫西藥之祖。先生在院內與同學鄭士良善，蓋彼此皆滿腔熱血之青年，且有救國之志，志趣相投，乃約爲知己，嘗終日傾談研討救亡圖存之計，並從事宣傳鼓吹工作，故此時國父對革命事業實已有較具體的計劃與方案。但由於廣東省內，傳統思想牢固，革命風氣未開，且耳目衆多，言論很受約束，宜傳革命殊不容易，因此在香港西醫書院派員赴廣州招生時，先生便毅然轉學西醫書院。

孫中山先生在港大的演講

民國十二年二月十七日，孫中山先生自滬返穗途中，路過香港，二十日，應港大學生會之邀，蒞臨香港大學演講，其時學生會會長何君世儉說：「任何語言用來介紹孫中山先生，都無必要，他的名字是中國的同義字。他的經歷，如果用書本記載下來，無疑將是最吸引人的事蹟之一。如果愛好自由是偉大的考驗，那麼孫先生將與偉大共存。」講詞本爲英語；茲集昔日譯文，稍事修正，刋錄如下。於此可見先生在港讀書所受之影響。

『這次返香港，如返自己家鄉一式，因爲我曾在香港讀書，教育是在本港得來的。從前有人問我，你在何處及如何得到革命思想？我今直言答之：革命思想，是從香港得來。回憶卅年前，在香港讀書，功課完後，每出外遊行，見本港衞生與風俗，無一不好，比諸我敝邑香山，大不相同。我於每年放年假，必返鄉二次，每次約數星期，發覺在鄉間與在本港，確大相懸別。如在鄉間，要做警察及看更人方可，因斯二者有槍械在手，而鄉間晚上無時不要預備槍械，以爲防備之用。香港地方開埠不過七八十年，而內地已數千年，何以香港歸英國掌管卽佈置得如此妥當？吾有一次返鄉，主張由我個人發起親自灑掃街道，做清道夫。村內有數少年亦贊成如此做法，後面見香山知縣，解明來意，欲仿效香港，整頓地方。知縣亦喜，且云：「極願幫忙」。不幸放假完滿，再要返港。迨第二次返鄉，欲再求縣官幫助，始悉縣官已離任多時，其缺爲新任者用五萬圓購買得。此等腐敗情形，激發起我革命之思想，因見香港之腐敗事少，而中國內地之腐敗，竟習以爲常，牢不可破也。始初以爲我敝邑香山一縣始如是，及後再到省城，其腐敗更加一等。由此想到中國之官，勢位愈高，貪念愈熾，最後至北京，則見滿清政治下之齷齪，更百倍於廣州。吾曾與英國朋友閒談，僉云良好之政府，並非與生俱來，須人事造成之；數百年前，英國官僚多係腐敗，迨後人心一振，良好政府遂得以產生。由是吾之革命思想愈堅，深知中國無良好政府，辦事必不能成。迨畢業而後，在社會上行走，遂毅然脫離醫學，轉以救國爲前提。惟是革命以來，亦有人反對，且多加毀謗，不明我素抱之宗旨；吾人之宗旨，無非欲得一良好政府而已。雖然，中國革命以還，十二載於茲，不特無甚進步，人民之受苦更深，因是有少數人，且欲恢復帝制；但須知民國以民爲主，人人皆有一份，不容放棄者也。民國廢除帝制，如拆了一間舊屋，新屋尚未建築完竣，而一有風雨，居民受苦倍深，此勢所必然者。但將來新屋必有完竣之一日，不用艱苦，何能底於成？吾之所以百折不回者，無非爲一勞永逸計，爲大衆謀將來之幸福計耳。有等西人，亦曾向余問及，何以中國反正後亂事多過從前？吾祇答以緣故極多，現在革命事業只行了一半，譬如山頂有一大石跌下，至半途爲樹枝所阻遏，不能一直跌下，然樹枝終有枯之一日，障碍物旣除，大石自然跌倒平地。吾所抱之宗旨亦如是耳，無論若何艱辛，一定要革命成功。中國有一良好之政府，我心願已足，現香港有六十餘萬人，皆享安樂，亦無非有良好之政府耳，深願各學生，在本港讀書，卽以香港爲模範，將來返祖國，建設一良好之政府，吾人之責任方完，吾人之希望方達。極望諸生勉之。』

中國古代的醫學

伍錦仁

中國醫籍，浩如湮海，非窮十載以上，難以得其梗概。傳曰：「淵泉如淵。」此之謂乎？本文博而約之，以極簡之文字，畧述古代醫學，誠非易也。茲就香港大學學生會年刊（一九五六年）中，取而錄之。

——編者謹識

中國古代，神權極盛，一切行事，皆聽命於神，是故先有巫而後有醫，凡遇疾病則禱之。尚書金縢篇本爲武王有疾，周公祈禱願以身代之文；尚書大誥：「民若有疾；予曷敢不于前寧人，攸受休畢。」論語有子路請禱之舉，傳載二豎相語之文；是故患病者恆祝禱之，且亦間有求之醫藥。據經傳所載，如書云：「若藥弗暝眩，厥疾弗瘳」易云：「无妄之疾，勿藥有喜」論語載康子饋藥事，又云：「人而無恆，不可以作巫醫。」則古代醫藥，已頗發達。至於醫藥之淵源，則始於殷代。甲骨卜辭，足資考證。嚴一萍殷契徵醫以醫始於殷，而曰：「古者巫醫連稱，醫術實自巫術孕育而來，故初作醫者，名曰巫彭，又曰巫咸。彭咸皆殷人，今其名並見於卜辭。」傳說中有採藥事，而以彭咸爲採藥之神醫，然卜辭無藥字，別有百草釀成之「𠂤」，如其𠂤新𠂤，二牛用卯；及「新𠂤在且乙」等，可見殷世已有百藥湯液。至於疾病之由來，殷人視其原因有四。殷契徵醫云：「一曰天帝所降，二曰鬼神祟禍，三曰妖邪之蠱，四曰天象之變化。」足見殷人探究病原，深遽精微，已超越天帝鬼神之藩籬，進而確仗自然界氣候變化之能影響疾病，固以由「巫醫」而登「疾醫」之境矣。於病象，殷契徵醫則分爲六科，曰內科、曰兒科、曰耳鼻科、曰眼科、曰齒科、曰產婦科，並列舉卜辭以證之。

古代醫藥書籍，首推神農本草及黃帝內經，然此二書非神農、黃帝所作，皆後人僞託也。王應麟困學紀聞云：「今詳神農作本草非也。三五之世，朴略之風，史氏不繁，紀錄無見。斯實後醫工知草木之性，託名炎帝耳。」司馬溫公與范景仁書云：「謂素問爲眞黃帝之書則恐未可。黃帝治天下，豈終日坐明堂但與岐伯論醫藥鍼灸耶？此周漢之間醫者依託以取重耳。」根據本草所記之藥物產地之地名，採藥時月等可證本草成於漢太初以後。黃帝內經爲素問、靈樞兩書之總稱。靈樞又名鍼經，成於素問之後，宋元人多已言之。素問一書、古人均以爲作於戰國秦漢之際，嚴一萍於中國醫學之起源考畧中則斷爲東漢時之作。

黃帝內經可謂集中國古代醫學之大成。遠於二千年前，醫學家爲欲明瞭人體外部與內臟之部位，曾就屍體解剖，內經靈樞經水篇云：「若夫八尺之士，皮肉在此，外可度量切循而得之，其死可解剖而視之，其藏之堅脆，府之大小，穀之多少，脈之長短，血之清濁，氣之多少，皆有大數。」關於人體骨骼之記載，最早見於靈樞經骨度篇，惟度量多與實際不符，至於全身骨骼之記載，可見於「洗寃錄」。血液循環之生理現象則可見諸素問之舉痛論與平人氣象論。古代醫學家以人體內外環境能協調，生理上能正常，故內經曰：「陰平陽秘，精神乃治，陰陽離決，精氣乃絕。」其次關於致病因素，古代醫學區分頗詳。如氣候不正常，適藉人體機能不健全，外界環境驟變，遂可能引致疾病，內經云：「夫百病之生也，皆生於風、寒、暑、濕、燥、火。」飲食與藥物，生物等亦可爲致病之因素。內科學方面，其成就頗可觀；於疾病之認識則根據臨床症狀，病徵及發病經過情形。診斷法則以望、聞、問、切爲主。關於傳染病之描述及治療之著作甚多，如素問遺篇，張仲景之傷寒論，孫恩邈之千金要方與千金翼方及王燾之外台秘要等典籍，醫學中之外科學萌芽甚早，周禮中所載之瘍醫，主治範圍爲腫瘍、潰瘍、刀傷及骨折等。施手術及麻醉等可見於後漢書方術傳：「華陀，字元化，沛國譙人也，精於方藥，處劑不過數種，心識分銖，不假稱量，針灸不過數處，若病發於內，針藥所不能及者；乃令先以酒服麻沸散，既醉，無不覺，因刳破腹背，抽割聚積，若在腸胃，則斷前洗，除去疾穢，既而縫合，敷以神膏，四五日創愈，一月之間皆平復。」惜乎手術及麻醉藥方皆失傳，後人無以探其奧祕，引以爲憾。

醫藥至漢，漸趨大備，遂納一切疾病於陰陽五行之中，人身一切器官，與之陰陽五行之符，世上一切藥物，與以陰陽五行之性，統一切治法歸於調劑陰陽之和；於是總散漫之事實，貫以圓通之理論，雖其說不合於近世科學之法，然其條理自具，則二千年來中土醫學之大本也。

（案：本文原名「中國古代之科學」現謹節錄「醫藥」一節。）

次因爲越南帶來許多資料，都是從中國搜集得來的，引起與會者很大興趣。

（一九四九年）國際針灸協會第三屆會議，在巴黎舉行，又有阿根廷、美國，瑞士三國代表參加入會。這許多國家的代表，都有論文宣讀，有些專家認出某種疾病，一定要在某穴落針，這是極有價值的新發現。還有幾人，把這種發明應用到注射方面，各有論文報告。

（一九五〇年）國際針灸協會第四屆會議，仍在巴黎舉行，有德國、澳洲、加拿大、印度，土耳其等加入，代表的人數大爲增加，會期三天，各國代表帶來的著作物也非常豐富。

（一九五一年）國際針灸協會第五屆會議，在法國堡鐸 Bordea Ux 舉行。這一屆係保持原有各國的代表，中國針灸界，還沒有人參加，僅在開會期間，邀請中國駐巴黎大使以貴賓身份出席。

（一九五二年）國際針灸協會第六屆會議，又在巴黎召開，有葡萄牙、香港、墨西哥加入，這次會議，香港的代表是黃學禮君，會期三天，參加的國家已有十六國，針灸專家出席人數，有三百五十餘人，由越南代表保祿親王任主席，他是越南駐法的公使，也是針灸專家，他提出一個實驗的報告，說用極長的金針刺牛隻，可以使陽萎無嗣的公牛，恢復生殖機能。

（一九五三年）國際針灸協會第七屆會議，在德國慕尼黑舉行，又增加日本，及南斯拉夫兩國與會，日本代表是日本針灸界權威柳谷靈事氏，他在會場中，，受到極大歡迎，提出研究資料，都是中國針灸古法，他作了有系統的敘述，而且在法國繼續舉行講座，培植了許多新的針灸家。

（一九五五年）國際針灸協會第八屆會議，仍在巴黎舉行，新參加者有剛果、埃及、伊朗、荷蘭、巴西及希臘等國。這一年我們香港的中國針灸學會，申請入會獲得批准。

（一九五七年）國際針灸協會第九屆會議，在維也納舉行。又增加澳大利亞、匈牙利、波蘭等國，鄙人受到邀請，可是因會期急促，未能成行，由該會主席，聘爲特約研究員。

（一九五九年）國際針灸協會第十屆會議，在巴黎舉行，新加入會者有捷克、羅馬尼亞、哥倫比亞，及中國，中國的出席代表是吳惠平氏，受到了各國代表的重視，公推吳氏爲大會主席。

（一九六一年）國際針灸協會第十一屆會議，在德國慕尼黑舉行。每屆大會，必由德拉斐博士主持，可是本屆會議，因博士已在這一年三月三十日患病逝世，這是國際針灸界的損失。在會議前，舉行哀悼儀式，後由奇雷 J. Gillet 博士繼承德拉斐博士職位，繼續努力發揚。

此外，國際針灸協會有一本定期季刊，名爲「國際針灸雜誌」Revue Internationale D'acupuncture。總編輯是德拉斐博士，發行人是 Dr. J. Gillet。這是一本國際性的針灸學報，每年出版四冊，每冊登載論文四五篇至七八篇，均係各國針灸家所撰著。並附刊該會各國會員通信錄。經常有各國針灸學會開會消息及歐洲各地針灸訓練班，及針灸講座的通告，這一本雜誌，已有十五年歷史，是一本權威的針灸雜誌。

六、附言

以上所述，足見各國對中醫中藥和針灸的研究和發掘，正在繼續不斷的發展中，還有許多國家，對這種工作發生興趣的，如英國劍橋大學 Felix-Mann 新近著成一本針灸專書。此外有 Sidney Rose-Neil 等於一九六三年正式組成了一個「英國針灸學會」The British Acpuncture Society & Register，最近已開始工作，並與作者通函聯繫。

美國人對研究針灸的興趣，並不很高，但亦有所研究，如美國霍金斯大學醫學院，把中國的「內經」譯成英文，在一九五二年哥倫比亞大學醫學院，聘請一位胡定安博士（抗戰前曾任江蘇醫政學院院長，南京衞生局局長），指定他介紹中國針灸的理論和方法。

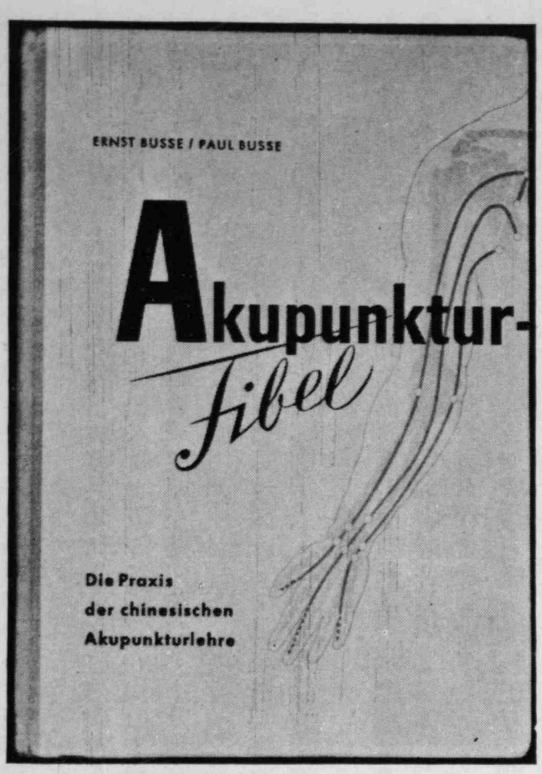
自從中國的「麻黃」被全世界採用之後，各國藥物學學者，對中國藥的研究，有異常的興趣，各國醫藥雜誌中，常有關於中國藥的論文發表，不勝備述。

的一本針灸圖譜，名爲Akupunktur Fibel，這是用德國人精美圖畫筆法繪成，準確而細緻，對治療應用，有很大的幫助，可以說是針灸界的傑作，遠遠的超過中國針灸圖譜的成就。（見插圖五）

（一九五四年）醫學博士 Heinz Schoeler 著作 Die Weihe'schen Druckpunkte, Ihre Beziehung Zur Akupunktur Neuraltherapie U. Homoopathie 一書。此書係講金針療法，神經療法，對症療法在人體壓痛點的表現。德國醫界出版宣揚針灸的通俗書籍，也有多種，最有名的是醫學博士Dr. Erich W. Stiefvaterl所著的Was Sit Akupunktur ? Wie Wiykt Akupunktur? 一書，卽是說明何謂針灸，如何用針灸治病，這是一九五五年出版的。

（一九五五年）醫學博士 Herald Mozer 著作 Brennpunkte D. Krankheiten 一書出版。這是講表面神經焦點與內臟病症關係，對針灸治療上發揮了極多科學的解釋。

（一九五五年）德國醫學博士 Dr. Erich W. Stiefvater 著作 Die Akupunktur Des Tenrhyne 一書出版。



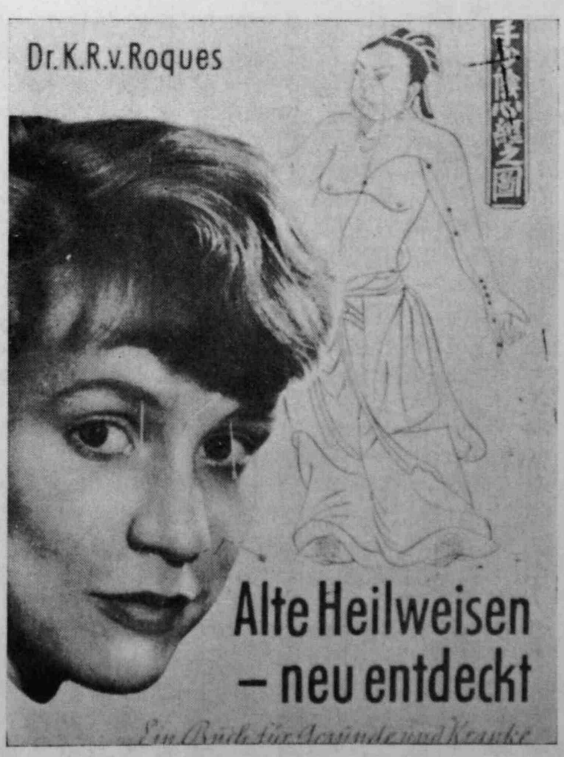
【圖五】此係德國醫學博士 Ernst Busse 及 Paul Busse 兩人合著之經穴圖譜，原名 Akupunktur Fibel 此書內容為經穴圖表，均依解剖位置繪製。

五、國際針灸協會的組成

中國針灸學術傳到歐洲，令到歐洲國家許多的學術界，發生研究興趣，各用其本國文字寫成專書，但是他們感覺到要交換知識，因此由法國的德拉斐博士De LaFuye 發起，組織國際針灸協會，於一九四三年時，在巴黎舉行成立大會，當時出席僅有英國、法國，比利時、義大利及西班牙等五個國家。會議除了擬訂會章之外，其餘的時間，都研究探討中國針灸學術，原定次年繼續開會，因爲戰事影響，才告停頓。

（一九四七年）由德拉斐博士召開「國際針灸協會」的第一屆會議，與會人士有法國、比國、英國、意國及西班牙等國醫師，宣讀論文二十餘篇，大家對中國針灸學術，各抒意見，得到結果很圓滿。

（一九四八年）國際針灸協會第二屆會議，在法國南部尼斯 Nice 城舉行，增加了越南，盧森堡兩國的代表參加，範圍逐漸擴大，此

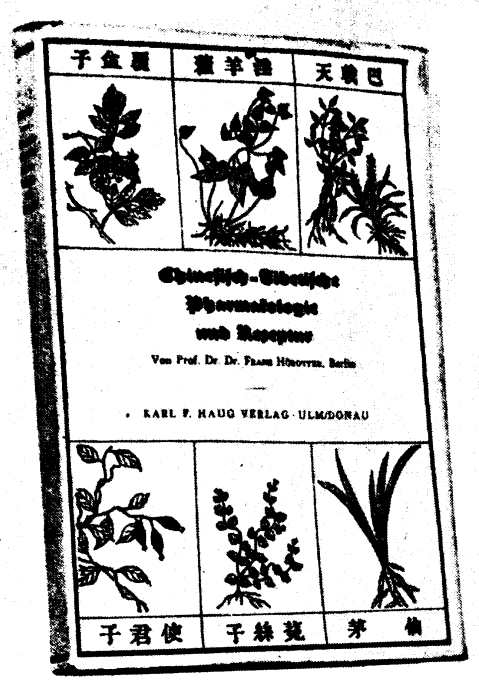


【圖六】此係德國醫學博士 K.R.V. Roques 所著，Alte Heilweisenneu Entdeckt 一書之封面攝影，上有中國古代老人畫，及一德國女性，面部之上插有金針五枚。

四、德國學者研究中藥及針灸

德國學者研究中藥及針灸，歷有年所，今舉數例如次：

（甲）同德醫學院院長黃勝白氏由德國考察歸來，記述德國人對中國藥物的重視，說是：「余遊德國，見德國醫學家，幾無一不注意中國藥物，各大藥業莫不以此爲重，達摩城之怡默克廠，柏林之立德爾大製藥廠，以及嘉大藥廠等等皆有專門陳列中國藥之室，搜集中國生藥之標本，盈櫥滿篋，既多且精，如奇喜廠除中國生藥標本外，並印有大小兩種生藥標本圖，着色鮮明，詮註詳細，並及該藥生產地之附近狀況，或採摘時情形，此種圖片，搜集之勤，亦至可驚人矣，怡默克廠搜羅尤富，彼所蓄中國藥材，其富足精美，恐聚國內大藥商十家所有者與之較，亦未必能也。怡默克廠且有成件之中國生藥標本出售，每件購齊約有數百瓶，皆以整塊整個或切片之中國藥材，裝於三四十生的米達長四五十生的對徑寬之精美玻璃筒中，用黑色硬橡皮蓋之，皆標瓶簽，標明藥名，並何地所產，其中如大黃一種有十數瓶之多，中國人皆知德國有一製藥商採買中國當歸，提出精英，製成婦女痛經良藥，娜幼門羅耳，販運於歐美各邦以及中國，因而大獲其利。」



【四圖】此係德國醫學博士 Franz Hubotter 所著，研究中國藥物之德文專書，此印出並，種，上有中國藥物圖六圖，影攝面封係中國藥名。

（乙）近年以來，德國人仍舊繼續不斷的研究中國藥，有許多專家在工作着，早年且將中國李時珍的本艸綱目，譯成德文出版。一九五七年，有醫學博士 Dr. Franz Hubotter 著作 Chinesisch Tibetische Pharmakologie und Rezeptnr 一書（見插圖四）。作者將四十三種中國藥物，著成一部書，對附子、青蒿、茵陳、天門冬、黃芪、紫苑、射干，巴戟天，菟絲子等，均有詳細考證，並述及中國配方應用之方式。

（丙）德國人又研究中國針灸學，由許多德國醫藥界中人，組織了一個「德國針灸療法學會」，主持的人物是德國醫界極負盛名的琦貝克門，該會組織龐大，參加的會員以柏林市，明奧市、漢堡市的開業醫生爲最多，歷年來出版一本「德國針灸雜誌」，現已出到七卷以上，編輯四人，所載論文，皆是研究中國針灸的心得和治療報告。今將三卷九期的內容列出如下：（一）健康者與病者經穴的物理電器測量：Dr. H. Schmidt 氏。（二）實施針治時的明顯反應：Dr. E. Finchk 氏。（三）針治意大利青年皮膚病奏效醫案：Dr. G. Bachmann 氏。（四）中國脉理與儀器測驗：Dr. G. Kampik 氏。（五）婦科病的針療：Dr. E. A. Franke 氏。（六）「中府」穴：Dr. N. Frack 氏。（七）國際穴名對照表：Dr. Otto Karow 氏。

（丁）德國專家所撰述的針灸專著，近年以來出版甚多，現在列舉七種如下：

（一九四九年）醫學博士 Dittmar, Fr. 著作 Untersuchung D. Reflle Ktor. U. Alget Krankheitszeichen，此書內容精美，有彩色插圖，對人體全身神經與針灸應用關係，敘述極詳。

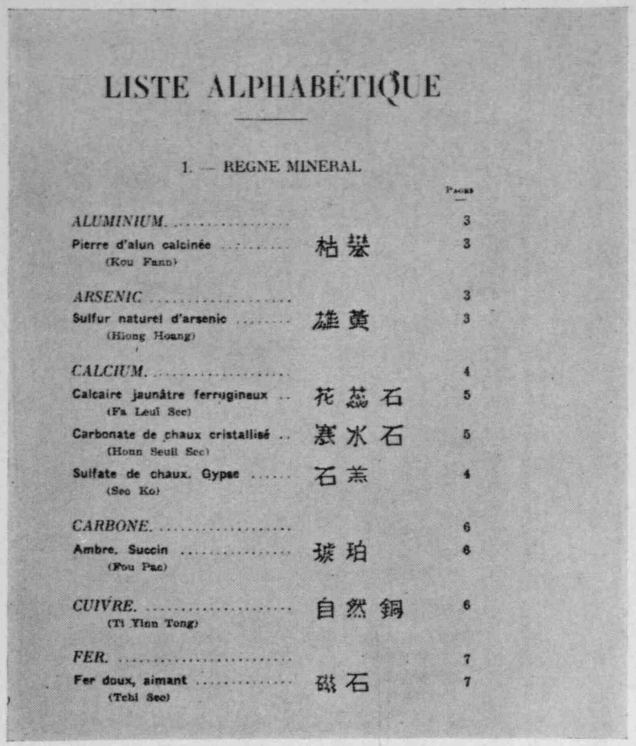
（一九五三年）醫學博士 Dr. Erich Stiefvater 著作 Akupunktur Als Neuraltherapie 一書，此書可譯名爲「金針的神經療法」，二四六頁，內有圖畫，根據X光骨骼定穴，採十四經系統，選取要穴。

（一九五四年）醫學博士 Ernst Busse 和 Paul Busse 兩人合著

（一九五九年）法國臘費哀J. Lavier醫師，將中國針灸家吳惠平所著的「中國針灸」一書，譯成法文本出版，法文書名爲 Formulaire D. Acupuncture 。

（一九五九年）法國醫學博士 Dr. Jacques M. Kalmar 著作「針灸實錄」La Pratique De Lacupuncture這是一本研究性很豐富的著作物，內容有附圖十九幅，描繪極爲精細

（一九六〇年）法國針灸前輩蘇理馬博士 Soulie De Morant 在世界二次大戰前，寫成了一部 Lacupuncture Chinoise，封面上還有「鍼灸學」三個中國字，這是一部空前的鉅著（見插圖三），在法國學習針灸的人，都認爲它是針灸的經典。該書出版不久，蘇氏逝世，戰事停止之後，此書已絕版，但需要閱讀的人依然很多，書商乃於一九六〇年翻印出版，原書第一版，印刷極精，封面爲硬面，再版本的封面，係軟紙面，但版本極大，銷行甚廣，本港香港大學圖書館中亦搜藏一部。蘇理氏著作，傳誦全歐，他另有一部 Pre'cis De La Vraie Acupuncture Chinoise，亦於一九五〇年再版。



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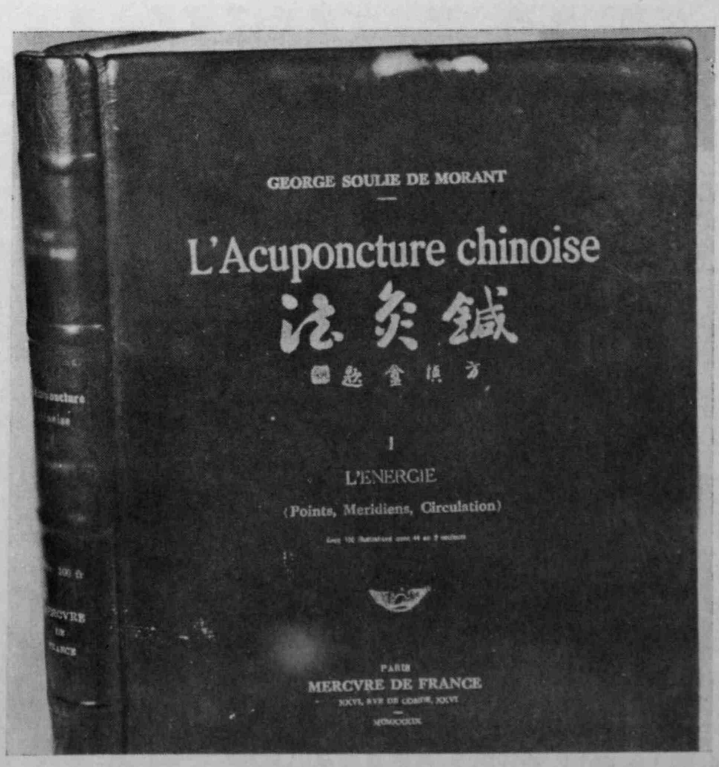
【圖二】法國研究中國藥物之專著，此係目錄之首頁，上有中國藥名，拉丁學名，及法國名稱，論及中國藥四百餘種。



【圖三】此係法國人 Soulie De Morant 所著 L'acupuncture Chinoise 一書，書上有中文名稱「鍼灸法」，三字爲中國已故針灸家方慎盦所題。

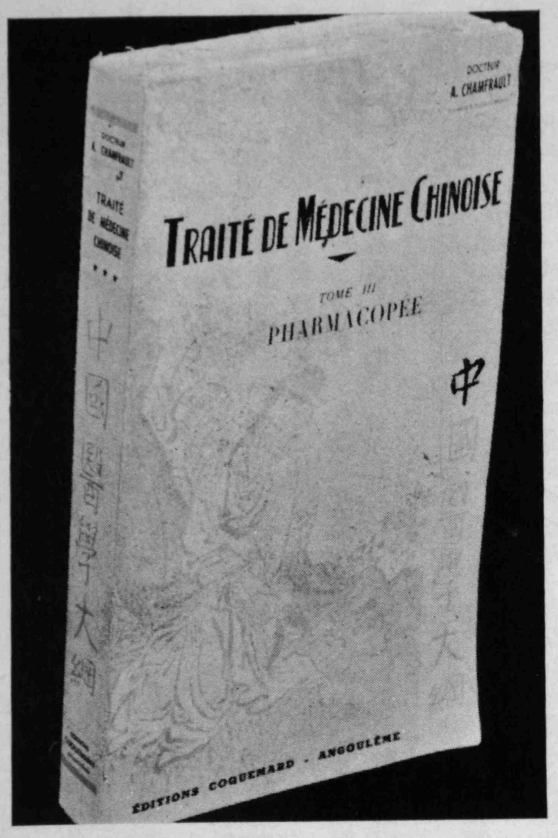
歷年以來，法國醫學雜誌及針灸雜誌中，都刋有許多專家寫的針灸論文極多，皆是極有價值的專門性文章。一九五一年，有 J. E. H. Nibovet 氏搜集各家論文，編成一部「中國針灸論文集」Essai Sur Lacupuncture Chinoise Pratigue 。這是一本大著作，所刋若干論文，附帶印出「心電起伏圖」等，這是講心脏病用針之後的科學試驗報告，這種論文，在中國是未之前見。

格，製成掛圖，這幅表格是經過臨床實驗後寫成的，成爲研究針灸者之重要參考品。

一九五二年，拉斐氏著「現代針灸療法」Lacupuncture Moderne Pratique 這是一部精細的著作物，厚一百八十五頁，內容以實用爲主，故有表格甚多。

一九五六年，拉斐氏著作「中國針灸學」第一卷出版Lacupuncture Chinoise Sans Mystere Dacupuncture, Tome，這是一部更偉大的著作，第一卷有六百三十六頁，圖表數十幅，內容介紹中國針灸的原來理論，和治療技術，他對中國的陰陽學說，發生很大的趣味，又介紹中國針灸的經絡起訖，與近世神經學說互相對照，他指出許多情況，都與生理學說相合，他認爲中國人這種發明是極偉大的，因此他把中國舊式經穴圖，改繪成爲新式的穴位圖，把神經，骨骼，肌肉，都表現出來，這部書由法國出版，內容卓特，爲法國醫家所稱許。

次年，拉斐氏的「中國針灸學」第二卷出版，這一卷十分之九是圖畫，全書一百二十二頁，分爲四章，第一章是十二經穴圖，第二章是任脉督脉圖，第三章是各經的循環圖，第四章以德醫Dr. Yeihe所著的神經系統圖和中國的經穴圖作比較，發現多數不謀而合，他說Yeihe氏是純粹西醫解剖學家，對中國人的經穴，向所未知。所以中國的經穴學說，是全世界最早的神經學說，他又指出中國針灸學上針取「少冲」穴位，其效用等於西法注射强心針。



【圖一】法國醫學博士 A. Chamtrault 著作為中文名稱，書一 Traite De Medecine Chinoise 書，封面有中國古裝女子讀書圖，「中國醫學大綱」。

（乙）一九五四年，法國醫學博士 Chamfrault 氏，著作了一部 Trait'e De Medecine Chinoise，這部書的封面上，還寫出中國書名，叫作「中國醫學大綱」（見插圖一），這位法國醫學博士，對中國醫藥研究了二十年之久，他還請了一位中國專家 M. Ung Kan Sam 幫同撰述。第一卷厚達九百八十六頁，附有精緻圖畫四十幅，內容大部份是講針灸，附帶兩篇，一篇講中國的按摩方法，一篇講中國的放血方法，這是全書的第一卷。作者的見解，是把中國針灸方法，作全面介紹，而且配合了科學理論，作了有系統的講述。

隔了兩年（即一九五六年）前書第二卷發行，這一卷把中國的「內經」譯成法文，而且把內經中的要點，由作者指出它的科學觀點，表達極有價值的見解。

隔了三年（即一九五九年）本書第三卷出版，這一卷專談中國藥物，他以李時珍的本艸綱目爲主，以鄙人的藥學大辭典爲輔，分別敘述四百餘種中國藥物的性能和療效（見插圖二），因我的藥學辭典，原已搜集了各種中藥的拉丁名稱，對法國學者傳譯極爲方便，作者又把法國方面的資料，並搜集歐洲和日本的實驗報告，來作引證，所以這卷書的內容異常充實，實在是一部份量很重的著作物。除此以外，歷年出版的法國針灸書列舉如下：

（一九五一年）法國醫學博士 Lavergne 著「金針療法的實施」Precis Dacupuncture Pratique這是一本簡明要言不煩的針灸手冊。

（一九五二年）巴黎醫師 Edith Vanrijckevolrel 博士著「針灸穴位及按摩術」一書 Lacupuncture Sans Aiguilles Ni Moxas。

（一九五二年）法國醫學博士Albert Leprince著作L'acupuncture A La Portee De Tous。這是一部針灸療法結合神經學說的新著。

細山田馨發表「夾竹桃葉有效成分成就之藥理學的研究」。

（一九三八年）京城大學，杉原教授及張禮世發表「桂之藥理作用」。杉原教授及曹圭瓚發表「漢藥常山之藥理學並化學的研究」。大澤教授及寒河江昂發表「地龍之解熱作用有關知見」。九谷夏禹・曹伊東發表「銀柴胡之成就」。加來天民・北川清治發表「蠍毒素關於藥理學的研究」。

（一九三九年）大阪大學，羽野、長谷川、藤登，後藤發表「牛黃藥理學的研究」。杉原教授野津辰郎發表「艾葉茜根及三七根之止血作用與成就」。羽野、前田、高田發表「甘草之藥理作用」。

（一九四〇年）京城大學，杉原教授及李希賢發表「梔子之作用與成就」。八木教授及佐藤齊發表「青木香芳香性物質之藥物學的研究」。

（一九四二年）大阪大學，吉村一雄發表「露蜂房之藥理學的研究。」

（一九四三年）八木教授及渡邊親孝發表「秦皮配糖體之臨床的研究」。

（一九四五年）京都大學，荻生教授及藤尾三郎發表「石蒜之藥理學的作用與成就。」恆川一勝發表「海人草有效成分藥理的研究」。田中護發表「蚯蚓解熱成分之藥理學的研究」。宮崎三郎・山本發表「茵陳蒿之驅虫作用與成就」。

（一九四七年）加藤太基發表「蘆薈有關研究」。鹿兒島大學，肥厚勇發表「甘草之藥理學的研究」。

（一九四八年）工藤次郎發表「黃連黃柏有效成分之抗貧血作用與成就」。三輪車東耳發表「黃疸藥山梔子的成就」。

（一九四九年）高橋・八木發表「肉蓯蓉之唾液分泌促進作用成分之研究」。

（一九五一年）赤羽・河村，猿橋發表「芍藥成分之藥理學的研究」。坂口弘發表「甘艸之解毒作用與成就」。大津喜一發表「薏苡仁有關藥理學的研究」。簡東緒發表「杜仲之藥理作用的成就」。高部登發表「半夏之鎮吐作用的成就」。

三、法國學者研究針灸

在十七世紀中，有一位荷蘭籍的醫學者藍尼氏，學到了中國針灸後，針灸治病的方法，介紹到歐洲去。

德法兩國的醫家，認爲中國的金針療法，很有科學價值，是一種神經系的理學療法。因此屢次有學者從法國到中國來學者，最著名的就是那位蘇理馬氏，在清代光緒年間，任法國駐華欽差，就在北京聘請專家作有計劃的學習，而且在北京參加醫療服務，他回國之後，著書和治病，成爲針灸方法在法國的早年紀錄。

最近廿五年來，法國醫學家繼續研究針灸，而且在法國國家醫院或市立醫院，特設針灸科目，在巴黎一處，有一千餘位針灸治療家，作私人開業，這些開業者都是法國的正式註冊醫師，除了應用西方醫療方法之外，兼用中國的金針療法。有若干正式學術機構，不斷的設立針灸講習班或針灸治療實驗所，因此中國針灸方法，大大的在法國擴展開來。

近廿五年中，有許多法國醫學博士及法國正式醫師，著作了不少有關針灸學術的書籍，先舉兩部大著作：

（甲）法國醫學博士德拉斐氏 Docterur Roger De La Fuye，他是法國針灸界的領袖人物，歷年担任法國針灸學會會長，也是國際針灸學會的首腦，最近二十年來，法國針灸講座，針灸雜誌，都是他發起和主持的。

他自己在法國巴黎 Boulevard 開業，他是醫學博士，除了採用西方醫學和藥物之外，就是兼用針灸療法來治病，他歷年著了許多有關中國針灸的書，今依着出版的年份先後列舉如次：

一九五〇年，拉斐氏依據中國針灸經穴圖，改製成爲「針灸經穴全圖」，依照着神經系統的傳佈，經過臨床實驗後撰成的，成爲研究針灸着重要參考品之一。

一九五一年，拉斐氏作「臨床應用針灸經穴圖」Suhemas Meridiens Points Homeosimi，他把各種疾病應用何一經穴，列成一幅表

二十世紀的傳統醫學

陳存仁

一、前言

中國醫藥僅靠全國私人的研究，以及私立的中醫學校，和全國的開業中醫，來維繫和宣揚中國醫藥學術的流傳。

中國醫藥學術，包涵古今各個時代的學說，當然有些是無稽的迷信的，以及不科學的，但是有許多寶貴資料，的確能夠治療疾病。近世出現的若干新發明，如**脏**器療法，對症療法，荷爾蒙療法，免疫療法等，在中國醫藥資料中都早已發現了，而且還有許多中藥和醫療技術，在西方醫家的心目中，成爲尚未瞭解的發明資料，這是一個未經發掘的寶藏，因此各國的學者，至今不斷的做着鑽研工作。

外國的科學家和醫藥家，陸續發現中國醫學中，蘊藏着無數有價值的發明，因此各國專家的研究工作，日益發展，在最近廿五年中，有人專攻中國藥物，有人研究中國醫術，有人專門研究中國針灸技術。

在一世紀以前，荷蘭植物學家開姆比氏Kaempfer將中國藥物種籽，帶到歐洲去，從事栽種，供應給各國西醫界所採用。西醫配方中，有一百多種原藥，如大黃、麻黃、巴豆、杏仁、五倍子、甘草、松香、兒茶、芥子、丁香、桂皮、豆蔻、茴香、薑、薄荷、樟腦、橙皮、龍膽、檳榔、黃連等，這許多東西都是中國藥物。自此以後，西方醫學中便有中國藥滲入在內。至今這許多藥品的拉丁名詞，還保存着中文原來的聲韻，有些還有「支那」或「唐」字的字義，這是中國藥物早期便爲西方醫界所接納的史實（事見富士川游著的日本醫學史）。過去的情況，今時畧而不談，現就最近二十五年來，世界各國對中醫中藥和針灸技術的研究，現在到了如何的程度？我今就此問題，擇要寫成本文。

二、日本學者研究中國葯

中國醫藥傳入日本，在唐時已開始了。日本維新之後，西醫盛行，但對中國藥仍不斷的作科學試驗，所得成果，證明療效極高，確有科學價值，因此設立了許多漢藥種植場，漢藥研究所，還有大藥廠，將科學試驗證明有效的中國藥物，製成了不少注射劑，丸劑，粉末劑，成爲近世新藥。如日本歷史悠久的「漢藥舖武田長兵衞」改爲「武田藥廠」，若干新藥，以漢藥製成。

在日本醫科大學中的醫學教授，以及植物學教授，礦物學教授，和化學教授，不斷的作研究漢藥工作，往往花費了十年八年之久，祇研究一種中國藥，有若干人一生祇研究幾種中國藥，今將廿五年以來日本權威專家所寫成的漢藥報告論文，綜列如下：

（一九二九年）迂治雄發表「驅蛔藥蛇床子的作用並其臨床成就」。寺田文次郎發表「漢藥**蝦蟆**之成就」。岡西爲人發表「丹方之研究」。

（一九三〇年）久保田教授及杉本重利發表「漢藥牛黃之研究」。寺田文治郎，山崎六郎發表「漢藥黃芪之藥理作用與成就」。久保田教授及峯下銕雄發表「漢藥鹿茸之研究」。

（一九三一年）京城大學，杉原德行，石戶谷勉，加來天民發表「漢藥大豆黃卷的成就」。峯下銕雄發表「漢藥鹿茸之家兎血液像及影響成就」。久保田晴天，山崎六郎發表「川椒治療豚蛔虫的毒質作用的成就」。

（一九三二年）慶應大學，池田茂雄發表「枳實之利尿作用的成就」。京城大學，平野繁夫發表「木香成分與家兎血糖量及影響成就」。栗原潛及原晃發表「木香之藥理作用與成就」。

（一九三三年）久保田教授及峯下銕雄發表「蝦蟆之**脏**器有關毒藥研究」。久保田教授及佐士丁發表「漢藥蒼耳子之研究」。奧島教授及三宅愼治發表「淫羊藿之藥理學作用」。吉村邦一發表「土木香抽出混合」。

（一九三四年）京城大學，平野一丁田，門永發表「黃芩之化學及藥理學的研究」。岡西佐士發表「支那醫方對於水銀劑之應用」。內田壯太郎發表「龍膽草苦味質之胃液分泌有關實驗的研究」。

（一九三七年）峯下銕雄，景原德發表「漢防己之中樞神經作用遺」。李宗珍，中村功發表「樒實之驅虫作用的成就」。加來天民，李丙圭發表「全蠍的研究」。八木教授及丹野與三太發表「葛根之解熱作用」。加來·中川發表「驅虫漢藥有關的研究」。加來·李發表「蠍毒素及全蠍之化學的研究」。小林芳人發表「漢藥蠍酥之研究」。寺田須崎·苗村多田發表「漢藥常山之效力及成就」。貫文三郎，

社論

變革時代的責任

艨艟巨艦，堅銳兵革，驚破了閉關自守的滿廷迷夢；輝煌的科學成就，精巧的技術產品，貧乏了樂天知命的漢族農村，也震聾了守舊頑固的中國知識份子。百年來，亙古未有的大變動，在東亞大陸上發生着；從古舊的、過時的思想桎梏下，中國學術獲得解放，新的思想和新的方法隨而產生。醫學方面，亦並不例外；以陰陽經脈爲體的中學，與用生理解剖爲基的西學，兩股潮流在這大時代互相匯合、衝激，也形成着一種新的力量。面臨這項劇變，我們的責任又當如何？

社會對一個醫學生的起碼要求，是要他敦品力學：培養良好的醫學道德，學習基本的診療知識。但作爲這個時代的中國醫學生，不獨要細心於此二者，同時必須認識到當前廣大中國土地上所遇到的各種醫藥問題。看哪：住血絲狀蟲、血吸蟲、肝蛭、以至黑熱病、鼠疫、傷寒、霍亂和結核症等的病原體，廣泛地分佈在衞生缺乏的農村中，殘害着千萬同胞的性命；看哪：腳氣、壞血、軟骨、夜盲、玉蜀黍疹和水腫等症，普遍流行在營養不良的社會內，造成不少工作和時間上的損失；看哪：醫藥困乏，人才奇缺，技術落後，設備不足，以致抗疾救亡的工作，遭受着嚴重無比的障碍。一個中國醫學生，能埋首課本之中，對這些事實無動於衷嗎？尤其近年喪亂之餘，以空洞的思想代替實際的科學，以致內陸教育水準，大爲低降，令我人民健康，蒙受到極大的威脅；兼之有司祇圖以赤腳醫生、護理人員等敷衍其事；眞是疫癘方殷，前途堪虞。我們必須不斷對日新月異的形勢和困難有所認識，了解，才可希望機會到來之際，切切實實爲中華民族服務。這是我們今天的一大責任。

其次，處於這個變動中的世紀，中國傳統醫學正日益式微，黃帝扁鵲之術，漸漸趨於衰落，雖經一二有心人士大聲疾呼，但言者諄諄，聽者藐藐。長此以往，何堪設想？有些人，更以傳統醫學爲「巫」術，說：「不論是什麼『華陀再世』『歧伯復生』，都通通屬於萬世一系的巫醫系統。」「在這個可憐的國家，禍害這個可憐的民族，使他們吃樹根草藥，吞蟲屎黑湯」。其實我中華民族，積五千年經驗，發展了精深的醫學理論，獲得到無數的珍貴藥方，但以其義深慝隱晦，不易爲世所知而已。我們習西方醫學的，掌握有新式的科學理論，把持着具體的臨床方法，若竟以傳統醫學爲無用，不加理會，甚或恣意揚棄，則不惟違反東西文化交流之精神，抑且有害於醫學的進步，成爲民族科學的罪人。應利用西學之長，補中學之短；以求得兼收並蓄之效。最低限度，也應對傳統醫學有一正確的認識，不致盲目附和，或因利害關係而互相敵視。這點是當代中國醫學生的另一責任。

民族給我們的期望既如此高，時代給我們的責任又如此重。橫渠先生有言：「爲天地立心，爲生民立命，爲往聖繼絕學，爲萬世開太平。」義在斯乎？義在斯乎？

目錄