

FOCUS

The Murangs: Neglected and Forgotten

THIRTEEN tribes, each having its own distinct history, tradition, dialect and cultural traits, have been living in the three hill districts of Bangladesh along with the plain landers who migrated to this area partly due to their search for better fortunes and partly due to the invitation extended to them by the tribal chiefs. Of them the 'Murangs' of Bandarban are the most backward, neglected and poorest community.

The Murangs identify themselves as Mros to others but other tribal communities prefer to call them Murangs. The Murangs usually live at the inaccessible remote hills and deep forest of Bandarban.

They live at Thanai, Lama, Alkakadam and Naikhongchari thana areas of Bandarban. They are also found at Kaptai thana area of Rangamati district. According to the population census of 1991 the number of members of Murangs is 21603. But to many their actual strength will be more than 40,000. In terms of number of population they rank fourth among the tribals. The Chakma is the largest tribe of the hill districts. The Murangs migrated to Bangladesh from Myanmar.

They construct their houses by the side of innumerable springs and rivulets and at the slopes of the hills. Ten-fifteen families constitute a Murang village. They

used to construct their houses on machan, 9-12 feet above the ground. They do this to save themselves from the attacks of pests, insects and wild animals. Their society is patriarchal one. Their mother tongue Murang does not have scripts.

The Murang have their own religion — Torai based on animism. They believe that Torai lives above the sky and from there, He protects them from diseases, calamities and evil forces. Their greatest religious festival is Go Hottaya (cow slaughter). The Murangs do not have priests. For the purpose of performing marriage ceremony and other socio-religious functions, they used to select and old man from amongst them. The Murangs have also certain beliefs and various superstitions. One of these is that the male members used to keep long hair like the female members and both boys and girls colour their teeth.

The Murangs used to live on Jhum cultivation and hunting. They hardly have landed property of their own. Off-farm activities are not known to them. Jhum cultivation nowadays fails to provide them with adequate food and any marketable surplus. They are totally dependent on nature for their subsistence and the nature is

by Rifat Ahmad

very rude to them. To many of them rice is a scarce commodity. Their literacy rate is less than 17; whereas the literacy rate among the Chakmas is 72 per cent — highest in the country. Due to their untold poverty and high rate of illiteracy they are exploited by the Chakmas and the Marmas. As they live at the deep forest they are deprived of the benefits of the development programmes of the government. The development programmes of the government hardly reach their needs.

The Murangs remember the efforts of the Bangladesh Army to lift them from ignorance and poverty with gratitude. This will be testified if one talks to a Murang. The members of Bangladesh Army have tried sporadically to do something for their upliftment. Nobody took care of them before the Bangladesh Army.

In 1980, the Government established a residential school for the school going children belonging to the Murang community. It is learnt that at present 214 students of that tribe are

studying in this school. Till now 23 boys/girls have passed SSC examination from this school. The government bears all expenses including boarding, and lodging of the students. The establishment of this school have ushered a new era in the life style of the Murangs. It is expected that the residential school will continue to provide educational facilities to them. But there is a rumour that the school may be closed at any time.

The Upland Settlement Programme undertaken by the Chittagong Hill Tracts Development Board aims at rehabilitating the landless tribals and if extended to the Murangs, it will generate employment among the Murangs thereby resulting their increase in income. But the programme does not cover the areas dominated by the Murangs. It is hoped that the government considering the poverty and backwardness of the Murangs will do the needful. In order to save them from poverty, superstition and illiteracy they need attention and sympathy of the government and NGOs.

direct to other hospital, or to computer screens in GPs' clinics.

Many Advantages

In spite of the many advantages only two or three other hospitals, in Japan and the USA, are going digital and none as far as fast as the Hammersmith. The high cost of the state-of-the-art technology needed is one reason.

A single ordinary chest X-ray takes up as much space as the Bible in a computer's memory. PACS — Picture Archiving Communications System — as the new technology at Hammersmith is called — will have cost £20 million when it is formally inaugurated, sometime in 1995.

PACS is the most expensive single medical technology project ever funded in the UK. Most of the money has come from the Department of Health, which has realised that Professor

per scan than you get from three hours exposure to cosmic radiation. But it can reveal frail bones affected by osteoporosis, or tell doctors just how much of a patient's body is muscle, how much is bone and how much fat.

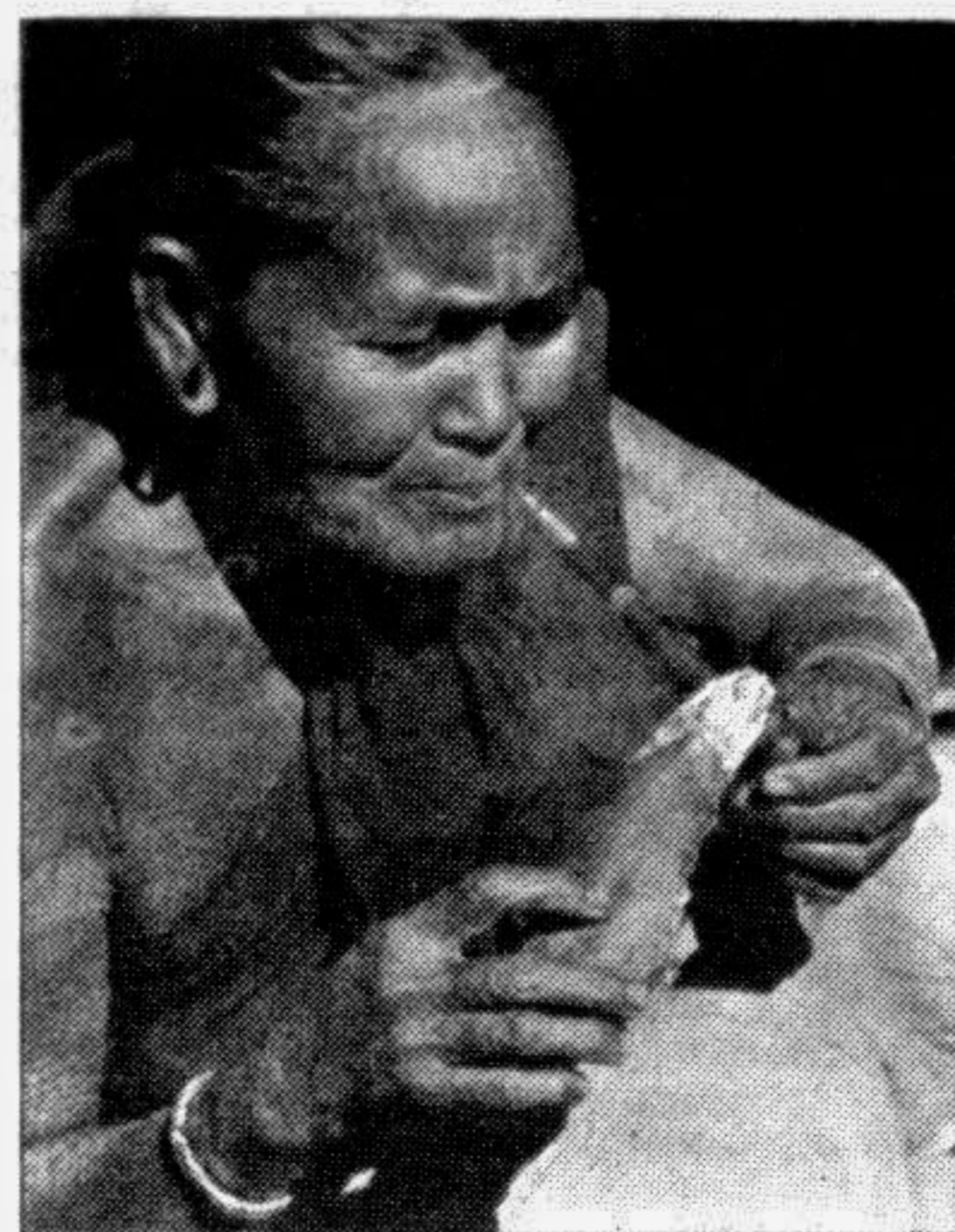
Most Innovative

Another technique uses radiolabelled white blood cells to guide doctors to the sites of hidden abscesses or other trouble-spots. In the most innovative technique of all, interventional radiology, doctors use tiny instruments at the ends of fine catheters, inserted deep into the body under local anaesthetic, to perform a growing amount of microsurgery, viewed by surgeons — and patients if appropriate — in extremely clear detail. Every scrap of unwanted image is electronically edited off the screen by the computer.

The Hammersmith is also pioneering interventional radiography, in which doctors carry out microsurgery



The land of the Murangs — Photo credit: Noazish Ahmed and Naibuddin Ahmed



Retaining their indigenous ways

Converting the Curse into a Blessing

by Iftikar Uddin

WE all know that even-though the curse of this deluge is not interminable. Even the storage of gas and crude oil will be used up someday in the future because of an imbalance between extraction rates and the natural production rates. If the rate of extraction (of water) from beneath the earth is higher than the rate of water supply returning to the soil, which is what is happening today, it is natural to expect a decrease in the underground water level there. According to our present water crisis situation in river due to the Farakka and other dams near our borders, time has come to consider the water flowing systems beneath our earth.

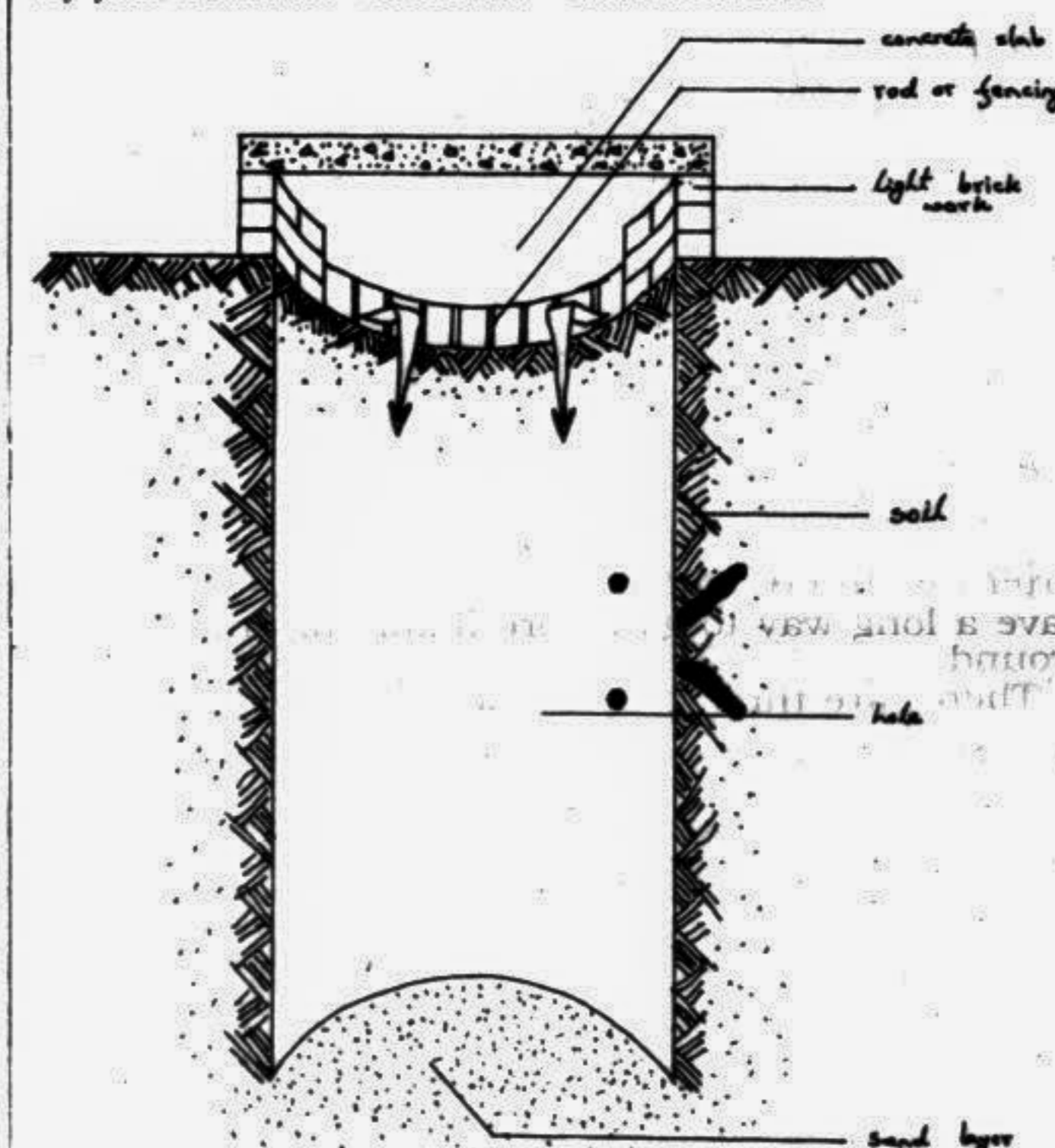
Usually a great percentage of water flows from the rivers into the earth through the sand layer of river beds, and according to the stale and earth construction this water keeps on flowing beneath the earth surface up to the reservoirs, where it is encompassed by harder rocks. Here, water is extracted for different purposes. What happens to the remaining percentage of water that comes from rain which is sucked by the soil depending on the soil characteristics (i.e. on loam, sandy and sticky type of soil)? As our soil is mainly either loam or sticky, the rate of suction of rain water is very low, so the major portion flows out into the rivers, canals, drains, etc.

As the abatement of river water is one side of the water oriented crisis, the floods every year is another side of the

above crisis. We could convert the curse of this deluge into a blessing. To do so, the main objective is to make the deluge water flow beneath the earth surface, so that it helps to increase the underground reservoir water level. There is a very simple technique for performing this objective. First we should dig a hole (of a chosen diameter) until the sand layer is reached. Then to protect it from any accident we should cover it by a concrete slab leaving holes at the sides, so that water can flow into the holes. The basic reason of digging the hole close to the sand layer is because sand does not store water and does not avert the water flow. In this way, endless amounts of water can flow beneath the earth, reservoir water creating an increase in the water supply.

This technique might not be of a very high standard, but according to our economic resources and limitations we must try to solve our problems in our own suitable ways. Since I have written this article solely based on engineering knowledge, I would not be able to tell you about its disadvantages, or give further details. I think the soil-scientists can fulfill such demands.

The potential customer climbs into his virtual dream car and decides on all the details. Not merely fantasy, but a service to the prospective buyer, made possible through the discovery of virtual reality technology by car manufacturers.



Virtual Reality in Car Manufacturing

FOR several years now, virtual reality has inspired researchers to adventures in the artificial realms of cyberspace. They travel via monitor helmet and data glove into a phantasmagorical world. Not only toy and game manufacturers, but also a growing number of companies in a variety of other sectors are beginning to recognise the industrial potential of this technology: in testing future products well in advance of their series production.

Volkswagen has now begun investigating the possi-

problems from the technical drawings. The teams have to try out variant methods of assembly, analysing separate functions and steps in the production process. Here, virtual reality can help. Even at a very early stage, a virtual model can give the team a clear view of the present state of development, presenting different ways of positioning and adjusting components in engine compartment, for example, and allowing simulation of alternative assembly procedures. Even the dismantling of a clutch unit can be simulated —

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bilities of virtual reality in vehicle development and in the planning of manufacturing processes. What does a company such as Volkswagen see in this avant-garde technology? Peter Zimmermann of VW provides an answer.

The development of a new car not only costs of lot of money, it also takes a very long time. Four to five years elapse between the initial design stage and actual series production. During this time, several steps are taken simultaneously. Machine tools are manufactured while the vehicle itself is still undergoing constructional development and tests.

Simultaneous Engineering Teams are set up to co-ordinate the various tasks involved. Particularly in the preparatory stages, it is difficult to identify impending

— Fraunhofer-Gesellschaft Press Service

The World's First Digital Hospital

by John Newell

THE Hammersmith Hospital in West London, home of the Royal Postgraduate Medical School, has been the scene of many innovations in medicine. It is now home to the most expensive and ambitious medical technology project ever in Britain, which this year (1995) will make the Hammersmith the world's first fully digital hospital.

The paper-free office brought about the computerisation and modern information technology is familiar to many office workers today. It has taken longer for the same technology to be applied to medical imaging, because of the immense computing power and high cost of the equipment required. But now the Hammersmith is becoming the first hospital in which

all imaging data — X-rays, ultrasonic, CT and MRI images — are stored not on cumbersome, inflammable films but as digital data on optical discs.

This has come about through the foresight of professor David Allison. He is Head of the Department of Radiology in the Royal Postgraduate Medical School and Director of Diagnostic Radiology and Clinical Imaging Services for the Hospital.

"X-rays were invented a hundred years ago in 1895, and nothing changed much for the next seventy-five years," says David Allison.

"Then there was a series of astounding innovations, with more and more new imaging techniques coming in one after another. It got harder

and harder to store and correlate all the data.

"About ten years ago we at the Hammersmith were getting our new hospital building. I wrote to the Department of Health and said: 'here's our chance, let's make this the world's first digital hospital!', and God bless them, they agreed."

The first consequence of this can be seen in the air-conditioned computer room in the new building, where two compact cabinets each about as tall and long as a man and 0.6 m wide are ready to store every X-ray and scan made at the

Hammersmith in the next sixteen years on optical discs. The conventional X-ray films alone produced over that period would occupy twelve

large rooms packed from floor to ceiling with shelving.

Sharpen Images

Space saving is the most obvious but not the most important advantage of the digital hospital. A consultant conducting a clinic with a work station linked by fibre optics to the data store has no need to cumbersome trolleys loaded with patients' X-rays. He sits at his screen and calls up just the pictures he wants. He can use all the tricks first developed for imaging planets from spacecraft to sharpen up the images and eliminate unwanted data.

The new technology considerably reduces the exposure to ionising radiation needed to get the pictures doctors need, correspondingly reducing the slight but

Our Men in Blue

by Raffat Binte Rashid

WHENEVER and wherever you see the 'man in blue', he is 'busy'. Busy doing his duty and without doubt sincerely.

Now sincerity to him has altogether a different meaning. Something that we civilians would not be able to perceive. It is strange that although they are supposed to have taken a pledge to protect and defend us, it is this very person in whose company we feel the most insecure.

You are in a tempo, or in a scooter, or a bus, or even in your own car; whenever you are summoned by his whistle you know that it's either of two things: he wants a free ride or some free cash.

He has his own way of asking for notes in all colour. "Show me your papers," he will say. (Now only a sergeant is authorized to see papers, that is the rule.) "Otherwise I'll take you to the sergeant sitting there," he adds. Of course, all things are done under the sergeant's careful scrutiny.

The driver, whatever vehicle he is driving, will never show him the papers because once they leave his hands, proper or improper, it will take him a fat bribe, not to mention a lot of harassment, to get them back. And by just pleading guilty for a few minutes it's over, you're clear spending only tens. (What shameless creatures are these men in blue, they would settle even for a single red note.

This [authorized] mugging and toll collection works parallel to the unauthorized. A simple instance, will prove their working formula.

In front of a certain diplomatic office in Dhanmondi, free visa forms are sold for Tk 5 to Tk 20, and more by blackmarketeers. To avoid the rush, people often buy these.

Well, black markets exist everywhere in the globe, but what is new, perhaps to everybody, is that these markets flourish under the protection of these men in blue. "We pay, each one of us here, Tk 1100 per month, to

stay in business. We are 50 or 80 working here," says one black marketer, selling visa forms. Their price range varies but their toll charge remains constant. Then of course, there are low scale collections, from vendors on the lootpath, and so on.

Incidents like these have become almost normal to us, the citizens. It is so usual a phenomenon that a father introduces these men in blue to his young son as, "Baba see goosh khatche (taking bribes)". And the innocent son would excitedly ask, "ke Baba ghooshi khatche (who is getting punished)? We don't enjoy being part of this business, but to live a hassle free life we accept it. But now they have crossed the limit in just one leap. Rape and murder. Are these ugly creatures our protectors? We run to them when we are in trouble? We ask for their protection when we are physically, harassed or mugged? Yet they are the ones committing the crimes — the authorized way — they are the criminals themselves (They didn't even spare a destitute girl of fourteen. So what they could do to you, is anybody's guess.)"

"Whenever I see these men in blue, sitting in front of a tempo, or scooter, bus, talking to drivers or vendors, gazing at the sky when there is a traffic jam, or even sitting on their own motor bikes, I feel sick, a revolting feeling takes over", opines a citizen requesting anonymity.

"People have no respect for these men in blue; what else do you expect when law enforcing agents or protectors themselves become law breaking criminals," he explains.

The most unfortunate part is that there is not a single one of them dedicated enough or literate enough to bring a change. The worst shock comes when promising, young men take up this job of acting as authorized criminals while pledging to protect, be sincere and, in the course of time, be "busy" as well.



A member of staff at the Hammersmith Hospital views a patient's scan at a workstation.

inevitable health risks that come with repeated X-rays record their images on fluorescent plates, lasers read off and store the data and the plates are wiped clean to use again. This requires less radiation than conventional imaging. The ability to enhance imaging also reduces the need for extra exposures.

Another advantage is that any stored image can be sent to any of the hospital's 128 work stations (eventually there will be 150) in four seconds (soon that will come down to two seconds). Soon it will be possible to send it

at the same time as they image the patients' organs in minute detail. The blocking or unblocking of arteries so as to prevent damage due to bleeding or thrombosis are among the conditions now being treated in this way.

All these and other imaging and interventional techniques are now benefitting from enhanced imaging and rapid access, thanks to the PACS system.

The scanners and other equipment whose images are packed in PACS are as innovative as it is. One new technique developed at Hammersmith, Dual Energy X-Ray Absorptiometry or DEXA scanning, uses minimal ionising radiation, no more

The writer is a former science editor of BBC World Service