



PUBLISH AND REFORM

Sexual abuse in mental health units is the NHS's dirty secret

If the true test of a civilised society is how it treats its least fortunate members, the case study we publish today of a patient's experience of care in an NHS mental health trust is a shameful indictment. The woman, in her late twenties, had already suffered sexual abuse before being admitted to hospital suffering from depression last July. There she was sexually harassed again, this time by male patients exposing themselves to her. The next time her GP would ordinarily have referred her for treatment for depression, he understood why she refused to submit to it. Instead, she tried to kill herself.

This example reflects the overall findings of a profoundly disturbing report by the National Patient Safety Agency (NPSA) that records more than 100 cases of sexual assault and harassment, including ten rapes, in NHS mental health units over the past two years. The document exposes the reality, in some units, behind the Government's claim to have replaced mixed-sex with single-sex wards across 98 per cent of the NHS. In fact, according to the Healthcare Commission's last major survey, nearly a quarter of patients in mental health units

are sharing wards with members of the opposite sex against their wishes. Furthermore, women in single-sex wards clearly remain at risk from sexually aggressive men in non-segregated communal areas.

But the fate of the NPSA report is even more alarming than its contents. Eight months after the agency forwarded its findings to the Department of Health, they have yet to be published. A Freedom of Information Act request for details of those findings was rejected in April, and yesterday the Department reiterated a vague undertaking to publish later this year, while suggesting that the report still needed "further analysis". There is little doubt that meticulous thought is still required to end the abuse described by the NPSA. But it is hard to see what "further analysis" is required unless its real purpose is to undermine the report and its case for action. So far, the Government's response fits a pattern of cogitation and inaction.

Set up five years ago to assess and reduce patient risk throughout the NHS, the NPSA established the National Learning and Reporting Sys-

tem (NLRs) two years later to collect trustworthy data. This in turn commissioned the Mental Health Observatory Report (MHOR) that has now gone missing. At great cost, a problem has been perceived, confirmed, reported — and then buried. Institutional inertia, scarcity of resources and reluctance to accept responsibility are all factors, compounded by the lamentable "Cinderella" status of the NHS's mental health services, which often feel the impact of budget deficits before higher-profile sectors such as cancer and paediatric services.

Blame for the delay in publishing the NPSA report may yet be assigned to the NHS "gateway", set up to disseminate such information throughout the service. It has proved more bottleneck than gateway. But the plethora of acronyms in the system that produced the report must also be part of the problem. The NPSA's chief executives, Sue Osborn and Susan Williams, are the most senior job-sharers in the NHS. They must share with Patricia Hewitt, the Health Secretary, some of the responsibility for a delay that has hidden the suffering of patients who deserve full and urgent protection.

Revealed: the mass murderer that is lurking hidden in all our heads



SCIENCE
NOTEBOOK
ANJANA AHUJA

YOU PROBABLY think you're a really lovely person. And, for all I know, you are. But your brain isn't so pretty. It is a lumpen mass prone to making quickfire judgments based on prejudices you didn't even know you possessed.

These instinctive responses could help to explain why certain people, such as drug addicts and prostitutes, are so frequently the targets of mindless violence. Psychologists at Princeton University have found that pictures of "social outgroups" provoke feelings of disgust, but do not activate the brain areas associated with processing thoughts about people. Lasana Harris and Susan Fiske conclude that some outcasts are viewed, subconsciously, as sub-human.

Ms Harris and Dr Fiske showed 24 undergraduates photographs of Olympic athletes, elderly people, drug addicts and city slickers. They were also shown pictures of the space shuttle, a cemetery and an overflowing toilet. The pictures were chosen to elicit emotions suspected by psychologists to be associated with prejudice: pride, envy, pity and disgust. While the volunteers scanned the pictures, the academics scanned their brains.

The researchers were particularly interested in whether a part of the brain called the medial prefrontal cortex (MPFC) whirled into action. The MPFC is activated when we think about ourselves or other people. It turns out that photographs of people that elicited disgust triggered little MPFC activity. The researchers claim in *Psychological Science* that this is proof that "members of some social groups seem to be dehumanised". These outgroups are perceived as having alien moral values, social norms and beliefs; so alien, the observers' brains appear to conclude, that they are not even members of the same species.

Dr Fiske has previously suggested that a similar psychological framework can explain genocide. For this thesis, she cites surveys that asked which behaviours people associated with which social groups. The elderly and

the frail elicited feelings of pity, and needed to be "helped and protected". Those inspiring envy provoked thoughts of "harm" and "affiliation".

Her take is that we like to schmooze, or affiliate, with people of high status because it serves us well to do so, but we don't particularly warm to them. So we will turn on them, given half a chance. Genocide, she suggests, is this trend writ murderously large.

"Many of the groups who have been subject to mass killings... were once seen as entrepreneurs but perceived as outsiders," she explained. Such killings are sometimes termed "ethnic cleansing", which illustrates, if only lexically, that we intuitively grasp the disturbing relationship between bigotry and disgust.

◆ **BERKELEY PIT LAKE** in Montana is a mile-wide environmental nightmare. The abandoned open-pit copper mine is filled with acidic water laced with heavy metals and arsenic. From this poisoned reservoir has emerged the most unlikely substance — an acid that has been found to kill ovarian cancer cells in the laboratory. Researchers from Montana Tech have named the compound berkelic acid.

◆ **EVOLUTION CAN** do funny things to species. Take electric fish, which generate weak electric fields to sense their environment and to communicate with their fishy friends. Biologists at Cornell University have found two types of electric fish that generate different electrical signals and won't mate with each other.

This reproductive coyness is usually an indication that the fish are not of the same species. But these fish share identical DNA so, technically, they are the same species.

Matt Arnegard now believes that the fish are on the brink of separating into two species. "This might be a snapshot of evolution," he says of the research in Gabon, published in the *Journal of Experimental Biology*. This would be an illustration of sympatric speciation, the idea that animals living in one region can spontaneously diverge into several species. It is a controversial thesis — most biologists believe that speciation occurs as a result of geographical isolation.

One alternative explanation, Dr Arnegard concedes, is that the fish really are the same species, and that differing electrical signals are a naturally occurring variation (like eye colour in people). Maybe that really is the case — and the paucity of piscine passion is just a question of fussiness.

RESPECTING THE VOTE

Protests by the defeated candidate threaten Mexico's democracy

The frustration and anger were palpable. Having come within a whisker of victory, the supporters of the left-wing candidate in Mexico's presidential election refused to believe that Andreas Manuel López Obrador had been defeated by a mere 244,000 votes, out of 41 million cast on July 2. The result, giving victory to Felipe Calderón of the ruling National Action Party, had to be fraudulent. And at a weekend rally Señor López Obrador fed their anger, demanding a recount, promising to challenge the result in court and calling on his supporters to keep up their demonstrations.

His claim of vote fraud, including the computer manipulation of the results, has struck a chord with many Mexicans, used to the tricks used by the Institutional Revolutionary Party (PRI) to keep itself in power for 71 years. These included vote-rigging, unfair rulings by the Federal Electoral Tribunal and the use of a "computer crash" by the authorities in 1988 to eliminate the challenger's lead.

Señor López Obrador, a former

Mayor of Mexico City, cut his political teeth in those days in protests, shutting oil wells and blocking state government in his native Tabasco state. This time he accused the outgoing President Vicente Fox of illegally backing Señor Calderón with government funds, a charge he strongly denied. He said the Electoral Tribunal had become a pawn of the Right. And he and his supporters demanded a complete recount, "vote by vote".

Such behaviour is as irresponsible as it is unjustified. None of the European election observers found any irregularity. There is no evidence of vote-tampering. And although it must be galling to lose by a mere 0.6 per cent of the vote, the Left has no grounds for a court challenge or the allegation of irregularities in 50,000 of the 130,000 polling stations.

Señor López Obrador's premature claim of victory and his accusation that his opponent was backed by powerful figures in the richer north of Mexico have split the country along geographic, class and even racial lines.

It is from the poorer south, where indigenous peoples have been struggling against rich landlords and exploitation, that Señor López Obrador draws his strength, as well as in the slums of Mexico City. His refusal to concede defeat will not only make it hard for Señor Calderón to tackle the country's problems with any measure of consensus; it will also exacerbate underlying tensions within Mexico and threaten new fractures in a country that has seen more than its share of revolutions and social uprisings.

Any incitement to his followers to continue their demonstrations — even if they are ordered not to block the roads — could lead to violent clashes and rally support for a crack-down on all protest, a reimposition of quasi-military controls, a reversal of recent moves to embed democracy and human rights in Mexican society and increasing alarm north of the border. Those who would suffer most are Señor López Obrador's supporters. He must pull back from such reckless incitement before it is too late.

SPOT THE GAIT

You can tell a man by his walk

The Ministry of Silly Walks may have done more to catch criminals than any more prosaic government department. A person's gait is as individual as his iris, fingerprint or DNA, and can just as reliably lead a detective to the culprit. Not everyone has a manner of walking as angular as John Cleese's man from the ministry; but, according to recent research, each of us strides uniquely through life in a manner that leaves no room for confusion.

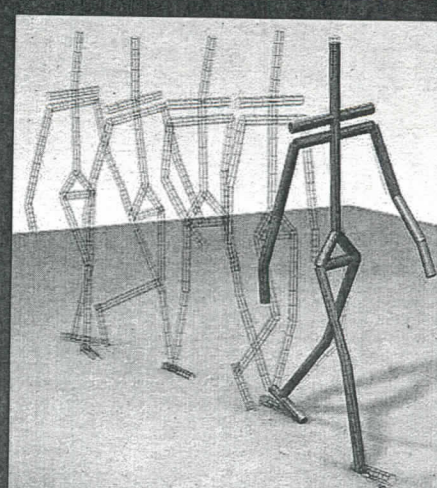
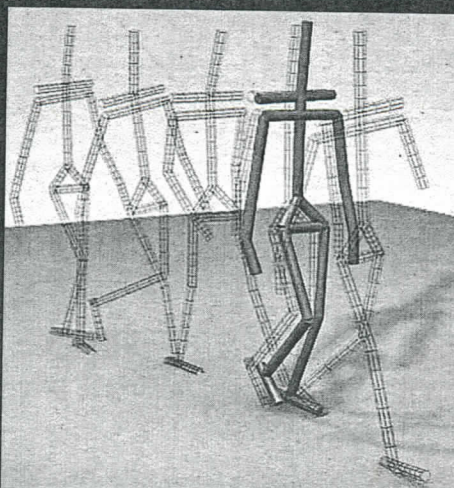
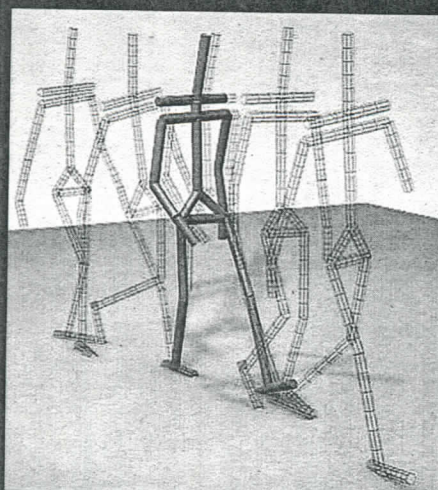
There are, of course, some who will always stand out a mile: those who lift their heels too early and bounce on

rubbery air; those who compensate for their restricted height with enormous strides, rising up rhythmically like piston heads; those who mince along with tiny steps and obsequious mien; and those who position each delicate foot with the self-regarding ostentation of the Prince preparing for his pas-de-deux with the White Swan.

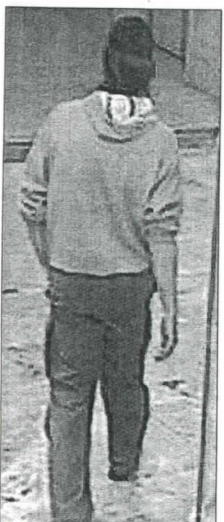
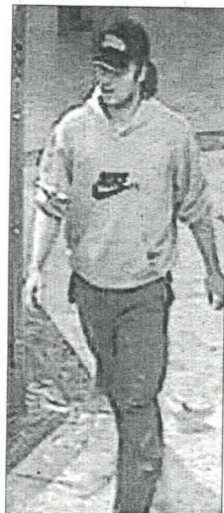
Some walks have faded with time: the rolling swell has gone the way of the Indian tea-clipper, the goose step fell with the Reich, the bow-legged no longer swagger down the streets of Laredo and Quasimodo's heirs have

straightened their backs and lost their lopsided lope. But in their place have come walks that betray a brave new world: the pimp-roll, where sides alternately droop and roll forward with lurking unspoken menace; the first-letto, a teenage stilted tottering on legs bound fast by a short, tight, narrow dress; the mobile drift, an aimless meander across the street that comes to a sudden stop on receipt of astonishing fresh gossip. Like the politician's lurch, each step reveals past crimes and future intentions. Police have only to watch the cameras to spot the gait.

Aiming to catch criminals red-footed



Computer images used by police to examine the walking style of Mijailo Mijailovic, who murdered Anna Lindh, the Swedish Foreign Minister, while she was shopping in September 2003.



Guilty feet: CCTV footage of Mijailovic at the crime scene

A computer system can spot those who are guilty by the way they walk, report Stewart Tendler and Lucy Bannerman

THEY may be able to wear disguises, dodge CCTV and even keep their DNA under control, but one thing will always identify criminals — their walk.

Far from relying on fingerprints or photofit, scientists now believe that an individual's gait can give the game away.

Police have databanks of palm prints, ear prints and handwriting at their disposal, as well as facial recognition systems that can match fugitive faces with those in a crowd. But the next step could be swaggle surveillance.

For more than ten years, scientists have been working on a computer system that can analyse the movements of criminals caught on CCTV and compare them with those of a suspect. The system works on the premise that every individual has a signature walking style.

The technique is still in its infancy but has been employed in high-profile cases. Swedish police successfully used it three years ago to identify a robber involved in a bank raid in which a customer was killed. Officers investigating the murder of Anna Lindh, the Swedish Foreign Minister, in 2003 asked experts to examine the walk of their suspect, Mijailo Mijailovic. Their efforts were not needed — Mijailovic confessed — but the case highlighted the technique's potential.

In Britain scientists backed by the MoD and a £500,000 research grant are working on "automatic gait recognition", which will allow police and courts to compare images captured on CCTV with the walk of a suspect.

Mark Nixon, of the Southampton University department of electronics and computing, said that studies showed everyone has a distinct walk. This was because of subtle differences in muscle strength, tendon and bone length, bone

density, visual acuity, co-ordination skills, experience, body mass, centre of gravity, muscle or bone damage, physiological conditions, and a personal walking "style".

He said that it was very difficult for someone to disguise the way they walked, and they could still be identified whether casually sauntering up to the bank teller or sprinting from the scene of the crime.

Professor Nixon's team believes that gait recognition has advantages over facial mapping. "Gait recognition could have significant implications for police. In the James Bulger case you could see the boys walking away but not their faces," he said.

Professor Nixon said that research showed that people would recognise someone they knew with 80 per cent confidence. The team has built up a bank of images of data on volunteers to measure the differences in the way people move and to test out their theories. The volunteers walk through a biometric tunnel and have their movements caught.

It is hoped that criminals could be made to walk through similar tunnels to make identifi-



"I wouldn't recognise your walk - I haven't seen you move for six weeks"

NOWHERE TO RUN

■ Many countries are moving towards biometric passports but the technology has difficulty recognising bald men, black people and those with brown eyes

■ Britain has one of the largest DNA databases in Europe. In January the Home Office said police had solved 88 murders because of DNA testing

■ This year Yeovil became the first British town to install fingerprint scanners in pubs and clubs to identify potential troublemakers

■ Plans have been mooted for a database of footprints to help police to search for links between suspects' shoes and prints from unsolved crimes

cations. Professor Dixon said: "It would have been a pipe dream ten years ago but now computers are faster and memory is a lot cheaper to buy."

Eventually a national database will be created to demonstrate to courts that individuals do walk differently and that the evidence of identification is safe to use as evidence.

Work is also being done on the techniques in China, Australia, Japan and the United States, where scientists have been experimenting with radar guns, similar to those used by police to track speeding cars. The US system sends out a pulse of radar energy and receives the signals reflected off objects. As a person walks the radar signals change.

The system can recognise and capture the different patterns during natural walking movements. The movements create an individual radar signature and can be replayed in the form of matchstick men.

Leading article, page 19

BREAKDOWN COVER FROM JUST £30

WITH FREE HOME RESCUE.

- ▶ From £30 a year when you buy online
- ▶ Plus extend your cover to home rescue at no extra cost
- ▶ Average response time around 40 minutes
- ▶ A national network of breakdown specialists.

visit **greenflag.com**
or call **0845 246 1334**

Free Home Rescue available on Rescue Plus and Recovery Plus cover levels for first year of membership only. Offer ends 3/10/06.

Maximum call charge from a BT landline is 3p per minute. Calls from other networks may vary. Calls may be recorded. Starting price shown is a web price. Phone prices start from £35. Conditions apply.