THE CROW family: collectors of fascinating trinkets, portents of doom; symbols of spirituality, emissaries across the flood. And if THE CROW should make wing to the rooky wood, then the world will be turned on its head. To see which way the wind blows, keep your eye on THE CROW.

NANO, NO AND NO AGAIN!

THE CROW has just discovered that small isn't always beautiful...

It's been more than half a century since British Intelligence cracked the Enigma code of the German Wehrmacht, a feat which contributed greatly to the Allied victory in World War Two. On the scientific front, an equally prodigious deed has now been accomplished, one which will no doubt have as far-reaching consequences for the outcome of the war against disease: crack-

ing the genetic code.

If early press reports are to be believed, this scientific breakthrough will soon enable us to determine who is predisposed to what disease, and thus allow us to make a pre-emptive strike by way of adjustments in the person's DNA. While the prospect of finding such an omnibus 'prophylactic tactic' is reason to rejoice, we must proceed with caution. For, as Aldous Huxley warned in *Brave New World*, the temptation to abuse such knowledge can be irresistible to a ruthless regime bent on reducing the individual to a compliant cipher.

Huxley wanted to alert his own generation to the fallacies and dangers inherent in a political system in which science was made subservient to the will of the State — as was the case in Communist Russia, and was soon to manifest itself in Nazi Germany. Wherever soulless science joined politics in an unholy union to produce a master race, it instead gave birth to

chaos and untold human misery.

Almost 70 years have now passed since Huxley issued his prophetic warning against the misuse of scientific knowledge. He saw science as a potentially dehumanising force — one that could rob us of the very essence of humanity: our creativity and ability to reason, our potential for unselfish love and divinely inspired deeds. And this from an avowed agnostic!

The rising star on the scientific firmament, as reported earlier in this issue, is nanotechnology — certainly the art of the infinitesimal, but not exactly what economist E F Schumacher had in mind when he wrote *Small is Beautiful*

some 30 years ago.

Nanotechnology (from nanometre, one billionth of a metre) enables us to manufacture molecular-size 'bombs', with the promise of eradicating many of the viral and bacterial scourges that have plagued mankind from the beginning of time — everything from herpes and flu to E. coli and salmonella. Such non-bombs have already been successfully tested against spores

containing anthrax — the deadly biological warfare agent used by Saddam Hussein in the Gulf War and against the Kurdish minority of his own country.

'We are knocking on the door of creating new living things, new hybrids of robotics and biology,' says Paul Alivisatos, a chemistry Professor at the University of California (as quoted in US News & World Report). 'Some may be pretty scary, but

we are compelled to keep going. It is just so cool.'

So much for scientific compulsion and cool. Fortunately Paul's colleagues in the halls of academe are not all as gung-ho about the new technology as he. Some scientists express alarm at the rapid evolution of their latest pet lab rat. Along comes our friend Bill Joy, who wrote in *Wired*, and reiterated to *The Ecologist*, that 'in the wrong hands, nanotech could be more destructive than a nuclear bomb'. He envisions a scary scenario straight out of H G Wells or *Star Wars*, in which trillions of self-reproducing nanobots would take on a life of their own and

'Nanotechnology was probably not exactly what Schumacher had in mind'

reduce our planet to a massive lump of 'grey goo'. Importantly, Joy does not foresee any technical solution to this dilemma; he believes it has to be an ethical and political decision.

Aah — and there's the rub. For, as Santayana observed, 'those who refuse to learn from history are condemned to repeat its mistakes'. And human history is rife with examples of our reluctance to learn from the mistakes of previous generations. But to a would-be Stalin or Hitler, Idi Amin or Saddam Hussein, Pol Pot or Kim Il Sung, the temptation to use such sophisticated technology as genome-tinkering and nano-bombs toward nefarious ends might well prove irresistible. And if you think tyrants are obsolete, you are welcome to join TBTF — True Believers in the Tooth Fairy.

But all is not gloom on the political and scientific frontiers of our brave new world. Far from it. In the same issue of *Wired* that featured the joyless prophecy of Mr Joy, the magazine's editor, Mortimer B Zuckerman, assures his readers in a full-page editorial that globalisation is the panacea for all of mankind's problems, present and future: 'it's the way to even greater gains in prosperity'. He roundly castigates 'anti-globalists [who] out of ignorance and indifference... are seriously distorting reality'.

So it would behove us 'poorly informed' environmentalists and 'street protesters' to post-haste mend our errant ways. We should know better by now, anyway: if there's a problem, you can bet that global free trade will be the answer. So relax. The good guys have it all under control. Just like they always did.

The Crow is a mouthpiece for thinkers with individual and strong views. This month, the role of The Crow was taken by Gard Binney.