

zealously cutting every possible budget item so as to bring the federal deficit under control, but that is plainly not the case. The Senate may be able to insist that the project should not be made to rub along, in the year beginning on 1 October, on roughly half of what it needs from the National Institutes of Health, but it is not well placed to make that point (see page 309). The excuse that the earmarking of research funds for a particular project undermines the primacy of the principal investigator sounds like a deliberate misunderstanding; that the project would consist of a great deal of production-line research work has been made clear from the start.

The essence of the case for the genome project is that the sequence of the human genome will not be compiled by accident. Despite the speed with which particular human genes are being identified and their nucleotide sequences established, the indefinite continuation of that process will never yield the nucleotide sequences of the apparently boring bits of the genome that lie between identified genes, whose evolutionary significance may nevertheless be great. And there is no prospect that even the present rate at which human genes are being identified will make the human genome the analytical tool it might be — a databank of which it is possible to ask interesting questions. Unless the compilation of that databank is commissioned, it will never exist.

That is the case against the position taken by the House Appropriations Committee, but it should be acknowledged that the genome project's own posture is not without its inherent problems. It is caught in a dilemma created by its own existence. The prospect of a deliberate effort to sequence the human genome has stimulated a plethora of new techniques, further complicating the development of a coherent strategy. Sensibly enough, the project plans to cut its teeth on the sequencing of a smaller genome, while constructing a physical map of the human genome. The plan to use NIH money to commission some centres now will give the project the luxury of choice at a later stage, when the responsibility for the long haul will have to be shouldered by a subset of them. Congress's long experience with military projects should be a warning against parsimony at this early stage. But that is a less clear message than those to which congressmen are used.

The military analogy can be taken at least one step further. Making a telling case to the US Congress is a matter of giving the impression that the objective is nicely crystallized without inhibiting the freedom to change course radically at a later stage. Generals pleading for funds for exotic new weapons systems have learned to give the Congress the impression of always knowing exactly what they want; if they later change their minds, they usually manage to get away with it. One consequence of what is called the peace dividend is that there will be experienced Pentagon negotiators out of work. It might suit the genome project's book to hire one or two of these experienced operators to get the appropriations bill through Congress. □

Television violence

Evidence that television breeds violence remains as elusive as ever.

WHETHER or not television has the inherent power to incite violence in its consumers, the square-eyed hordes seem to have more personal and cultural 'fortifications' than is usually supposed. The annual research review of the Broadcasting Standards Council, published last week, leapfrogs the debate in Britain over whether the content of television should be regulated, calling instead for a general and dispassionate recognition of the complexity of the issue and, crucially, of the viewer.

The report, the council's first since it was set up in 1988 on an ominous 'pre-statutory' basis, takes a refreshing approach to what has become a rather turgid issue. Instead of trying to account for the role of television in the violent behaviour of violent criminals, the council's researchers, led by Dr David Docherty of the London School of Economics, has asked how television may affect the attitude of the viewing public towards violence itself.

For their main survey, the researchers asked just over 1,000 British viewers how they felt about violence in Britain today — a survey which, as well as providing a useful gauge of public sentiment, allowed the researchers to test for correlations between people's television consumption and their overall attitude towards violence. For instance, do heavy television consumers feel differently about 'legitimate' violence, such as capital punishment and armed police action, than their more abstemious counterparts, and are they, in general, less secure about their own safety?

For the most part, the research shows no significant differences between the heavy viewers and the light on such questions. In fact, the issue that provokes the clearest discrepancy between the two groups — the arming of police in various confrontational situations — shows heavy television viewers to be cooler-blooded in every instance than their library-going and apple-bobbing compatriots. The report concludes that there is a qualitative sifting, on the part of the viewer, of violent images into different categories of palatability. Docherty suggests that it is the extent of the viewer's involvement in the fiction that is the determining factor in these classifications. Television violence that somehow involves the viewer — whether by eliciting an intellectual response or simply by reflecting life in Britain — is far more likely to upset than that which makes fewer claims to realism. In short, the report holds that the context of fictional violence is at least as important as its substance when it comes to earning the label "unacceptable"; and, whether or not television has the power to incite people to violence, viewers are more actively discerning than some proposed legislation gives them credit for. The research does not provide justification for the restrictive regulatory regime that some would like. □