fullness of all revelation (Vatican II), and a symbol which embodies and conveys what it signifies.

If I have not misunderstood Fr. Dulles, and despite the fact that he concedes that the word "sacrament" usually refers not so much to revelation as to the "communication of grace and sanctification", it appears that a symbol which contains, expresses and conveys what it symbolises can well be called a sacrament. In this connection he appears to accept the modern usage whereby Jesus Christ is, as a realised and realising symbol, described as a "sacrament of God", while the Church, in its turn, is the "sacrament of Christ" (Fr. Dulles empathises with Vatican II). In their turn, the seven sacraments both symbolise and contain and convey that of which they are symbols.

The penultimate chapter of this most important book is entitled "The Acceptance of Revelation", or as we might say, faith as an act of adhesion to the Christian revelation. Fr. Dulles speaks of the "credibility" of revelation. Personally I would prefer the unpleasant but significant term, "credentitas". It may be agreed that the truth of Christianity cannot be strictly "proved"

to the satisfaction of the pure rationalist. But Fr. Lonergan offers some advice which seems to me to be completely correct: "Be attentive, be intelligent, be reasonable, be responsible". An examination of the Christian data, assisted by intelligence, wil lead to the position that to accept the Christian claim is, first, reasonable (Christianity is credible) and secondly an act which alone corresponds to genuine moral responsibility. In other words, a stage will be reached at which the acceptance of the Christian revelation becomes a moral obligation-and, as Kant reminded us, moral obligation is a "categorical imperative". That the resultant act of faith cannot occur without the promptings of divine grace can be readily conceded, since Christian faith, while confirming the natural experience, raises the believer to a supernatural level. One must of course add that there may be many honest and concerned people who fail to recognise that Christian faith is an obligation; but moral theology has plenty to tell us about what it uncomfortably described as "invincible ignorance".

**B.C. BUTLER** 

## THE CROSS AND THE BOMB-CHRISTIAN ETHICS AND THE NUCLEAR DEBATE, edited by Francis Bridger. Mowbrays Christian Studies. 1983. pp 154

This book was conceived as a reply to The Church and the Bomb from a group of well-known pro-deterrence Christians: Dr Graham Leonard, Keith Ward, Richard Harries, Gerard Hughes S.J., Ulrich Simon, General Sir Hugh Beach and Francis Bridger. The first four offer pieces which are considerably improved on their earlier hasty entries into the Church and Bomb debate. None of them argues that nuclear deterrence as now practiced is morally right. But all of them argue that some kind of nuclear deterrence can be accommodated within Christian war reasoning—though only Keith Ward makes much of an effort to prove it. They are by no means agreed among themselves about how the case

should be argued and there are some considerable contradictions from one chapter to the next. Fr. Hughes offers us a version of the "moral paradox" argument: "by maintaining a credible deterrent it is possible to make nuclear wars less likely, and the more convincing the preparations the less likely they will ever be called into action". This means that the people in the chain of command are doing something quite moral, in that the proper description of their acts is "preventing nuclear war". To do this successfully they also have to have the intention to fire the weapons on orders. But this is morally necessary in view of the main intention. If they are wrong, it is not because they are doing something

intrinsically immoral, but because the belief that this will in fact prevent nuclear war is unsoundly based. It then becomes a problem of strategy and politics rather than of moral reasoning. Hughes maintains that there is no logical connection between the conditional intention to use and the real intention to fire weapons which an operator might have if deterrence has already broken down. This is mere hollow casuistry. The morally relevant fact is that the operators put themselves at risk of using the i.e. o f committing weapons. what-according to all Christian teaching on war- would be a great crime against God and mankind. It is not a complex question of strategy and politics that such a risk exists. It is a rudimentary fact which is available to anyone who takes the trouble to learn about the arms race. Hughes' dichotomy between moral logic and political argument-between "wrong in itself" and "wrong because of consequences"-is falsely applied in the circumstances of nuclear preparations. It can only lead-as in this case-to the abdication of the moralist from his proper task.

This cannot be said of Keith Ward's contribution however. He uses the "limited war" argument for deterrence. He argues that to risk all-out war through nuclear deterrence is morally unjustifiable, but that just war teaching permits deterrence based upon the threat of limited nuclear war. He shows that deterrence is not stable enough in the long term to be sure of preventing war, thus cutting the ground from under Fr. Hughe's argument. Not even flexible response can save the situation, morally speaking. Therefore we are morally obliged to move unconditionally (i.e. unilaterally) to a "limited, balanced deterrence". So he is in favour of deep cuts, "no-first-use" and the freeze. But he thinks there is no alternative to some kind of nuclear deterrence. The arguments he uses for this are general and would apply to any country in the world. All that can be said of this 'limited war' argument is that it bears no relation to the realities. Deterrence has

always—whatever the declaratory policies of governments-relied upon the final threat of MAD. It is nonsense to suppose that one country only can adopt a policy of ensuring that all-out nuclear is impossible by retaining just enough weapons to fight a "limited" nuclear war. Holding any nuclear weapons commits a nation to the arms race and to all-out war if its deterrence breaks down. On Keith Ward's own moral reasoning, we should adopt the lesser evil, which would be to take ourselves out of nuclear deterrence altogether and so minimise the chances of our involvement in a nuclear war, the scope of which will not depend on us in any case. Apart from this, there are some serious flaws, in his just war argument. He thinks it would not be wrong deliberately to kill the innocent where that is "unavoidable", to prevent "greater harm". Once this pathway is opened it is impossible to close, as the Second World War demonstrated. It would contradict one of the main human rights for which he thinks NATO countries ought to defend themselves.

Richard Harries in his chapter is more intent on demolishing pacifism than on justifying nuclear deterrence. Perhaps he thinks the one exercise follows from the other. It most certainly does not. Ulrich Simon, in another, much less restrained attack on pacifism-which he equates with unilateralism-calls it "an evil act which condones evil intentions". He informs us that unilateralists would sit back and let Helen of Troy be stolen (something wrong here, surely). His piece is not only silly, but dangerous, as he seems to have fed Dr. Leonard (no original thinker) with his apocalyptic imagery, so evident in the Church and the Bomb debate and recalled in this volume. They both appear to believe that "sacrificing everything for the truth" in a nuclear war would be some kind of ultimate faith in Christ, the suffering servant. One turns to the practicalminded Sir Hugh Beach with relief. He provides us with the strategic arguments for nuclear weapons. But he seems to have learned nothing from the careful just war reasoning of Keith Ward, Moral

considerations do not seem to determine his rejection of Britain's independent deterrent and his support for cruise missiles and present NATO policy. The book ends with a reprint of talks on preventing war given by Michael Quinlan, late of the Ministry of Defence, which have received critical attention elsewhere. His smooth reasonableness conceals deliberate over-simplifications and

ommissions and a complete inability to account for the disastrous direction that the arms race is now taking. There are welcome signs that even bishops—whose gatherings Mr Quinlan has assiduously cultivated over the years—are beginning to perceive the monstrous immorality of what he represents.

ROGER RUSTON O.P.

## ABUSING SCIENCE—THE CASE AGAINST CREATIONISM by Philip Kitcher. Open University Press. 1983. Pb. £6.95. 208pp plus index.

Scientific Creationism is essentially an American phenomenon, although it is based in a more general context of evangelical fundamentalism. It is American largely because the constitution of the U.S.A. does not permit the teaching of religion in schools, in contrast to the U.K. where religion is the only compulsory subject. Were it not for this fact fundamentalists could propagate their literal exegesis of Genesis on an equal footing with the scientific theory of evolution by natural selection as an alternative view of the nature of the origin of mankind. As that equal footing cannot take place in American schools Creationists have modified their stance and become Scientific Creationists. presenting their somewhat crude theology and cosmogony as if it were plain science. With their views in that guise they then demand equal time for their alternative scientific theory. Although they have set up an Institute for Creation Research and have the following of a number of scientists the Creationists stil present their scientific case with what can only be called scientific naîveté. Nevertheless their voice is loud and their cause is closely allied to that of the Moral Majority and hence presents a not insignificant force in Reagan's America. Despite some setbacks in the courts, which have denied them equal time, many educational policies have been modified by Creationists pressure and many science teachers feel that academic freedom is threatened by the Creationist cause.

It is in this context that Philip Kitcher

has written a "manual for self-defence" for the layperson and professional scientist alike, to counter the Creationist arguments, to show "why they are wrong". Kitcher claims that the Creationists campaigns constitute not just an attack on evolutionary theory but also "an attack on the whole of science", hence the title of his book. He has set out the Creationists' battery of arguments and disposed of them contemptuously, expounding with some skill the principles upon which the orthodox scientific case is based so the reader can compare claim against counter claim. It is already a much praised book written by a philosopher of science, who vigorously defends science from the onslaughts of a pseudo-science and pseudo-religion. And yet...

There are two aspects of this bok that make me uneasy about it. The first concerns the tone and at times quality of Kitcher's criticism and counter-arguments and the second concerns his defense of science. The Creationists are not difficult to attack or expose for their writing is naive and clumsy. Kitcher exploits their weakness and yet admits that they are making serious criticisms of Darwinian evolution theory, but he is too often condescending in tone and frequently shrill. Furthermore he does not always answer the criticisms of the 'Creationists and sometimes adopts their own methods. Take, for example, the objection that Darwinian evolutionary theory is tautologous. It is said by critics that the theory reduces to the claim that the fittest survive and that those that survive must

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