- 1. A debate about science is one thing, a debate with science something else.
- 2. A debate about science is possible whether or not one makes the same assumptions, follows the same procedures and judges by the same criteria as science itself; for one can have, e.g. an ethical debate about science; or a philosophical debate, or a theological or ideological debate about it. Of course, one may also have a scientific debate about science, as social scientists, say, presumably do, who see to understand science as an activity of men and women in society. But even then there is a difference between a debate of which science is the object, or which is about science, and a debate in which science is one of the parties to the debate, so that it is a debate with science.
- 3. In any event, a debate with science is possible only if, or to the extent that, one makes the same assumptions, follows the same procedures, and judges by the same criteria as science itself. Not the least interesting question that might be discussed in any theological debate about science is whether, or to what extent, a debate of theology with science is logically possible.
- 4. If the preceding theses are correct the logically first question for a Christian theologian in any theological debate about science is about theology itself. What are the assumptions, procedures, and criteria constitutive of theology, and to that extent, if any, are these same assumptions, procedures, and criteria shared by the other party or parties to the theological debate? Presumably, in pursuing this question, the theologian should find himself or herself answering the question whether or to what extent a theological debate about science is possible for theology with science.
- 5. Clearly essential to any fruitful debate about science, however, theological or otherwise, is requisite clarity and precision about the use (or uses) of the word "science". At this point the contributions of philosophers and historians of science are of critical importance. It is arguable that one can and should distinguish minimally between a stricter use of "science" to refer to the human activity of so understanding the order of events as to be able to predict and control them for the sake of human good and a broader use or uses in which "science" refers also either to the technological applications of such understanding or to its metaphysical associations, or, possibly, to both. The failure thus to distinguish

(not to separate, but to distinguish!) science proper from technology, on the one hand, and scientistic metaphysics, on the other, has already created and may be counted upon to continue creating a good deal of confusion in the theological and ideological debate about science. Thus, e.g. much so-called anti-science is as often as not either anti-technology or anti-scientism, not anti-science as such.

- 6. Also essential to any fruitful debate about science is sensitivity to the changes called for in understanding science proper, as well as technology and scientistic metaphysics, by the continuing work of philosophers and historians of science. Perhaps one of the most serious handicaps from which the theological debate about science up to now has suffered is a failure to appreciate the important shift in recent philosophy of science from an empiricist to a post-empiricist understanding of nature and goal of scientific understanding.
- 7. Whatever other main areas need to be included in a theological debate about science, there would appear to be a place for questions concerning the justification of science proper, as well as concerning the justification of technology and of alternative forms of scientistic metaphysics. In the nature of the case, there is a metaphysical as well as an ethical aspect to such questions of justification; for the only possible justification of a scientistic metaphysics is a metaphysical justification, and any ethical justification either of science proper or of technology necessarily presupposes metaphysics.