Introduction

I should like to begin by thanking the organisers of this conference for inviting a theologian to participate in a gathering of eminent scientists. In one sense, of course, that mere fact is a reflection of our times. The pressures of globalization embrace much more than the obvious truth that highly diverse cultures mutually influence one another today. They mean, as well, that at a time when discrete disciplines are becoming more and more specialised, and in that sense narrower and narrower, there are many calls for cross-disciplinary explorations, and I suppose that this conference, in part, is a fruit of such pressures. Ideally, that is a good thing. We must frankly admit, however, that not a few of the strident voices that clamour for cross-disciplinary study, some of them more articulate than well advised, are crossing disciplines with an exuberant glee that seeks to domesticate other domains of inquiry with the hegemony of postmodern epistemology. That sums up at least part of the contemporary clash between scientists and many philosophers of science. We know how you think, the latter say to the former, and so our task is to expose your blindspots, and teach you the proper way to think.

Since both Christian confessionalism and science are facing a similar onslaught, it is not too surprising that we should be drawn together in a common defence. For both parties have something in common: we both think there is such a thing as culture-transcending truth, and that we human beings have some access to it.² For those who are both scientists and Christians, it is scarcely surprising that some should wonder if it might be profitable to pool our resources as we engage in this debate.

In this paper my aims are modest. I propose to offer a summary of the challenge, a survey of responses, and a pair of suggestions.

¹ This paper was first prepared for a *Christians in Science* conference entitled 'Can We Be Sure About Anything?', held in London on 29 September 2001.

² Although this is not the place to probe the issue, I suspect that this shared belief in the existence of culture-transcending truth has something to do with the fact that on many university campuses of the Western world there is now a much higher percentage of Christians among lecturers and students who are connected with the 'hard' sciences, or sometimes with mathematics and business, than among lecturers and students who are connected with the arts and the social sciences. More commonly, I think, scientists are inclined to hold that their own disciplines, and perhaps some other hard sciences, deal with truth, but that anything outside such domains has a much looser connection to truth. In short, many scientists are modernist with regard to their own disciplines, and postmodernist elsewhere, not least in the domain of religion.

A. A summary of the challenge

I had better begin with a statement about postmodernism. The expression is clumsy, the range of its reach ridiculously broad, its usage diverse. But in my view the term is still useful if we recognise that what ties its diverse usages together is the assumption of a shift in epistemology. Modernist epistemology taught us that in every discipline, and in thought itself, there are certain universal foundations on which we can build with methodological rigour; postmodern epistemology insists that both the foundations and the methods are culturally contrived, and therefore the resulting 'knowledge' is necessarily the function of particular cultures. Not only are there many foundations, postmodernism insists, but we should delight in the multiplicity of competing and even mutually contradictory methods. Modernist epistemology thought it could move from the individual finite thinker – the finite T in Descartes's T think. therefore I am' - via reason to universal and objective truth. Postmodernism insists that the limitations on any finite knower are so severe that the pursuit of universal and objective truth is a mere chimera; and reason itself, though useful, is simply not up to the task. Modernist epistemology held that uncovering universal truth is both desirable and attainable; postmodern epistemology is quite certain that universal truth is not attainable, doubts that it is desirable, and suggests that pursuit of it is not only an idolatrous waste of time but leads to endless immoral manipulation of others (cf. Foucault's famous denunciation of 'totalization'). Modernism tends to emphasize the intellectual contribution of the individual or of the directed team; postmodernism lays more stress on the social determiners of ostensible 'knowledge'. For the modernist, truth (in an objective sense) is crucial, and both belief and ethics should properly be constrained by it. For the postmodernist, there is a rejection of truth as a coherent set of ethical precepts and standards for moral behavior. Truth must be rejected because it is coercive, normative, unambivalent, and implies universals and absolutes.'3

How we reached this point in Western civilisation is not easily or quickly discovered. Arguably there have been key individuals who, though not properly labeled postmodern, anticipated some of its features: an Immanuel Kant, whose philosophical idealism insisted that the human mind imposes an order onto the data of sense perception not intrinsic to the things being perceived; a Friedrich Nietzsche, whose nihilism left no place for truth or morality in any objective sense, but only for the power of the gun; historians who recognise how easily history is turned into propaganda (Hugh Trevor-Roper, for instance, once gave a lecture to German historians in which he frightened his audience by articulating what British historians would now be saying if Hitler had conquered Britain). More importantly, in the twentieth century three or four

³ Michael Jessup, 'Truth: The First Casualty of Postmodern Consumerism', CSR 30 (2001), 291.

⁴ For this last observation I am indebted to Owen Chadwick, *Action and History*, Cambridge: Cambridge University Press (1998), pp. 224–5.

intellectual movements have coalesced. The German tradition taught us the intrinsic subjectivity of all interpretation, and bequeathed to us the hermeneutical circle; the French tradition, in one side-shoot of linguistics, gave us deconstruction, and taught us, among other things, the power of language and words over the power of science⁵; the American tradition, with its love of anthropology and sociology, gave us the notion that each subculture constitutes an interpretative community⁶; and literary theory across the Western world has moved away from the view that meaning lies in the author of text, to the autonomous authority of the text itself, to arrive, finally, at the view that meaning resides primarily in the reader or knower in interaction with the text.

Although none of these influences can be denied, I suspect that there is a deeper and often unacknowledged commonality behind all of them, viz. the intrinsic weakness of modernist epistemology, especially in its late form. Early modernist epistemology (i.e. from about 1600 on) was pursued by people who were mostly theists or deists. Descartes himself was a devout Catholic. Despite their formal reliance on reason and the finite self, on foundations and methods, most of them were still operating within the heritage of the Judaeo-Christian tradition. Science itself, as many have pointed out, was founded on theology – in particular, on the idea that God is a law-giver who has guaranteed order and predictability in the world he created. But as more and more moderns, not least in the domain of science, abandoned the Judaeo-Christian tradition and adopted some form of philosophical naturalism, the God whose omniscience was the reservoir of all knowledge was lost to view. There was no final arbiter, no anchor, no stable reference point. Thus late modernist epistemology, by various routes, became unstable, and sired a bastard we call postmodernism. I choose the term 'bastard' advisedly: my point is that on this reading, modernist epistemology is in fact the progenitor of postmodern epistemology, even if the latter is so unlike his father that he wants to deny family likeness and commit patricide. The implication of this analogy, of course, is that thoughtful Christians should not think of themselves as either modernists or postmoderns in their epistemology. Both systems are far too unstable, far too anthropocentric – idolatrously so.

In the shift from modernism to postmodernism, the relationships between science and confessional Christianity have been undergoing some changes as well. One may usefully distinguish two opposed tendencies in late modernism: imperialism and (early) perspectivalism. Under imperialism, either science

⁵ For discussion of these developments and substantial bibliography, see D.A. Carson, *The Gagging of God: Christianity Confronts Pluralism*, Grand Rapids: Zondervan (1996).

⁶ In more whimsical moments, I wonder if it would not be wise to turn some of these categories on their head. Most of the American postmodern intellectuals, who hold that all human 'knowledge' is merely a social construct and therefore has no necessary connection with reality, are 1960s graduates who are deeply anti-authoritarian. So perhaps their conviction that postmodern epistemology is the truth (!) is nothing more than a function of their group anti-authoritarianism.

⁷ Isaac Newton, for instance, was greatly influenced by the Cambridge Platonists. Not for nothing do we find 'Reason is the candle of the Lord' in the windows of Emmanuel College.

tried to control religion or religion tried to control science. One finds the former, for instance, in the hard-edged philosophical naturalism of Richard Dawkins in this country, or in Peter Singer at Princeton. Sometimes the stance adopted by science is an ill-defined mysticism that is nonetheless a materialistic scientism, in which nature becomes god, the corpus of empirical knowledge its sacred deposit, the scientists priests and priestesses, and the scientific method almost sacramental religious rites. The same imperialism shows up when we are told that science deals with fact, while religion is about 'faith' where 'faith' has been implicitly defined to mean something like personal religious preference, with no important connection and only accidental connection with reality (an understanding of faith used by no biblical writer). Alternatively, some forms of religious fundamentalism, unable to read texts in line with their intrinsic genres, want all biblical passages to function on the same prosaic plane. Biblical authority can then be used to quash the claimed results of science. Of course, there are devout Christians, scientists and non-scientists alike, who wrestle somewhat more creatively with perceived tensions between the Bible and science. But the tendencies of imperial control, both ways, are well known. Science and Christianity are competing categories, and each is trying to control the other.

Under perspectivalism, especially in its earlier form, science and Christianity look at the same phenomena under incommensurable frameworks. 'The classic illustration of perspectivalism is the distinction between the technical understanding of an end zone scoreboard of the electrical engineer who designed it and the subjective understanding of the die-hard football fan looking at it to see if there is hope for his or her team to make a comeback.'¹¹0 Under perspectivalism, the two modes of talking about one thing do not succeed in engaging each other. Each talks past the other; each has little if any impact on the other. But because these are seen as mutually complementary ways of talking about reality, then, at least ideally, each makes its own contribution to *the truth*, the total description of what is.

Thus imperialism and (this older) perspectivalism¹¹ have this in common: they still operate under the assumption that there is a truth to be discovered

⁸ I am thinking, for instance, of Ursula Goodenough, *The Sacred Depths of Nature*, Oxford: Oxford University Press (1998).

⁹ See the useful discussion by Andrew Ford, 'Believing in Science', kategoria 19 (2001), 21–32.

¹⁰ Stanton L. Jones and Mark A. Yarhouse, *Homosexuality: The Use of Scientific Research in the Church's Moral Debate*, Downers Grove: IVP (2000).

¹¹ As I have used the term, this older 'perspectivalism' is not readily distinguishable from 'complementarity', the term preferred in scientific circles. In both cases, however, it is supposed that there is genuinely objective truth to be gleaned by approaching a large subject from different 'perspectives', and that these truths are 'complementary'. More recently, of course, 'perspectivalism' is so cut free from notions of objective truth that the richness of 'perspectives' is precisely one of the things that drives the postmodern commitment. In this sort of epistemological vision, 'complementarity' as understood by many Christians active in the sciences does not really play a part, since such 'complementarity' presupposes a larger (objective) truth to which science and revelation make their respective contributions.

and cherished. Under the impact of postmodernism, however, the existence of objective truth began to be questioned. But how could this be so, especially for something as transparently and as eminently successful as science?

Once again, of course, there are antecedents. In the middle of the twentieth century, Michael Polanyi was demonstrating, pretty convincingly, that science has intrinsic elements that go way beyond empirical demonstration, elements that he called 'tacit truths'. By the mid-sixties, Thomas Kuhn's theories on the advance of science had called into question the now old-fashioned view that science advances by steady acquisition of knowledge, knowledge grounded in data that are rigorously tested under controlled conditions by different scientists so as to vindicate or disqualify some theory or other. Even if his theory of paradigmatic advance has subsequently been qualified and circumscribed in various ways¹³, he has succeeded in calling into question the popular view (and it was never much more than the popular view) that science builds its edifice of ostensible truth on nothing but the solid foundation of a growing accumulation of indisputable facts. ¹⁴

In this climate it is not surprising that several books detailing scientific blunders have been selling briskly. The one by Robert M. Youngson¹⁵ includes something in the order of sixty major examples, and scores of minor ones. One loves the quotes. Here is Ernest Rutherford: 'Anyone who expects a source of power from the transformation of the atom is talking moonshine.' Or Lord Kelvin writing in 1896: 'I have not the smallest molecule of faith in aerial navigation other than ballooning, or of the expectation of good results from any of the trials we hear of.' What more must be said about phlogiston, the Piltdown man, and Isaac Newton's alchemy? Youngson, the author of the book, nevertheless writes out of a framework of modernist epistemology; indeed, he seems committed to philosophical naturalism. If even such as he warn of the blunders of science, it cannot be surprising that postmoderns take the argument even

¹² Thomas S. Kuhn, *The Structure of Scientific Revolutions* 2nd edition, Chicago: University of Chicago Press (1970)

¹³ E.g. Frederick Suppe (ed.), *The Structure of Scientific Theories* 2nd edition, Urbana: University of Illinois Press (1977); Gary Gutting (ed.), *Paradigms and Revolution: Application and Appraisals of Thomas Kuhn's Philosophy of Science*, Notre Dame: University of Notre Dame Press (1980). Kuhn, of course, is not the only non-rationalist non-realist among the philosophers of science. Others include W.V.O. Quine, Paul Feyerabend, Hilary Putnam and Richard Rorty. For a useful survey, see J.P. Moreland, *Christianity and the Nature of Science: A Philosophical Investigation*, Grand Rapids: Baker Book House (1989), especially chapter 5.

¹⁴ Some of the charges that early opponents raised against Kuhn stem from his insistence that two scientific paradigms are marked by *incompatibility*, *incommensurability*, and *incomparability*. But his opponents took those words in their ordinary sense; Kuhn is in fact using them in a tighter, more technical sense, so that later discussion has largely exonerated him on this point. See especially Richard Bernstein, *Beyond Objectivism and Relativism: Science, Hermeneutics, and Praxis*, Philadelphia: University of Pennsylvania Press (1985), pp. 80–7; D.A. Carson, *The Gagging of God: Christianity Confronts Pluralism.* Grand Rapids: Zondervan (1996), pp. 88–9.

¹⁵ Scientific Blunders: A Brief History of How Wrong Scientists Can Sometimes Be, New York: Carroll & Graf Publishers (1998).

farther. Thus Harry Collins and Trevor Pinch¹⁶ not only treat us to the usual assortment of scientific blunders, but then ask how uncertainties in science are resolved. They deny that resolution comes primarily by ever clearer evidence. They insist, rather, that resolution is achieved through social consensus. For Collins and Pinch belong to a new breed of the movement sometimes labeled 'Sociology of Scientific Knowledge', or the 'Edinburgh School'. This movement holds that scientific knowledge is socially constructed and must exercise no privileged claim to objective truth about the world.

These philosophers of science are often at loggerheads with scientists. But they are catching the wave of postmodern relativism. On the streets, the trend is displayed in countless appeals to alternative medicine (very few of which have been double-blind tested), fortune-telling, astrology, the use of magnets for healing toothache, the beneficent influence of crystals, and the rest. ¹⁷

Suddenly, then, on the street, and backed up by the intellectuals of postmodernism, Christianity and science find themselves in somewhat parallel positions in society. Many people now think that neither traffic in truth. They traffic in things that may be true for you, or may be true from one perspective (hence, a new perspectivelism has dawned in which multiple perspectives are not mutually complementary of some greater truth, but equally socially constructed and conveying no objective truth); but they do not tell you how things are, and so they have no binding authority on your conscience or on your belief system. You may choose another paradigm: you may opt for another science. another religion, an alternative medicine. It's really up to you or to your social group, your interpretative community. Certainly no one has the right to say that you are mistaken, or that your religion, or science, is false. To say that is to succumb to intolerance. 18 In fact, one suspects that part of the reason for such an impassioned debunking of science among many sociologists and philosophers is allied to part of the reason for the impassioned debunking of confessional Christianity: the postmodern mood is profoundly anti-authoritarian. Confessional Christianity holds itself above the eddying waters of relativism by insisting on the facts of the central revelation; science holds itself

¹⁶ The Golem: What You Should Know About Science 2nd edition, Cambridge: Cambridge University Press 1998).

¹⁷ As an aside: during the past three years my wife has been battling cancer. I could not estimate the number of well-meaning people who have contacted us to encourage us to try this or that 'alternative medicine'. Although these suggestions have always been well meant, virtually none of them has been double-blind tested; some have been, and have failed the test. Sometimes the suggestion is prefaced by a breathless question, 'Do you believe in alternative medicine?'

¹⁸ It would take me too far afield to justify the point, but this sort of charge has become possible only by an astonishing revolution in the meaning of tolerance. It used to be that tolerance was the virtue of the person who held strong views about something or other, but who insisted that those who disagreed had an equal right to defend their views – the sort of stance picked up in the slogan, 'I may detest your opinions, but I shall defend to the death your right to speak them.' Today, however, tolerance is the virtue of the person who holds no strong views, except for the strongly held view that it is wrong to hold strong views, or to indicate that someone else might be wrong.

above the same waters of relativism by insisting that its methods and its results transcend the relativism of social construction. Both are therefore making authority claims inimical to a generation brought up to be suspicious of 'totalization'.

One does not want to exaggerate the influence of postmodernism in our culture. There are plenty of modernists around who engage in intellectual combat with postmoderns. Some of the roots of postmodernism are withering: in France, for instance, deconstruction is increasingly viewed as *passé*. But that is a bit different from saying that postmodernism is *passé*. Critical realism may have a respected place in some intellectual circles, but postmodernism is still perceived to be the innovator, the leading edge, of cultural advancement. And even if it dissipates faster than I think it will, it is leaving in its wake a very large swathe of Western populations who are suspicious of all truth-claims, including those of science and of confessional Christianity.

Its impact on science, science funding, the vision of desirable careers, superstition in the culture – doubtless these are things many of you who attend this conference know more about than I. The impact on confessional Christianity is something I have made an academic and professional interest for about a decade. 19 I shall restrict myself to two observations. (1) In the domain of evangelism, not least university evangelism, the hardest thing to get across these days is the notion of sin. To talk about sin is to say that certain behaviour and attitudes and beliefs are wrong, and that is the one thing postmodernism does not permit us to do. The one heresy postmodernism condemns is the belief that there is heresy; the one immoral act is the articulation of the view that there are immoral acts. But unless people adopt biblical views on sin, transgression. rebellion, trespass, guilt, and shame, it is virtually impossible to articulate faithfully the good news of Jesus Christ. If we cannot agree on what the problem is, we most certainly cannot agree on what the solution is. (2) Within the church, not least in home Bible studies and discussion groups and the like, when some interpretation of screwball proportions is advanced, leaders are more and more likely to say something soothing such as, 'That's an interesting insight, Charles. Does anyone else have anything to contribute?' It has become out of vogue for the leader to ask Charles how or where he finds his so-called 'insight' in the text, or to get others in the group to criticise Charles, in the hope of bringing the entire group to a common view of what the text means. Within my own discipline, one comes across more and more books with titles such as The Open Text, Reading Sacred Texts Through American Eyes, The Liberating Exegesis. But the question sooner or later becomes this: How can Scripture ever reform us if by our 'liberating exegesis' we are invariably able to make it say what is comfortable to us, if we are always able to domesticate it in line with the predilections of our own interpretative community?

The challenges we face are deep and complicated.

¹⁹ See my *The Gagging of God*, referred to above in citation 14.

B. A survey of responses

Apart from piecemeal attacks of one sort or another, responses can usefully be grouped (at the risk of oversimplification) into three camps.

(1) There is a sizable and growing literature that attacks postmodern epistemology from the standpoint of an unreconstructed, or only slightly modified, modernism. In the domain of science, one thinks, for instance, of the blistering and highly amusing book by Paul Gross and Norman Levitt, Higher Superstition: The Academic Left and Its Quarrels with Science. 20 One of the two authors is a physicist, the other a mathematician, Both, apparently, are philosophical materialists. As a compendium of the worst absurdities in postmodernism, as seen from the perspective of intelligent and informed modernism, the book is priceless, and fun to read as well. But I doubt that it will convince anyone in the postmodern camp. Or again, the recent book edited by Noretta Koertge, A House Built on Sand: Exposing Postmodernist Myths About Science²¹, is a book that no one working in the area should ignore. It will certainly make a lot of scientists feel better. But frankly, I doubt if most of the contributors have a really good grasp of what they are criticising. Better put, they score a lot of points out of the absurdities that abound in the popular and pretentious postmodern literature, without really responding to the best of it. It's not too difficult to expose the idiocies of erroneous feminist views of the macho sperm and the bashful egg (chap. 4), the misreading of the cold fusion debacle by Collins and Pinch (chap. 8), or the false and romantic view of alchemists propounded by some feminists (chap. 16). But the fundamental division between modernists and postmoderns is a conflict of worldview, where the distinction in worldview is primarily epistemological. And these questions Koertge and her contributors do not address.

Similarly in the domain of literary criticism or of theology: there is a growing literature that I do not need to detail here that attacks postmodern approaches from the vantage point of an unreconstructed conservatism. Some of these publications provide reams of useful material. But few of them deal with the fundamental worldview issues, the central problems of epistemology. For even at the level of brute experience, globalization has forced us to recognize that there is at least some truth (if I may use that word) in postmodern claims. Sub-Saharan black African theologians tend to see far more corporate metaphors in the Pauline corpus than we individualists do in the West; acupuncture developed in China, not here; some cultures are more given to narrative, others to abstract analysis. In fact, at one level thoughtful Christians will want to go farther than postmoderns: we Christians admit not only to the subjectivity inherent in interpretation bound up with our finiteness, but subjectivity inherent in interpretation bound up with our fallenness. The rationalism and emphasis on autonomy that characterized late modernism has

²⁰ Baltimore: Johns Hopkins University Press (1994).

²¹ Oxford: Oxford University Press (1998).

not, after all, always been a friend of Christians. Marxism was thought by millions to embrace a scientific approach to history, and Aryan supremacy finds its roots in scientific discussions of race stemming from the nineteenth century.²²

Apart from such considerations, this first set of approaches sounds defensive, old fashioned, angry, even when it says some true things. In other words, quite apart from the fact that (I would argue) a thoughtful Christian epistemology should not buy into either modernism or postmodernism holus-bolus, there is a simple, pragmatic consideration: if all our appeals are to yesterday's epistemology, we will be perceived to be yesterday's people. And I doubt that that will strengthen our cause.

(2) A second set of responses simply gives in to postmodern epistemology. For these thinkers, modernist epistemology has been successfully debunked; postmodernism is essentially right. And that has a bearing on how we think of both science and religion.

Consider, for example, one of the recent books by Stan Grenz.²³ Grenz buys deeply into postmodern epistemology, so deeply that he has a very hard time talking about the truth of the gospel at all, or about the truth of anything else. He thinks the way ahead is to reshape evangelicalism to reflect postmodernism. I have discussed that book in some detail elsewhere.²⁴ For my present purposes, I shall focus briefly on his chapter on science.²⁵ I will not detail his entire argument.²⁶ Suffice it to say that about half way through this chapter, Grenz summarizes Thomas Kuhn, and then argues that from a paradigmatic approach to scientific revolution it is but a small step to the conclusion 'that a paradigm entails a social construction of reality.²⁷ Grenz then marshalls an array of authors to justify this conclusion, starting with Mulkay's book *Science and the Sociology of Knowledge*²⁸, concluding that whether scientists admit it or not, they *are* theologians. Finally Grenz returns to questions put forward by George Lindbeck: Does the move to nonfoundationalism (i.e. to postmodernism)

²² See especially discussions in Jacques Barzun, From Dawn to Decadence: 500 Years of Western Cultural Life, San Francisco: HarperCollins (1999).

²³ Stanley J. Grenz, Renewing the Center: Evangelical Theology in a Post-Theological Era, Grand Rapids: Baker Book House (2000).

²⁴ See my review article in a forthcoming issue of *Modern Reformation*.

²⁵ Viz. chapter 7, 'Theology and Science after the Demise of Realism'.

²⁶ I might mention one point. In his discussion of scientific method, Grenz marshalls quotations from scientists who disagree as to the exact nature of the so-called scientific method, to draw the conclusion that there is no such thing, in order to justify the conclusion that there is no proper grounding of 'truth' in scientific method since there is no such thing as a stable scientific method. The most reflective of scientists have always recognized the limitations of 'scientific method' and the adaptations that are made to particular 'methods' to accommodate each discipline, not to mention the interplay between controlled experiment, scientific theory, and tests of theory (see, for instance, David Lindley, *The End of Physics: The Myth of a Unified Theory*, New York: Basic Books, 1993). But Grenz, like all postmodernists, takes any admission of weakness or incompleteness to be a confession that there really is no such thing as objective truth in scientific discipline. 27 *Ibid.*, p. 238.

²⁸ Michael Mulkay, Science and the Sociology of Knowledge, London: George Allen and Unwin (1979).

entail a final and total break with metaphysical realism?²⁹ That comes right to the point. But what is Grenz's answer? Here it is: 'Formulated in this manner, the question is both improper and ultimately unhelpful. It might be better stated, How can a postfoundationalist theological method lead to statements about a world beyond our formulations?'³⁰

But why is the question either improper or 'ultimately unhelpful'? It is improper only if postmodernism in its strongest sense is true, and we cannot know anything 'true' about the real world. But in that case, the question is not unhelpful; it should merely be answered, 'Yes, there is a final and total break with metaphysical realism.' When Grenz goes on to say that the question might be better stated another way, he is indulging in sleight of hand. For the alternative he offers is not the same question, phrased another way; he has simply refused to answer the first question and asked an alternative question, viz. 'How can a postfoundationalist theological method lead to statements about a world beyond our formulations?' And his answer to that question, influenced by Pannenberg, says, in effect, that the only kind of realism of which we can speak is 'eschatological realism', with reference to the universe as it will be. There are several muddled confusions here, too, but for the moment I shall have to pass them by.³¹

So confessional Christianity and science, in Grenz's view, are both in the same situation, precisely because postmodern epistemology governs both. Yet so far as the academic world is concerned, in some ways they have been forced into this situation from different sides. Before widespread appeal to postmodern epistemology, science was widely thought to be dealing with facts and truth (and most scientists still think that today), while religion was widely thought to be dealing with subjective experiences of the numinous, with minimal truth content. That's not how confessional Christians saw things, of course, but it was how science and Christianity were widely perceived in the university world. But now that both science and Christianity have been unceremoniously placed into the same postmodern bracket, both have been relativised. Nevertheless, because they have approached the bracket from opposite directions, science and Christianity sometimes evaluate the impact of postmodernism a

²⁹ Stanley J. Grenz, Renewing the Center, p. 245.

³⁰ Ibid.

³¹ In fairness, Grenz then goes on to say that Christian theologians have some similarities to the so-called critical realists, in that we maintain 'a certain undeniable givenness to the universe' (p. 245). But what the right hand gives, the left hand takes away, for Grenz argues that this givenness is 'not that of a static actuality existing outside of, and co-temporally with, our socially and linguistically constructed reality. It is not the objectivity of what some might call "the world as it is". Rather, seen through the lenses of the gospel, the objectivity set forth in the biblical narrative is the objectivity of the world as God wills it, as is suggested in the petition of the Lord's Prayer, "Your will be done on earth as it is in heaven" (Matt. 6:10)' (p. 246). And thus Grenz segues into eschatology. But the confusion of categories is palpable. How does Grenz now know what the eschatological reality will be? If he replies, 'By revelation', then what stops us from knowing, in measure, what the world now is, by revelation? In any case, the Bible does not encourage us to think that the eschatological world is more real than the present one, but sinless.

little differently. Science tends to view it with deep misgivings because it demands that science give up its claim to objective truth, to meaningful realism. Conservative Christians, who hold that the claims of Christianity are no less true, perceive the same danger, but some are tempted to think that post-modernism offers to Christianity more opportunity than threat. When the university was controlled by modernist epistemology, and the so-called truth claims of Christianity were summarily dismissed as the product of 'faith' (abysmally defined), Christianity as a system of thought could be marginalised. Now, it is argued, precisely because *every* perspective has the right to be heard, and *every* stance reflects a worldview and an interpretative community, Christianity has a place at the table after all, and may be welcomed back into the cultural discussion. The best brief response to this perception came from Os Guinness seven years ago:

Christians who have prematurely declared victory over modernity are in for a cruel disillusionment... It is true that modernism was openly hostile to religion and that postmodernism is much more sympathetic on the surface. But it is naive to ignore the price tag. Postmodern openness allows all religions and beliefs to present and practise their claims. But it demands the relinquishing of any claims to unique, absolute, and transcendent truth. For the Christian the cost is too high.³²

(3) The third set of responses belongs to the category of critical realism. 'We are *critical realists*', writes one author, 'which means that we believe that there is a real world out there where it is possible to know and know truly (hence, "realism"), but we also believe that our theories and hypotheses about that world, and our religious presuppositions and beliefs about reality, color and shape our capacity to know the world (hence, "critical realism").'33

But this critical realism has many faces. It is an expression that covers a wide range of approaches. They have this in common: they all claim that we can know something about the real world, but that our claims are modest, owing not least to our finiteness, our capacity for distortion. Some philosophical materialists are abandoning the rawest form of modernism for this more nuanced stance. 4 Other self-defined critical realists use the expression to allow for miracles and acts of divine self-disclosure, for ways of knowing in a God-centred universe. And I confess that this is the stance with which I resonate.

And that brings me to my concrete suggestions.

³² Os Guinness, Fit Bodies, Fat Minds: Why Evangelicals Don't Think and What To Do About It, Grand Rapids: Baker Book House (1994) pp. 61, 108.

³³ Stanton L. Jones and Mark A. Yarhouse, Homosexuality, 15.

³⁴ E.g. Michael Shermer, 'Colorful Pebbles and Darwin's Dictum', *Scientific American* (Apr 2001), 284(4), 38, who argues that science is 'an exquisite blend of data and theory.'

C. A pair of suggestions

The topic assigned me requires that we consider how to maintain scientific and Christian truths in a postmodern world. In this last section it might have been useful to launch into a survey of all the helpful suggestions that have been put forward, for in fact there have been many. They include, for instance, learning how to demonstrate the inadequacies of both modernist and postmodern epistemology, which demonstration opens up a space for something more mature and more plausible; considering how the existence of an omniscient, self-revealing God necessarily changes one's approach to epistemology; focusing on world-view formation; working through what can be known of God in a finite and fallen world; demonstrating with myriads of examples how much can be communicated from one person to another, or from one culture to another, even though the task is not always easy; and much more. But here I want to focus on two points.

(1) It is a great help to acknowledge that no truth which human beings may articulate can ever be articulated in a culture-transcending way – but that does not mean that the truth thus articulated does not transcend culture. This point is extraordinarily important, and often overlooked. If we articulate a truth in English, since all language is a cultural artifact our articulation of the truth is culturally constrained. But that does not mean that the same truth cannot be articulated in another culture, often in another way.

The point is perhaps most easily explained by appealing to an example. More than twenty years ago, Charles Kraft published a book with the title, Christianity in Culture: A Study in Dynamic Biblical Theologizing in Cross-Cultural Perspective. 35 In that book Kraft argues for an approach to the Bible that would shift how we use it in missionary work. The Bible, he says, is really a book of case studies. It is therefore imperative that we apply the appropriate case study to a particular culture. If a missionary is called to a culture that practises polygamy, for instance³⁶, surely it is better to begin with David or some other Old Testament figure who enjoyed more than one wife and who was blessed by God, rather than to turn to the monogamy of the New Testament. Each culture should have the 'case study' applied to it that seems to fit best. If then we ask if there are certain things in the Bible that transcend all cultures, that are demanded of people in any culture if they are to become Christians, things that are certainly not endemic to that culture apart from the coming of Christianity, Kraft replies that there are not many, but there are a few. He thinks that they include a handful of crucial confessional statements such as 'Jesus is Lord' and 'Jesus died and rose again the third day.' These are truly trans-cultural and non-negotiable elements to Christianity.

Quite apart from Kraft's doubtful understanding of the Bible as a book of case studies, and quite apart from the tricky question of how he knows that cer-

³⁵ Maryknoll: Orbis (1980).

³⁶ Kraft himself spent a couple of years in Liberia.

tain statements in the Bible are trans-cultural and not others, his conclusions are both too open and too closed, too liberal and too conservative. They are too open, too liberal, in the way that his approach will allow most cultures to get "off the hook" in too many areas. Wherever the Bible seems to say something a bit constraining or rebuking, we smartly turn to another part of the Bible and thus escape the sanctions. It is a very comforting method. Such an approach, however, will have little or no power in reformation. But his conclusions are also too closed, too conservative. He holds that certain statements, such as 'Jesus is Lord' or 'Jesus died and rose again the third day' manage to transcend culture. But strictly speaking, of course, they do not; no statement uttered by a human being can. For a start, such statements are inevitably spoken in one language or another – and if in this language, it is not in that language, and thus the statement is culturally constrained.

The significance of this point is clearly seen if we imagine an ill-informed missionary from the West somehow learning to speak fluent Thai, and flying to Bangkok and boldly declaring, in Thai, to those leaving a Buddhist temple, 'Jesus is Lord.' What will these people think he is saying? Apart from the strangeness of the scene, they will hear him to be affirming, among other things, that Jesus is inferior to Gautama the Buddha. That, of course, is not what he thinks he has been saying. But within their worldview, when a person reaches the highest level of exaltation, as Gautama did, nothing can be predicated of him: he is neither good nor bad, hot nor cold, lord nor un-lord, etc. So if someone says, 'Jesus is Lord', one has predicated someting of Jesus, and clearly Jesus has not advanced as far as the Buddha.

If that is all there is to be said, postmodernists might well rub their hands in glee and smirk, 'Carson is finally catching on. Human beings cannot escape the constraints of culture. Even the utterances we most highly cherish cannot escape being culture-bound.' True. But something more must be said. That same missionary, if he or she takes time to learn the culture as well as the language, and to communicate the Bible's story-line and unpack its theological assumptions and asseverations instead of mere clauses, can in time make clear to Thais, in their own language, what we mean when we confess 'Jesus is Lord' in English – indeed, in substantial measure what Paul meant when he wrote 'Jesus is Lord' in Greek (Rom. 10:9).

In short, no truth which human beings may articulate can ever be articulated in a culture-transcending way – but that does not mean that the truth thus articulated does not transcend culture. Kraft's attempt to secure a handful of transcultural Christian confessions fails, not because there are no transcultural truths, but because whatever transcultural truth there is cannot be communicated in a culture-transcending way. To put the matter this way means that simply because all utterances are conveyed within some cultural matrix or other does not mean that knowledge of culture-transcending truth is

impossible. 37 And that is so for both science and religion – or for any other domain, for that matter.

(2) The overwhelming majority of postmodern writers have assumed the truth of an indefensible but usually unacknowledged antithesis. If you allow that antithesis to stand unchallenged, a competent postmodern will almost always win the debate. If you destroy that antithesis, the postmodern does not have much left on which to stand.

What is that controlling but often unacknowledged antithesis? It is this: Either we can know something absolutely and omnisciently, or we must give up claims to knowledge of objective truth. The reason why that antithesis is so dangerous, of course, is that you can always show that finite human beings know nothing absolutely and omnisciently: there is always more to know, either in the thing itself or in its relations with everything else. So if the antithesis is left to stand, and the first of the two alternatives is ruled out owing to human finiteness, only one alternative remains: we are left to wallow in the mire of relativism.

It is far better, I think, to argue that finite and fallen human beings may know some true things partially, even if nothing exhaustively. Then the antithesis is destroyed.

Certainly that is much closer to common experience of knowledge acquisition. Students begin to study some new discipline, whether quantum mechanics or *koine* Greek, and initially their progress is very slow. Every new idea takes a while to absorb. Paradigms or equations must be memorized and understood; then they must be utilized in examples and problems. But after years of study, all those elementary steps are just that, elementary. Far more complex structures or arguments may be absorbed or evaluated at much greater speeds. None of this assumes an absolute mastery of the discipline, an omniscient grasp of the discipline. In fact, higher levels of learning within the discipline will disclose how many things are still disputed. But the progress in knowledge acquisition does suggest that some things may be known truly even if nothing is known exhaustively.

Various models have been deployed to make this point clear. Imagine a common graph. On the positive x-axis are measured years, in a strictly linear fashion. On the positive y-axis is measured the distance of some human's understanding of something or other from a perfect and exhaustive understanding of that thing — or, otherwise put, from the reality itself. Suppose,

³⁷ The point is implicitly recognized in many discussions of revelation and accommodation. Calvin, for example, who holds that the Bible is the Word of God, insists nevertheless that it was an act of accommodation for God to reveal truth in human language, embedded as any language is in the limitations of finitude that necessarily characterize all human cultures.

 $^{38\,}$ I have discussed some of them in *The Gagging of God* – including the one described in the following lines.

then, that we asked a five-year-old lad, from a Christian home, why he believed that God loved him. Assuming he is bright and well taught by his parents, he may well reply by quoting the words of John 3:16. Of course, he would have no knowledge of the Greek text; he would know nothing of debates over the meaning of 'world' or of the relative claims of 'only begotten' or 'one and only'; he would know nothing of debates over the various Greek verbs for 'to love'; he would not have thought through how this text is to be linked to another text in the same chapter, a bare twenty verses on, that speaks of God's wrath; and so on. Still, his appeal to John 3:16 does answer the question; he has in some measure answered the question correctly. He does not think that John 3:16 describes the virgin birth, or reflects on the sex life of sea turtles. His choice of John 3:16 shows that he understands it well enough as an appropriate answer to the question that was put to him. We might say, then, that the lad's answer is positioned fairly high up in the top right-hand quadrant of the graph, and only five units removed from the y-axis. Doubtless his knowledge of John 3:16 still leaves a great deal to be desired. By the time he has graduated with a degree in the classics and another in theology, however, his position on the graph is perhaps twenty-five units from the y-axis (he is 25 years of age), and much closer to the x-axis. After completing a doctoral dissertation on the Fourth Gospel's understanding of the love of God against Jewish background, the graph of his increase in knowledge is still heading in the same general direction. In fact, the graph is tracing out an asymptotic approach to the x-axis. Even fifty billion years into eternity (if we may speak of eternity in the categories of time), the graph that represents the proximity of his knowledge to the actual reality never touches the x-axis, because omniscience is an incommunicable attribute of God. It is simply not available to finite beings. But to argue that finite beings therefore cannot truly know anything is decidedly unhelpful. That conclusion is true only if one initially assumes that the only meaningful way of speaking of 'knowledge' and 'objective truth' occurs when the knowledge belongs to Omniscience, when the truth is what God alone knows it to be. Certainly in some discussions that is a useful point to make. But to run from that truism to the commonly assumed antithesis adopted by postmodernists is a leap too far: Either we can know something absolutely and omnisciently, or we must give up claims to knowledge of objective truth. For finite human beings (the 'we' in the antithesis) can know some things truly, even if partially. To appeal to the standards of omniscience to eliminate the possibility of true but partial knowledge among finite and fallen beings made in his image is to erect a false standard. To argue that either we can know something absolutely and omnisciently, or we must accept the status of all human knowledge as lost in a sea of relativism, is a counsel of

despair grounded in an indefensible antithesis.³⁹

I have not discussed all the wrong turns that our biblical scholar might take in the pursuit of his understanding of John 3:16, any more than I have discussed the wide variety of miss-steps and accidents that sometimes go into scientific advance. Such phenomena will embarrass us only if we pretend that all advance in knowledge must be in a straight line of improvement – and that is precisely what no one should claim who wants to discuss the acquisition of (true) knowledge by finite and fallen beings. Both experience and genuine postmodern insight remind us that knowledge acquisition is not always linear and logical: we sometimes make huge intuitive leaps, or discount evidence because we do not like the person who has provided it, or tilt conclusions toward our expectations. But in any case, my point in this section is simpler: finite beings usefully speak of knowing some things truly, even if they are the first to acknowledge that we cannot know anything exhaustively. To deny this on the ground that we do not enjoy omniscience is to turn the merest truism (viz., we are not omniscient) into a tautology (we cannot enjoy omniscient knowledge). But it does not reliably address the question as to how human beings may know some things truly.

Concluding reflections

We need to be modest, I think, in our expectations about how well our arguments will succeed with the public at large. So much is shaped by our mass media, most of whose spokespersons are as abysmally ill-read in science as in theology. Moreover, one of the effects of globalization and rapid communication is what the sociologists call instant reflexivity. Fickle moods can be changed almost instantly as some reflexive response to a new stimulus is called forth in a torrent of trendiness. It is very difficult for either good science or good theology to prosper and act wisely under such conditions.⁴⁰

But we must try. We must try with confidence in the God whose word holds sway, and who demands an accounting of all of us, measured much more in terms of faithfulness and poverty of spirit than in terms of success and triumphalism.

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39 This is not meant to be the beginning of a responsible Christian epistemology. It is merely an attempt to debunk an assumption that has corrupted too much of the debate. Of course, if metaphysics deals with questions of truth, and epistemology deals with questions of knowledge and certainty, then the graph I have drawn suggests that the question being addressed concerns the relation between metaphysics and epistemology – and that presupposes, rightly, that to deal at length with how much 'knowledge' finite human beings can have of the 'truth' involves fundamental assumptions in the domain of metaphysics. Arguably the successive turns, in the wake of the Enlightenment, toward progressively more autonomous reason, have generated a fair bit of the problem. But such matters cannot be explored here.

40 One wonders if the events of Sept. 11 2001 will do more to overturn the pretensions of post-modern arrogance than all the books that have been written in the past twenty years. For suddenly people are willing to talk about 'evil' again (even if some of the talk is not very probing or realistic).