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Science in Faith: An Outline of a Christian Approach to the Sciences

Introduction: The Myth of Neutrality

Religious Freedom?

In an age in which scientific reason has replaced faith, a book on science in faith may sound decidedly mediaeval. Yet Christian faith still demands no less. When we celebrate the natural sciences, it is for the wonders of God's creation that they reveal. When we receive with gratitude the knowledge and understanding that they provide, it is because they help us in our tasks as stewards and servants of God's Earth. We are responsible and accountable before God for our lives. None of this, of course, is very popular today. People claim that they want to live in free, democratic, liberal¹ societies. Inherent in that claim is the presumption that the public realm - government and business, law and finance, university and school - will be 'secular', where 'secular' is understood to mean 'neutral'. It is taken for granted that the public sphere of our societies will not be shaped by anyone's philosophy, or religion. But what, then, is meant by 'religious freedom'? In a secular world, religious freedom obviously cannot mean that we are free to bring our religion into public affairs. It can only mean that we are free to have our religion at home - so long as we leave it there.

In claiming public neutrality, our Western culture has chosen to base itself on secular human reason, that is, on what scholars call the *rational autonomy* of each individual person and of each area of public life.² In secular understanding, an *autonomous* person is one who is self-directed, deciding and choosing for themselves, and responsible to themselves alone. To be seen as *rationally* autonomous, we must not be influenced by religious beliefs, but be guided to our decisions and choices solely by the exercise of our own secular reason. Applied to society, it means that each area of life – or of school curriculum – will be determined, in scope and content, solely by what is accepted as rational/reasonable by the relevant experts, that is, in accordance with the logical structure and principles of that domain itself.

It can seem only too reasonable. Who doesn't want their children to become truly independent, able to think and choose for themselves? That is, of course, how the matter is usually presented. The reality is that for Christians everything is at stake here.

Objective Science?

The great example and proof of this view of life is science. Scholar has followed scholar in appealing to the sciences as proving that there can be, at the very least, areas of knowledge that are independent of religious beliefs and values.³

Scientific terms have meaning and criteria of application which are not connected with religious concepts of any sort ... that there is here an autonomous domain of knowledge and understanding seems to me indisputable ... what matters in science, as in any other pursuit, is the mastery of its own logical and methodological principles, not holding any particular religious beliefs.
(English educationalist, Paul Hirst)⁴

The very nature of scientific activity precludes the possibility of indoctrination in science.
(English educationalists, Robin Barrow and Ronald Woods)⁵

Science stands apart from and is superior to all other systems for the reason that it alone of all the systems in contention ... represents a set of beliefs that any reasonable person would, if given the chance, choose for him or herself. There is a fundamental asymmetry between science and everything else ... Teaching science ... is about encouraging the child to exercise her powers of understanding to arrive at her own beliefs.
(American psychology professor, Nicholas Humphrey)⁶

The conviction of leading educationalists that there neither is, nor can be, a distinctively Christian (or any other) version of science is a major plank in their rejection of the idea of Christian education as a whole.

... there has already emerged in our society a view of education, which makes the whole idea of christian education a kind of nonsense and the search for a christian approach to, or philosophy of, education a huge mistake ... the notion of christian education is properly regarded as an anachronism.
(Paul Hirst)⁷

Clearly, if this was the case, there would be no justification for the existence of the new Christian schools and no reason for this book. But it is not the case: neutrality is a myth. A society and its institutions always embody certain fundamental faith commitments. In every area of study, the data are understood in the terms of a theory, against the frame of reference of a paradigm (research programme), within a philosophical view of reality, and from a religious stance (Figure 1.1). Even mathematics⁸ and science⁹ are no exception. The non-neutrality of science will be considered later (Part I, Section 2); here we must consider the particular structures that faith commitments form.

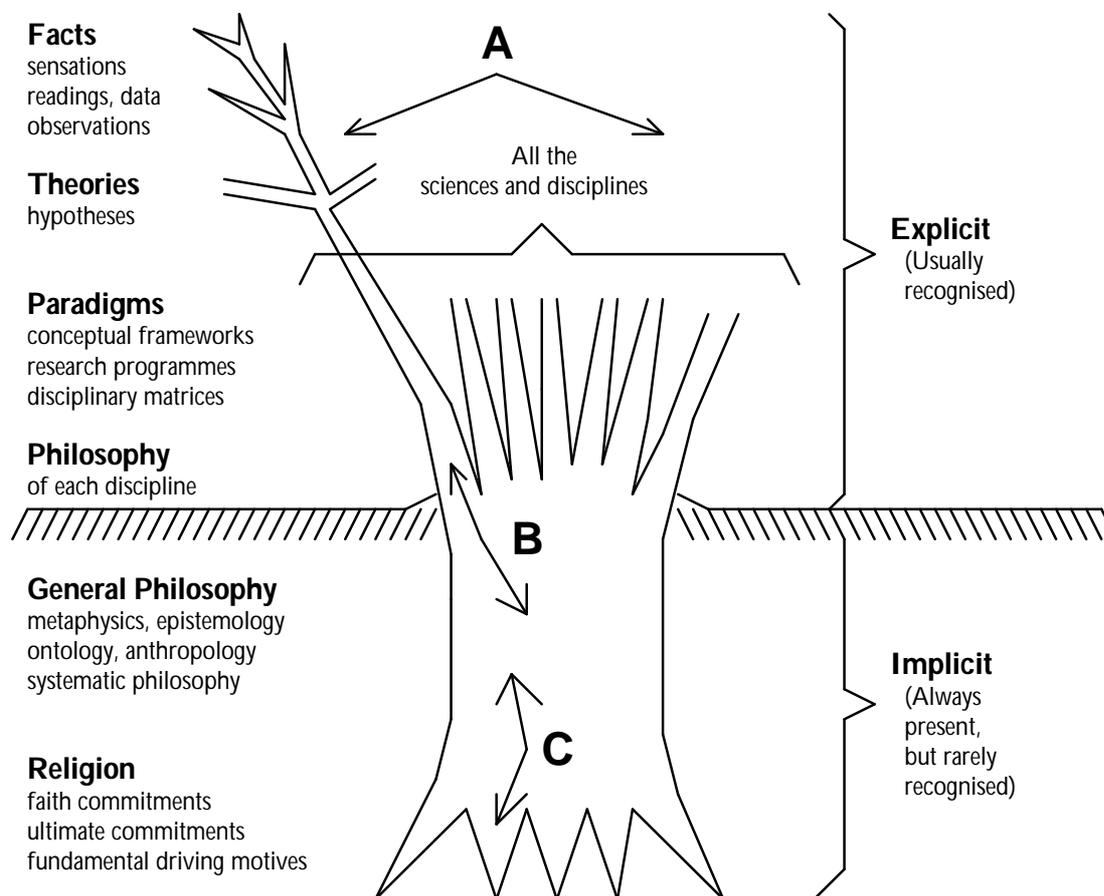
Figure 1.1 The Bush of Knowledge

Notes [See diagram on next page]

- (1) It is not true, either in fact, or in principle, that the academic disciplines (including the natural sciences) are autonomous with respect to each other (**A**), to philosophy (**B**), or to religion (**C**).
- (2) There is no simple relationship between religion and a specific discipline. The influence is both real and significant, but operates through a hierarchy of commitments which

we must 'dig out' before we can reflect critically upon them. It is often necessary to trace presuppositions back through several levels before the controlling perspective becomes clear.

- (3) The development of self-critical Christian philosophy and its articulation into every discipline is mandatory. Otherwise secular commitments will continue to reign at all levels.



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What Worldview? Which Culture? Whose Community?

Faith commitments form patterns or structures that nowadays are called *worldviews*:¹⁰

Worldviews are ... the basic stuff of human existence, the lens through which the world is seen, the blueprint for how one should live in it, and above all the sense of identity and place which enables human beings to be what they are. To ignore worldviews, either our own or those of the culture we are studying, would result in extraordinary shallowness.

(Theologian, Tom Wright)¹¹

Worldviews are not theoretical or intellectual. They are 'spectacles behind the eyes'¹² – we look *through* them not *at* them. They are not necessarily what we say, or think we believe. We may not be able to articulate our own worldview, or even be aware that we have one! It is manifest in *how we actually live and behave*.

Our worldview tells a *story*. Explicitly or implicitly every society is grounded in a story and it is within that story that everything is 'seen' or 'felt' to cohere. The story allows us to make sense of life. It defines what is 'common sense', 'self-evident', 'taken-for-granted'. And without a common worldview - shared beliefs, values and attitudes - there can be no real community.

Our worldview is a *map*. It indicates the direction we should take. It tells us what we ought, or ought not to do. It affects everything. The greatest threat to Christian faith today is not pornography, or drugs, or abortion, or State schools, or New Age, or Islam. These are all important matters, but they are not the real issue. Underlying them all is the dominance of secular worldviews, *even in the churches*, and the intense experience of secularism brought about by modernisation.¹³ Dominant worldviews put enormous pressure on dissenting minorities to capitulate and assimilate.

Worldviews are the mould or matrix in which *culture* is formed. Most of us imbibe our worldview indirectly and unawares from the culture in which we live. The Christian anthropologist, Dr David Burnett gives two helpful pictures¹⁴ to illustrate the relationship. First, he likens culture to a game of chess:

To a person who has no knowledge of the game the players seem at first to be moving the strangely shaped pieces at random. With time the observer begins to see that there is an order and pattern for every piece, and then finally he begins to see that there is an overall strategy employed by the players. Culture may be likened to the game itself, whilst the worldview is the unseen set of rules which determines how the game can be played.

His second illustration is of a tree in full leaf. When we look at the tree, all we see may be a multitude of leaves (culture), but it is the hidden trunk and branches (worldview) that create the shape and form of the tree.

A culture does not exist by itself; it is always the culture of some *community* and there is an all-pervasive interdependence. We all belong to some community or other, however impoverished it may be.¹⁵ Having a worldview and culture, and 'being in community' is an inescapable part of the human condition. The only questions are: *What* worldview do we believe? *Which* culture do we have? *Whose* community do we belong to?

It may well be that never before in history has it been so difficult to resist being shaped by the dominant culture and its underlying worldview. Our world has been shaped by the processes, or forces, of modernisation, namely, of democratic capitalism, modern science, urbanisation, scientific technology, and mass communications. These processes now all operate according to the spirit of the secular worldviews. By their all-pervasiveness and the sheer intensity of our experience of them, they have effectively replaced God and faith. The distinction between worldviews and processes is one of the greatest lessons we must learn in the modern world. Ideas are relatively easy to tackle. The processes are very much more difficult to counter. Our world is now one in which unbelief seems real and at home, but Christianity is experienced as irrelevant, alien and odd. The processes have effectively infiltrated the worldview into the homes and hearts of us all.

If we are to understand our society – including its science and its schools – then we must 'dig out' and critique its formative worldviews and identify the forces which promote them. If we are to respond effectively, we must understand and incarnate a Christian (biblical) worldview in the life and culture of a Christian community.

Curriculum reform is necessary and urgent, but if we leave the structures and processes of public life unchallenged and unreformed, no amount of change in school will succeed. But radical change in our schools may be like new curtains in a shabby room – demanding, even shaming, into wider change. This is the Divine strategy: we are called to be a peculiar people, a counter-culture, an alternative society.¹⁶

Notes

¹ Liberalism, here and throughout this book, is that tradition which makes the freedom of the individual its primary cultural and political end, and envisages a public realm which is neutral as regards all particular conceptions of 'the good life'. In this sense all of our main political parties are 'liberal' (as opposed to 'Liberal' in reference to particular party).

² 'Liberalism places its highest evaluative premium upon the *rational autonomy of individuals*, and thus upon their moral equality and personal responsibility.' (Ian Vine, Moral diversity or universal values? The problem of moral education within socially segmented societies. In J. Lynch *et al.* (eds), *Cultural Diversity and the Schools*, Vol 1. London: Falmer Press, 1992, Chapter 10, pp 169-210 (p 177).

³ A. Jones, Common schools: a Christian reflection on the issues. *Spectrum*, **27** (2), 1995, pp 125-144.

⁴ P.H. Hirst, Christian education: a contradiction in terms? *Learning for Living*, **11**, 1972, p 9. Hirst has now rejected this 'hard rationalism' (Education, knowledge and practices. In R. Barrow and P. White (Eds), *Beyond Liberal Education*. London: Routledge, 1993, ch **10**, pp 184-199).

⁵ R. Barrow and R. Wood, *An Introduction to Philosophy of Education*. London: Methuen, 1982, 2nd edn, p 71.

⁶ N. Humphrey, Perspective. *Times Higher Education Supplement*, **1269**, 28 February 1997, p 20. In its editorial Opinion (*ibid*, p 15) the *THES* comments that, 'People who fear alien abduction or do not know that the earth goes round the sun are poorly prepared to make judgements about whether to abort a foetus with possibly undesirable genes, or whether to eat genetically engineered soya beans ... Education is clearly failing to equip people to participate in society's big decisions. Equally, the academic world is failing to explore why it is that people reach for myth when they fear reality ... the tendency to unreason and superstition risks making the world a stupider and more dangerous place.'

⁷ P.H. Hirst, 1972, *ibid*, pp 6, 11

⁸ For secular critique, see Paul Ernest, *The Philosophy of Mathematics Education*. London: Falmer Press, 1991, 329 pp. For Christian critique, see James Nickel, *Mathematics: Is God Silent?* (Vallecito, CA: Ross House, 1990, 126 pp).

⁹ See *Science: An Annotated Reading List* (Chapter 5 in this book).

¹⁰ A person's worldview is their faith, but since the modern usage of 'faith' assumes conscious awareness, 'worldview' is now a safer term for the (often subliminal) faiths described in these papers.

¹¹ N.T. Wright, *The New Testament and the people of God*. London: SPCK, 1992, p 124.

¹² The title of Chapter 9 (p 149) of N.R. Hanson's *Perception and Discovery: An Introduction to Scientific Inquiry*, San Francisco: Freeman Cooper, 1969.

¹³ Put simply, the suffix '-isation' (e.g. modernisation) indicates processes whereas an '-ism' (e.g. modernism) is about ideas and worldviews.

¹⁴ D. Burnett, *Clash of worlds*. MARC, 1990, pp 12-14.

¹⁵ For many young people it may be a 'virtual' community created by the electronic mass media.

¹⁶ See, e.g., Rodney Clapp, *Families at the Crossroads: Beyond Traditional Roles and Modern Options*, IVP, 1993, 208 pp, and *A Peculiar People: The Church as Culture in a Post-Christian Society*, IVP (USA), 1996, 251 pp.
