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Scientific Theology

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"Of course that's the problem ... How to love and respect what you are being taught to dissect". Rabbi Abraham Gordon speaking of critical studies of the Talmud in Chaim Polak's novel The Chosen.

Why is it that so many enthusiastic Christians are disappointed by what they meet when they start studying theology? I suggest that two of the main reasons arise from a tradition of what is sometimes called 'scientific theology'. That title may be used even when the approach is derived from history rather than science. Abraham Gordon, in the quotation above, calls historical criticism 'dissection' and I hope to show that one aspect of the problem is in this approach whether it is called 'scientific', 'literary' or 'historical'.

The attachment of the word 'scientific' to theology is in any case a rather curious juxtaposition. Probably it arises partly from the confusion which has followed the failure of the English language to have any word to translate *Wissenschaftlich.* In the English-speaking world the use of the word 'scientific' as a substitute has, of course, brought in all the aura of prestige, impartiality, progress, modernity, and so on that goes, or at least used to go, with the word 'scientific'. One cannot think that calling theology aesthetic or mathematical, or logical or even academic, would have been so popular.

However, whatever the origin of this juxtaposition we find ourselves in a situation where many theologians are pleased to think they they are teaching and studying scientific theology. This tradition has two main features which create problems. The first is in fact not really in the scientific tradition at all. The

word science is stretched to cover a rationalistic approach. People like Wellhausen had some classical statements of this rationalism when he wrote about certain positions being 'inconceivable' and today it is common for people to argue that we should believe only what the scientific man or 'man come of age' finds intellectually comfortable. Those who argue like this rarely have any scientific background or any serious association with scientists, and have been singularly unsuccessful in influencing the scientific community. For all that Bultmann and his followers say about the scientific mind their methodology and approach have not proved to be particularly compatible with the discipline of science as we have it and the basic reason I suggest is that they are often more rationalistic than scientific, and frequently treat their data in an extremely cavalier fashion reminiscent rather of the philosophy of a pre-modern period when one could argue that it was only fitting for heavenly bodies to move in perfect circles just because heavenly bodies surely would do that kind of thing. This debate has been discussed fairly fully in evangelical circles and I do not wish to dwell on it.

Reductionism

I want to concentrate, however, on the second aspect of a scientific tradition which had more claim to be part of scientific methodology and outlook over the last hundred years. That is the reductionist tradition. A recent book *Reductionism in Academic Disciplines* provoked some further reflections on this theme. It is largely concerned with science and history and there is no treatment of theology. Nevertheless it attacks the reductionist tradition in science when this steps over from being more than a methodological device for analysis and becomes an ontological or philosophical outlook—as it so easily does. It also warns of other dangers which are particularly of relevance to the evangelical theologian.

A comparison with the varying traditions in biology is helpful in some ways especially as the developments lie somewhat parallel.

When the period of the great amateur zoologists and botanists was replaced by one ruled by professional academic biologists, there was a very important shift in the concept of what it meant to study living organisms 'scientifically'. The reasons for this shift are complex, but the result was that most of the leaders in the field regarded it as the academically correct thing to study animals and plants chiefly when they were dead. A reductionist philosophy that regarded the whole as no more than the sum of its parts undoubtedly contributed to this trend so that at almost the same time as Wellhausen was analysing the Pentateuch and trying to define the sources, the biologists were pre-occupied with classification (taxonomy), comparative anatomy and detailed morphology. Species were divided up into innumerable smaller species and sub-species, each new one bearing, if possible, the name of the man who had first identified it. Reading the late nineteenth century scientific journals, especially some of the German journals, fills one at the same time with admiration for the marvellous accumulation of detailed knowledge, but also a sense of astonishment that such learning should have been largely wasted. And it *was* wasted, because most of it told you almost nothing about how the animals and plants actually managed to live. Often it invented artificial entities and comparisons which had nothing to do with the life of the organisms (shades of JED and P ?). Sometimes it was positively misleading. One of the most famous of all the professors of geology in the first quarter of the twentieth century (D.M.S. Watson) used to demonstrate convincingly how his beloved fossil amphibia and reptiles walked, but in ways that have now been shown to be biologically and even mechanically impossible. He had, however, never asked how living amphibia do it. As late as the 1930s it was being argued that the best distinguishing features between groups and species

should be chosen from those which had no functional significance whatsoever. It was thought that that made them more academically secure so that much of this learning was totally divorced from function.

The result was that biology became 'Necrology'—the study of the dead. Museum specimens were an adequate source of information and students left the universities with an amazing ability to identify rare plants and animals, but with practically no knowledge of them as living things. Inevitably there can be a reaction when people stood back from all this massive accumulation of irrelevant knowledge. The problems of medicine helped to turn the tide. Many major biological discoveries like the life cycle of the malaria parasite were worked out by medicals. Then the two World Wars accelerated the process by asking questions such as, why desert animals have white tummies and whether that meant that tanks in the North African Campaign should do the same (the answer was in the affirmative)? Why was a fish shaped as it was and what did that teach us about efficient movements in water? How do bats locate their prey and could we learn radar from them? Biologists began to think again of animals as living things, marvellously adapted to their environment. This seemed to many to be an almost revolutionary rediscovery and it meant a massive shift in the academic curriculum. It became important to think of the whole organism and its *environment*. Environmental studies even became an academic discipline.

A non-Christian writer on science has put it like this: "There have always been two broadly contrasting traditions in biology: a reductionist or analytical and atomizing one: and a holistic or more synthetic one. This latter was strongly represented in the 1930's..." The former, which dominated the second half of the nineteenth century and the early part of this one, "believes not merely that to understand the world requires disassembling it into its component parts, but that these parts are in some way more fundamental than the wholes they compose. To

understand societies you study individuals, to understand individuals you study their organs; for the organs their cells; for the cells their molecules; for the molecules their atoms...right down to the most 'fundamental' physical particles. Reductionism is committed to the claim that this is *the* scientific method, that ultimately the knowledge of the laws of motion of particles will enable us to understand the rise of capitalism, the nature of love, or even the winner of the next Derby".[1]

The basic issue is this. It is perfectly possible to do learned necrology, but that is not biology. It can seriously mislead you if you want to know how animals and plants live. It certainly diverts your attention from those fairly obviously primary interests of biology. The fault had been to study organisms as *something that you know that they are not*—mere dead bodies. It is not a total waste of time, but where it had predominated it had led into a very sterile and unreal world of human knowledge. When it was seriously proposed in the 1930s by an extremely learned scientist that the key difference between man and the apes was to be found in the presence or absence of the *peroneus tertius* muscle in the foot, it was treated seriously. Today it would be laughed out of court.

Biology has largely recovered its sense of balance and discovered ecology. Medicine has swung back to a medicine of the whole person and sociology has moved towards thinking of broader cultural forces including religion. Theology in its anxiety to be scientific has been in danger of hanging onto this reductionist tradition too long. In the 1940s it reached a point where Professor Burnaby at Cambridge acknowledged that the faculty was not training people for the ministry and the Principal of Trinity College, Glasgow, lamented that though they were training a number of theologians—of which the Church of Scotland needed at most one a year—they were training

1. Professor Stephen Rose in *The Times Higher Education Supplement*, 28th March, 1986.

practically no preachers for which the Church of Scotland was clamouring. No doubt there has been a considerable improvement since then, but the problem remains a part of the academic background in which theology is still taught. A reductionist approach is thought by many to be the academic tradition.

Theological Necrology

A systematic reductionist outlook cannot allow the independent reality of 'higher level' categories. Everything has to be taken to pieces and as far as possible reduced to the lowest possible categories. The result has been that a reductionist 'scientific theology' simply has no room in it for the idea of the miraculous, or for that matter for faith or awe for the living God. To open a theological lecture in prayer is, in this tradition, simply not appropriate.

Indeed it is not necessary for those operating in this way to have any personal faith at all. This does not mean that those in this tradition want to deny the miraculous or the spiritual. These categories just are not what their methodology can deal with. As a result, the most conservative scholars can seem to be leaving out of their lectures all that matters most to the ministerial student. This is one of the major concerns of the student's bafflement and can tempt him to develop an almost total dichotomy between his studies and his preaching and personal devotional life. He is astonished and even embarrassed if the lecturer even says anything to move him to awe or worship.

There are, however, two kinds of reductionism. The academics have frequently 'reduced' theology to linguistics and historical criticism in all its forms. They will emphasise a few proof texts on the basis of which they criticise our Lord and the Apostles for their teaching (for example on the Second Coming), and don't know how to cope with the evangelical

students who maintain the reliability of our Lord and the Apostles on the basis of other passages and a broad sweep of biblical teaching. Faith in the reliability of our Lord is simply not a category that comes into their reckoning so that even evangelical scholars write and speak 'as if' from a reductionist standpoint that excludes all spiritual reality.

The book quoted above about reductionism in academic disciplines has, however, implicitly an interesting challenge to evangelical students. Stephen Rose (quoted above), who is a Marxist and insists on the political level of reality as a tool for understanding science, is neatly criticised by Mary Midgley, a non-Christian philosopher. She points out that there is not only hierarchical reductionism such as that defined by Stephen Rose—reducing all to its parts. There is also what we may call horizontal reductionism which reduces all to our own favourite level or other higher level categories. Evangelicals have not infrequently been guilty of this—seeing only certain familiar doctrinal themes in the Bible and refusing to see other less familiar emphases. The past fundamentalist aversion to social action is a case in point. They simply refused to see the thrust of Amos and of the enormous (distracting?) amount of time and energy given by Paul to raising money for the poor in Judea. There is a tendency to reduce everything to a simple gospel that could be expressed in a few points. A theological professor in one faculty complained that when he drew evangelical students into discussion of biblical passages they seemed to know exactly what the passage ought to be teaching before they looked at it! They had reduced everything to a few basic gospel themes in much the same way as the Marxists reduce everything to politics.

What then is the remedy? I suggest that the basic remedy is to allow the Bible to say what it actually says, recognising it as a unity which has a consistent message. The scientist studying nature believes that there is a unity in nature even where there are certain facts which do not fit into our present knowledge and

seem to stick out like a sore thumb. He will work hard until he sees how they all fit together. At the same time he has got to be absolutely honest with the data and willing to see that they make sense only when seen in the light of higher level categories. Many features of animals and plants only really make sense when you remember that they are actually living things and that though you may be examining the corpse, it was—a short time ago—an organism making its living in a difficult environment. The hierarchical reductionist can find little difference between a blackbird and a crow except size. Bird song simply is not in his vocabulary and by the time he has finished with his comparative anatomy, you have a colourless and soundless world. At the same time amateur ornithologists, who recognise birds by their song, must be willing to ask questions about anatomy and what those anatomical differences mean in terms of lifestyle, food patterns, and so on. The reductionism which reduces everything to anatomy on the one hand or the horizontal reductionism which reduces everything to bird song on the other, must be seen in the wider context. They have their value so long as it is remembered that both are talking about a living organism.

In theology it is harder than in some other disciplines to relate the comparative anatomy of the text to the great themes which move us to worship and to obedience. At the same time hammering away at those great themes will be on very thin ice unless it is adequately based on proper exegesis and linguistic study. The preacher who wrote in the margin of his notes, 'argument weak here, shout louder', can never be an evangelical ideal. We have got to be honest with the whole data which God has given us and sit humbly before it. When the atheist, Thomas Henry Huxley, said that 'he liked to sit down before nature like a little child', he was deliberately making a parody of a fundamental Christian attitude, but he realised that that was the true scientific attitude. He did not acknowledge that this owed a tremendous amount to a Christian view of God and His

creation. I suggest that theology should cease to call itself scientific, which is naming the parent after the child, and let it return to the queen of the disciplines which helps to teach the others to deal honestly and uncritically with their data.