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**Consonance, Assimilation or
Correlation?: Science and Religion
Courses in Higher Education**

The recent rapid increase in the number of courses on science and religion in higher education in Britain means it is now possible to analyse the different educational strategies employed and to identify different assumptions about how science and religion can be related. The analysis of sixteen course outlines, coupled with interviews with staff of four courses, shows that the typology of Barbour is not sensitive enough for this purpose as all the courses assume that there is to be dialogue rather than conflict, independence or integration. Polkinghorne's categories of assimilation and consonance are useful as they represent different approaches in dialogue but many courses do not fit neatly into either of these categories. It is illuminating to think of courses as encouraging the contextualisation of faith in a scientific context, and the category of correlation is introduced from studies of method in theology. While some courses aim merely to show that there can be consonance between science and religion, there are others which work towards the more systematic interaction of assimilation, and there are yet others which appear to be intermediate and allow for different patterns of correlation in different areas of dialogue.

Keywords: Assimilation, consonance, contextual theology, correlation, educational strategies, higher education, science and religion courses, types of theology.

Introduction

In *Scientists as theologians* John Polkinghorne has made a comparative study of the work of three scientists who have become theologians and have written extensively about the interaction of science and Christian belief: Ian Barbour, Arthur Peacocke and Polkinghorne himself.¹ He considers their views on issues prominent in current debate, and identifies where they agree and where they disagree. He attempts to characterise their different approaches by turning to Barbour's four-fold typology of ways of relating science and religion: conflict, independence, dialogue and integration, but finds that despite their differences they should all be placed within the category of dialogue.² He therefore proposes

1 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996)

2 Ian Barbour, *Religion in an age of Science* (London: SCM Press 1990)

two new terms, consonance and assimilation, to distinguish different emphases within the general approach of dialogue.

Consonance represents a search for mutual consistency between disciplines whose separate identities are to be respected, and this is expected to be 'not as a mere matter of compatibility but with a degree of mutual enhancement and enlightenment'.³ In assimilation there is 'a greater degree of merging of the two disciplines' so that although one is not absorbed by the other there may well be 'some accommodation of one to the other'.⁴ Thus, there is a systematic interaction between the two. Polkinghorne finds that consonance best describes his own approach and assimilation that of Barbour, but Peacocke is less easy to classify as his work sometimes seems closer to consonance and at other times closer to assimilation.⁵

The purpose of this article is to consider whether the typologies of Barbour and of Polkinghorne can be used to compare approaches used in courses on science and religion in higher education in Britain. Other typologies have been proposed, and Drees has pointed out that the use of a particular typology may vary depending on the field of study and the assumptions made about the nature of science and the nature of religion.⁶ Reich has shown that a common set of logical relationships underlie many of these typologies, but his analysis does not distinguish between different approaches within what Barbour describes as dialogue and this is what is attempted by Polkinghorne in his distinction between consonance and assimilation.⁷

Courses on science and religion

Interdisciplinary courses on science and religion have been offered in a few institutions for quite a long time and particular issues in the interaction of science and religion have featured sometimes as topics in broader courses in departments of philosophy, theology and history, but for a variety of reasons the number of specialised courses on the interaction of science and religion has increased markedly in the 1990's. One important influence has been the Science and Religion Course Program of the John Templeton Foundation and those courses which have received awards from this program form a group of a sufficient size to form the sample for this study. Particular criteria are used by the John Templeton Foundation in the making of awards and there are courses of high quality which do not aim to match those criteria, so the sample is not necessarily representative of all courses on science and religion.

3 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996), pp. 6–7

4 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996), p. 6

5 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996), pp. 83–84

6 Willem Drees, *Religion, Science and Naturalism* (Cambridge: Cambridge University Press 1996) pp. 39–49; Philip Hefner, 'The Science-Religion relationship: controversy, convergence and search for meaning', *Zygon* 31 (1996): 307–321; Arthur Peacocke, 'Introduction', in Arthur Peacocke, ed., *The Sciences and Theology in the Twentieth Century*; Ted Peters, 'Theology and the Natural Sciences', in David Ford, ed., *The Modern Theologians* (Oxford: Blackwell 1996)

7 Helmut Reich, 'A Logic-based typology of Science and Theology' *Journal of Interdisciplinary Studies*, (1996): 149–167

Outlines of courses on science and religion were requested from departments of theology, religious studies and philosophy in higher education institutions in England which had received awards from the Templeton Foundation between 1995 and 1997. Eighteen requests were made and sixteen outlines were received. The list of award winners was provided by the Templeton Foundation but otherwise the research was conducted independently of the Templeton Foundation.

The organisation and detail of the outlines varies but most include information about participants, staffing, aims, contents, methods, and a list of recommended books. After analysis of the outlines semi-structured interviews were arranged with staff of four courses, selected to represent a range of approaches. Questions were asked to check the accuracy of our interpretation of the course outlines, to clarify the aims of the courses and to explore further the ways in which staff perceive the relationships between science and religion.

Many different titles are used for the courses but all indicate in some way that they are concerned with both science and religion. As interdisciplinary courses many are joint initiatives with science departments, while some of those sponsored and taught by one department are open to students registered in other departments. Therefore in some courses participants represent several different major disciplines, including the sciences as well as theology, religious studies and philosophy, while in others even though the course is open participants are in practice almost entirely from one department. The range of participation can be influenced by whether a course provides credit towards degrees in different disciplines or in only one discipline. Thirteen of the courses provide credits towards first degrees while three of the courses provide credits towards degrees at the master's level. Three of the courses are designed primarily for people in training for ordination. Some courses are taught jointly by staff from different disciplines, which can include theology, religious studies, philosophy, history of science, physics, geology and biology. Where a course is taught for the most part by one person from a department of theology or religious studies this person is quite likely to have an academic qualification in a scientific discipline.

A variety of learning methods are used. Most courses use both lecture and discussion but the balance between the two varies considerably. Several courses arrange for some time in a seminar format in which discussion follows a short presentation by a participant. Further discussion of particular topics sometimes occurs in tutorial groups where plans may also be made for written assignments. Some courses expect participants to read specified extracts from relevant literature before discussion in class. The books of Ian Barbour, John Hedley Brooke, Arthur Peacocke and John Polkinghorne are prominent on book-lists. Barbour's *Religion in an age of science* is prescribed as a set-book by four of the sixteen courses, and two courses follow closely the sequence of a book written by the course leader.

All of the course outlines include a list of contents. Fourteen provide a statement of aims, but in some cases this is rather brief and needs to be considered together with an interpretation of the course contents. In all the courses there is

confidence that interaction between science and religion can be mutually beneficial, and three courses state that they aim to encourage intellectual humility in each of the disciplines. Three of the courses are organised around a series of theological topics which are considered in the perspective of relevant scientific theories: as expressed in the aim 'to examine some major theological issues from the perspective of the natural sciences'. Six of the courses view the interaction from the opposite direction, considering particular areas of science and identifying theological implications: as expressed in the aim 'to reflect theologically on issues related to science and technology'. The other seven courses use the first approach in some sessions and the second approach in other sessions.

Most of the courses cover a range of topics but three explore the interaction of science and religion through a focus in a particular area: genesis and geology, determinism and freewill, and science and religion in the nineteenth century. The selection of topics in one course is determined by relevance to science education and religious education in schools while the shape of another course is influenced by the inclusion of perspectives on science and technology from the South as well as the North. All sixteen courses are concerned primarily with Christian belief, although it seems that several of them may be open to insights from other faith traditions and one course outline refers explicitly to Islamic views on some topics.

A summary of the course contents is presented in Figure 1. Contemporary theories in physical sciences are discussed in fourteen of the sixteen courses, and in eight of these this discussion occurs in a quarter or more of the sessions. Contemporary theories in biological sciences are discussed in nine courses, and in two of these this discussion occurs in a quarter or more of the session.

	No. of courses
Course organisation:	
Organised around theological topics	3
Organised around scientific topics	6
Organisation partly theological & party scientific	7
Topics discussed:	
Physical sciences	14
Biological sciences	9
Environmental science	5
Technology	3
Ethical issues	7
Historical issues	12

Figure 1: Analysis of the contents of the sixteen courses

Environmental science is considered in five courses and technology in three courses. Because of the criteria used by the Templeton Foundation in making awards the courses in this sample are concerned primarily with the interaction between scientific theories and religious beliefs but seven of the courses give attention also to ethical issues; issues related to the practice of science and technology in general in two courses, issues related to genetics in three courses and environmental issues in five courses. It is known that in some of the institutions represented in this study by courses which are limited to the discussion of theories and beliefs, other courses do give attention to ethical issues.

Historical studies feature in twelve of the sixteen courses. Three courses are organised as a whole in a historical framework and in four other courses there are historical studies in a quarter or more of the sessions. Six courses trace the development of the mechanistic worldview, while particular attention is given to Galileo in seven courses and to Darwin in nine courses.

Consonance and assimilation: two ways of relating science and religion

The comparison of alternative models for the relationships between science and theology is listed amongst the contents or included in the statement of aims of thirteen of the sixteen courses, four of the outlines making explicit reference to the typology of Barbour: conflict, independence, dialogue and integration. Many courses aim to encourage participants to reach their own conclusions in evaluation of these alternative models. A common theme is that different models may be needed in the interpretation of different historical examples of interaction between science and religion, and it is also suggested that different models may be appropriate in different areas of contemporary interaction. There is sensitivity to the criticism of a typology such as that of Barbour that it can encourage over-simplification of what are often complex patterns of interaction.⁸

Nevertheless, it does seem that in the organisation and teaching of a particular course certain assumptions are often made about what models for the relationships between science and Christianity are to be preferred. All of the courses argue that the conflict model is unnecessary, and arises when there is misunderstanding of the nature of science or of the nature of Christianity or of both. The independence model is not generally accepted as all the courses express confidence that interaction between science and religion can be beneficial, although this does allow the possibility that independence may be appropriate in some areas. The integration model is viewed favourably in some courses yet there is no course which works within an integrated framework as would be provided, for example, by process theology. Examples of process theology are studied and sometimes used to illustrate the integration model but the courses themselves all seem to be organised and presented within Barbour's category of dialogue. One course is identified explicitly with 'dialogue rather than integration' and it may be

⁸ Willem Drees, *Religion, Science and Naturalism* (Cambridge: Cambridge University Press 1996).

appropriate to think of all the courses as occupying a range of positions within the dialogue model; on a spectrum from those which are closer to Barbour's integration model as they are inspired by a search for 'one vision' to those which are closer to his independence model as they assume that there are 'two disciplines in conversation'. The identification of such a range of positions within Barbour's category of dialogue corresponds to Polkinghorne's discussion of consonance and assimilation, and may be compared with the placing of the work of Barbour, Peacocke and Polkinghorne himself at different points on a spectrum from consonance to assimilation.

From analysis of the course outlines it is possible to identify which of the courses seem to be closer to consonance and which are closer to assimilation. It appears that nine courses are closer to assimilation and five courses are closer to consonance. One course which is designed in two parts seems to be closer to assimilation in one part and closer to consonance in the other part. However, this analysis needs to be revised in the light of the interviews conducted with staff of four of the courses.

The interviews confirmed that the understanding of course structure and contents that had been developed through interpretation of the outlines of these four courses was accurate, thus giving confidence that the understanding of course structure and contents of all the courses is accurate. But the interviews showed that the identification of some courses with consonance and of other courses with assimilation was not as straightforward as it appears to be after analysis of the course outlines. In each course there were some parts where the approach was closer to consonance and other parts where it was closer to assimilation. In a particular course there may overall be a greater tendency towards one approach but the other approach may nevertheless be present to some extent. Further analysis of the sixteen course outlines, in the light of what had been learnt from the four interviews, led to the conclusion that some courses are overall closer to consonance and some closer to assimilation, but in about one half of all the courses both approaches are used to a considerable extent.

Several different ways in which the two approaches may be combined emerged from the interviews and subsequently were identified in the outlines of other courses. Where a course is taught jointly by two or more people it is sometimes the case that one course leader tends more towards consonance and another towards assimilation, and this leads to the different approaches being prominent in different parts of the course. The initial analysis of one course outline had suggested that the two halves of the course, which were clearly distinguished in the course outline, corresponded to different approaches in the relating of science and religion. The interview confirmed that such a distinction could be made and that one half corresponded to assimilation. However, the other half for which two staff shared responsibility could not be identified directly with consonance. One course leader emphasised the differences between science and theology and advised caution in the interaction between them. The other had rather greater confidence in the scope for mutual enhancement and seemed therefore to favour an approach that went considerably beyond

consonance. In another interview it emerged that the aim of one course leader was that participants should develop a coherent theological framework within which they could interact with the theories and practice of science as well as other aspects of contemporary society. The other course leader spoke of how both religious beliefs and scientific theories are provisional and spiritual searching can emerge both from religious traditions and from the awe and wonder experienced in scientific investigation. The two course leaders valued the difference in their approaches, corresponding it seems to consonance and to assimilation, as they claimed it led to a creative tension and stimulated course participants to develop their own understanding.

Different approaches are also found sometimes in different parts of a course taught by one course leader. One course moved towards assimilation at the end of the course after earlier sessions in which the integrity of science on the one hand and of theology on the other had been carefully guarded and interaction between the disciplines had been tentative. The interview showed that while participants were encouraged to develop their own understanding, and might do this through writing an assignment with a title individually proposed and approved, they were expected to do this in critical response to the clear presentation of one particular way of resolving the issues through a process of assimilation.

In some courses the nature of the issue being discussed seems to influence which approach is prominent. An issue related to one scientific discipline may be discussed in terms of consonance whereas an issue related to a different scientific discipline is discussed in terms closer to assimilation. In some cases this seems to reflect the most popular approach in the recent literature, but it seems that it may also be related to the academic and professional background of the course leader. For one course leader who has experience in a particular scientific discipline as well as in theology the approach in that area of discussion is assimilation. In relation to issues arising in other areas of science where there is no first-hand experience the approach seems to be closer to consonance.

Models of contextualisation in theology

The comparison of different ways of relating science and religion may be illuminated by recent studies of contextualisation in theology. In his *Models of Contextual Theology* Bevans defines contextualisation as 'the attempt to understand Christian faith in terms of a particular context'.⁹ We suggest that the sixteen courses on science and religion can be regarded as attempts 'to understand Christian faith in terms of a *scientific* context'. Bevans identifies four models of contextual theology that correspond to different ways of relating 'the spirit and message of the gospel, the tradition of the Christian people, the culture in which one is theologizing, and social change in that culture'.¹⁰ These are the anthropological model, the praxis model, the translation model and the synthetic model.

9 Stephen Bevans, *Models of Contextual Theology* (Maryknoll, New York: Orbis 1994) p. 1

10 Stephen Bevans, *Models of Contextual Theology* (Maryknoll, New York: Orbis 1994) p. 5

In the anthropological model it is a particular cultural tradition which is dominant and contextual theology develops as the gospel is absorbed into that culture. This corresponds to those forms of what Barbour describes as integration between science and religion in which religious belief is shaped entirely by a scientific worldview. The praxis model assumes a commitment to social change and in this model contextual theology develops through reflection on action for social change. This does not correspond directly to any of the ways of relating science and religion that have been discussed but may be related to the critique of the scientific enterprise from a theological perspective which is a feature of some of the courses. Seven of the sixteen courses give some attention to ethical issues and four courses consider science within its social and cultural context. No course accepts the 'strong' view in the sociology of science, that scientific theories are determined by social factors, but several suggest that theories as well as research practice may to some extent be shaped by social factors. A commitment to social change, as essential to the gospel, is explicit in some course outlines; for example, in the discussion of ways in which the quality of people's lives may be enhanced rather than harmed by science and technology and in the recognition of a need for change in the values and organisational structures of the scientific enterprise itself.

The third and fourth models of contextual theology proposed by Bevans correspond to different approaches within what Barbour describes as dialogue, and we suggest that the translation model and the synthetic model may be seen as equivalent to what Polkinghorne describes as consonance and assimilation. In the translation model the assumption is made that the core of the gospel can be identified from the Bible and Christian tradition and it is this core which is then expressed in terms of a particular context. There is mutual enhancement of gospel and context yet the integrity of each is respected, just as in seeking consonance between science and theology Polkinghorne insists on maintaining the separate identity of the two disciplines. In the synthetic model of contextual theology there is a much more extensive interaction between Christian tradition and the context, there is no assumption that a definitive statement of the core of the gospel is available and contextual theology develops through in-depth analyses of Christian tradition and of the context and of the scope for their interaction. The parallel here is with Polkinghorne's characterisation of assimilation as 'the greater degree of merging of the two disciplines', which is illustrated for Polkinghorne by Barbour's careful and thorough analyses of Christian doctrines and scientific theories and his moves towards bringing them together within a process framework.

The synthetic model of Bevans is divided further into an integration model and a correlation model by Fulljames in his comparison of the methods used by three African theologians, Dickson, Nyamiti and Pobee, and two European theologians, Barth and Pannenberg.¹¹ The translation model is also used and it is claimed that any one of the three models may be associated with the

11 Peter Fulljames, *God and Creation in Intercultural Perspective*, (Frankfurt: Lang 1993)

commitment to social change represented by Bevans' praxis model.¹² Correlation represents an ad hoc interaction between particular elements in the Christian tradition and particular elements in the context, whereas integration represents a more structured interaction based on systematic study of the Christian tradition and elements in the context. It will now be suggested that the three models of contextualisation – translation, integration and correlation – may be seen to correspond to three ways of relating science and religion – consonance, assimilation and correlation.

Consonance, assimilation and correlation: three ways of relating science and religion

Correlation is a way of relating science and religion in which there is ad hoc interaction between some elements in science and some elements in religion, and corresponds to the correlation model for the contextualisation of theology. The interaction between the discourses is greater than in Polkinghorne's category of consonance, which corresponds to the translation model of contextualisation, and is not as systematic as in Polkinghorne's category of assimilation, which corresponds to the integration model of contextualisation. All three of these ways of relating science and religion – consonance, assimilation and correlation – are to be regarded as examples of dialogue in Barbour's comparison of conflict, independence, integration and dialogue, and integration in Barbour's classification should not be confused with the integration model of contextualisation.

The comparison of models of contextual theology with ways of relating science and religion is presented in Figure 2, which should be read bearing in mind that as the criteria used in each of the classifications are different the correspondence is not exact. Figure 2 includes three of the five *Types of Christian Theology* identified by Frei in his study of how theology has been related to other

Proposed ways of relating science and religion	Assimilation	Correlation	Consonance
Relating science and religion (Polkinghorne)	Assimilation		Consonance
Models of contextual theology (Bevans)	Synthetic	Synthetic	Translation
Models of contextualisation (Fulljames)	Integration	Correlation	Translation
Types of Christian theology (Frei)	Type 4	Type 3	Type 2

Figure 2: Comparison of Ways of relating Science and Religion and Models of Theology

¹² Peter Fulljames, *God and Creation in Intercultural Perspective*, (Frankfurt: Lang 1993) p. 104.

academic disciplines in the post-enlightenment era.¹³ Polkinghorne interprets his own work and that of Barbour and Peacocke as examples of these three types of theology.¹⁴

In theology described by Frei as Type 1, not shown in Figure 2, a modern worldview is dominant. It can be regarded as an example of Bevans' anthropological model of contextual theology in which Christianity is completely absorbed into a particular cultural tradition. It is equivalent to forms of integration between science and religion, described by Barbour, in which religion is totally absorbed into a particular scientific worldview. Frei's Type 5, also not shown in Figure 2, represents the opposite extreme in which the context of modernity is ignored and theology is simply a re-statement of what has been received from the Christian tradition. This corresponds to a refusal to attempt any contextualisation of theology and in particular a refusal to attempt in any way to relate theology and science.

It is Frei's Types 2, 3 and 4 which Polkinghorne associates with the work of Barbour, Peacocke and Polkinghorne himself, and which we regard as equivalent to consonance, correlation and assimilation. Types 2 and 3 both attempt to balance the contributions of Christian tradition and modernity, in Type 2 as a systematic interaction between theology and a particular philosophy and in Type 3 as ad hoc correlation between features in Christianity and general criteria of meaning in the modern world. They both correspond to Bevans' synthetic model, while the distinction between them is similar to that between Fulljames' integration model and correlation model. Polkinghorne suggests that Barbour's use of process philosophy places him in Frei's Type 2 while Peacocke with his reluctance to develop a metaphysical framework and his use of different patterns of interaction in different fields may be placed in Type 3.¹⁵ Polkinghorne found it difficult to classify the work of Peacocke as either consonance or assimilation for 'at times he appears . . . to operate in an assimilationist mode and at other times in a consonantist mode'.¹⁶ Our proposal that the category of correlation should be added to consonance and assimilation in distinguishing ways of relating science and religion means that the work of Peacocke can be described as an example of correlation.

Frei's Type 4 gives priority to the self-description of the Christian community: 'the practical discipline of Christian self-description governs and limits the applicability of general criteria of meaning in theology'.¹⁷ This corresponds to a translation model of contextual theology and to consonance in relating science and religion. Polkinghorne confirms that his own insistence on the autonomy of theology in its dialogue with scientific culture means that his theology is of this type.¹⁸

13 Hans Frei, *Types of Christian Theology*, (New Haven: Yale University Press 1992)

14 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996) pp. 84–85

15 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996) p. 85

16 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996) p. 84

17 Hans Frei, *Types of Christian Theology*, (New Haven: Yale University Press 1992) p. 4

18 John Polkinghorne, *Scientists as Theologians* (London: SPCK 1996) p. 85

When the sixteen course outlines were first analysed nine were regarded as closer to assimilation and five closer to consonance. As a result of the four interviews this interpretation was questioned, in particular because different parts of the same course can sometimes be characterised by different approaches. The introduction of the category of correlation is helpful as it means that courses may now be classified in terms of the three categories: assimilation, correlation and consonance. Correlation is a distinct type of relationship between science and religion intermediate between assimilation and consonance. There is a greater interaction between two discourses than in consonance, yet not in the systematic way characteristic of assimilation. The interaction is ad hoc allowing there to be different forms of interaction in different areas, so correlation may seem to be the appropriate category for courses in which some parts are closer to assimilation and others are closer to consonance. This may be a course in which different course leaders take responsibility for different parts of the course, but it may also be a course in which there is one course leader. One of the interviews provided evidence of how a particular course is shaped by the interests of participants, so that usually different patterns of interaction are encountered in the different areas of science that are studied. A range of models for the interaction between science and religion are presented and participants encouraged to develop their own understanding. The parallels that are noticed in this course between the use of symbolic representation in religion and the use of symbolic representation in science further illustrates the category of correlation. Analysis of the course outlines now leads to the conclusion that, while there continue to be courses which are seen as closer to assimilation and others which are closer to consonance, about one half of the courses are best described as examples of correlation.

The number of courses in each of the three categories is not in itself important. What the analysis does show is that different approaches are used in these courses even though all of them come within the general description of dialogue in Barbour's four ways of relating science and religion, and that the three part classification of assimilation, correlation and consonance helps to clarify what these differences are. Educationally, justification can be given for each of these different approaches. In one course where different approaches are explicit in different parts of the course, and overall the course may be regarded as an example of correlation, it may be argued that participants are encouraged to work out for themselves what is the most appropriate approach in the discussion of any particular issue. This is the pattern in several courses which cover a wide range of topics relating to different scientific disciplines. In a course which is focussed on one particular scientific discipline it is more likely that an approach of consonance or of assimilation will be used consistently throughout the course. In a course which moves strongly towards assimilation within a particular theoretical framework participants are challenged to accept this presentation or to reject it, in which case they are encouraged to develop their own alternative understanding. What is important is that course leaders should be aware of these alternative educational strategies and be aware of the approach that they are using, explicitly or implicitly, in a particular part of a programme.

Conclusions

In all of the sixteen courses in this sample the relationship between science and religion is one of dialogue. None of the courses presents the relationship as one of conflict, or of independence or of integration; although in one or two courses confidence is expressed that ultimately integration will be possible. There are differences in the practice of dialogue. Some courses aim to show that there can be consonance between science and religion, others argue for a greater degree of interaction perhaps in different ways for different issues in what has been described as correlation, and others are working towards the more systematic interaction of assimilation. Each of these approaches may be justified, theologically and educationally, and the effectiveness of a course is likely to be increased by reflection on which approach is being used and the reasons why it is appropriate. There are also important distinctions between courses that give attention to ethical issues and those that do not, and between courses which take account of the social context and those which do not. These conclusions have been reached through a study of course outlines prepared by course leaders and through interviews with some course leaders. A task for further research is to consider what conclusions would be reached if the views of course participants were also taken into account.

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Acknowledgement

We appreciate the time given by those course staff who participated in interviews as well as the willingness of course leaders to provide course outlines.