

METAPHYSICS, ONTOLOGY AND THE INSTRUCTIONAL DESIGN PROCESS: CREATING A SPACE FOR A VIRTUAL CONVERSATIONAL CHRISTIAN PRESENCE

Iain Doherty
Faculty of Medical and Health Sciences
University of Auckland

A Virtual Christian Presence

This author is concerned with the theory, methods and techniques for developing and producing learning environments and asserts that a pedagogically sound learning environment can be produced by consistently adhering to a learning theory and to a number of basic instructional rules.¹ We believe that a presentation of the learning theory and the rules will be of significant potential benefit to Christians considering the question of an effective on-line Christian presence. Additionally such a presentation will provide the opportunity for theological input on theory put forward in this paper

We are beginning from the premise of a theological concern with the question of the status and relevance of Christianity in contemporary society. It is unarguable that we now live in a technological age in which a very large number of people use computers and the Internet for a whole variety of purposes including information gathering and communication.² Given the predominance of the Internet and associated technologies as a means of communication and interaction, particularly amongst younger people, it seems clear that the question of an effective on-line Christian presence is important in terms of the theological concern with the status and relevance

¹ M. D. Merrill, "First Principles of Instruction," *Educational Technology Research and Development* 50:3 (2002) 43-59.

² ClikZ Stats Staff, "Population Explosion!" http://www.clickz.com/stats/sectors/geographics/article.php/5911_151151 (2005) [downloaded 25/8/2005].

of Christianity in contemporary society. The World Wide Web is one of the main media that people are using to communicate and the church cannot afford to be ineffective within this medium.

Ontology, Metaphysics and Instructional Design

The basic methodology of instructional design involves the instructor coming to the designer with a particular instructional problem to be solved.³ In our case, the problem that we are considering concerns establishing an on-line Christian presence that testifies to the reality and value of the Christian faith. Having been presented with the problem in its broadest terms the instructional designer would carry out a needs analysis, the purpose of which is to determine more exactly the objectives or aims of the instructor. Thus whilst we know that the theologian is seeking to establish an effective on-line presence, we need to define the objective more exactly in terms of measurable project goals. This would entail defining what exactly is meant by “effective”. Instructional design is a two way process of communication between the instructor and the instructional designer and, therefore, our process will involve helping the theologian to define what might be meant by “effective” whilst gaining the perspective of the theologian on what is to be achieved. In this case effectiveness might be defined in terms of number and range of visitors to the site, the degree of interaction and participation on the site and the number of people “converted” to Christianity as a result of visiting the site. These criteria provide the instructional designer with clear instructional design aims and a means of measuring the success of their endeavour.

The instructional design process goes through a number of other stages but for the purposes of this paper we can concentrate upon the learning theory and the instructional design principles that follow from this theory. A learning theory is essential to instructional design because without such a theory the instructional design is simply arbitrary and cannot be measured in any way.⁴ We will suggest that

³ K. H. Flechsig, “Cultural Transmission, Teaching and Organized Learning as Culture-Embedded Activities,” in *Instructional Design: International Perspectives: Volume 1, Theory, Research and Models* (ed. Sanne Dijkstra, Franz Schott, Norbert Seel and Robert D. Tennyson; Mahwah, NJ: Lawrence Erlbaum, 1977).

⁴ R. D. E. Tennyson and L. Robert, “Learning Theory Foundations for Instructional Design,” in *Instructional Design: International Perspectives: Volume 1, Theory, Research and Models* (ed. Sanne Dijkstra, Franz Schott, Norbert Seel and Robert D. Tennyson; Mahwah, NJ: Lawrence Erlbaum, 1977) 55-78, 58.

whilst there are a number of competing learning theories,⁵ the most appropriate learning theory for developing an online Christian presence is constructivism and that this theory needs to be combined with a theory known as the cognitive complexity theory. We will suggest that in tandem these two theories provide for a means of creating an on-line Christian presence informed by a theological understanding of the nature and ontological status of the self vis-à-vis the world and God. Thus, as far as Christians are concerned, pedagogical theory can be employed to achieve the purpose of establishing an effective on-line Christian presence that testifies to the value and reality of the Christian faith.

Constructivism and the Creation of a Shared Virtual Space

We believe that the design of an online Christian presence must be informed by a constructivist theory of learning.⁶ The constructivist theory of learning posits that knowledge acquisition is contingent upon new knowledge finding a place within a person's existing conceptual schema. That is, constructivists believe that new knowledge is most readily taken up when it can find a place relative to already existing concepts or when it is meaningful knowledge for the learner. In the context of creating a virtual Christian presence, the usefulness of this constructivist theory lies in the notion that if non-Christians are to be engaged in genuine and fruitful conversation with Christians, and if they are to see the reality and value of the Christian faith, then the virtual environment has to comprise concepts and ideas that are meaningful for non-Christians. Thus, the question for Christians wishing to engage with non-Christians concerns how they will present their understanding of the world and of our place within it, in a way that will be meaningful for non-Christians. Eschewing a more in-depth analysis of constructivism, we would suggest that constructivism *per se* is not sufficient as a theoretical basis for creating an on-line Christian presence because constructivism does not provide for an understanding of how one might address the "whole" person and this is necessary in order to fully engage non-Christians in conversation with Christians. Thus, a second theory is required; this is known as Cognitive Complexity Theory.

Complexity Theory and the Inclusion of the Soul

The complexity model posits that the learner is a complex of interacting parts including

⁵ B. Gillani, *Learning Theories and the Design of E-Learning Environments* (Lanham: University Press of America, 2003).

⁶ Tennyson and Robert, "Learning Theory Foundations," 58.

sensory receptors, cognitive strategies, affects and a knowledge base.⁷ We believe that the complexity learning model most closely represents the way in which individuals actually are in the world and to that degree the complexity model will provide the appropriate conceptual framework for developing a virtual Christian environment. To be more exact, the cognitive complexity model will take into account the fact that participants in a potential on-line conversation come with both a body of knowledge and a set of emotions, presuppositions, prejudices and attitudes and to the degree that the model takes this into account, it can provide a framework for creating a virtual space that facilitates genuine conversation including the presentation of ideas, the examination of the assumptions and values that underlie those ideas and, finally, emotional and attitudinal engagement. Thus conversation will occur in terms of two key aspects of the cognitive complexity theory; these are the knowledge base component and the affects component. The knowledge base consists of all of the previously acquired information⁸ whilst the affects component consists of the personality variables such as motivation, feelings, attitudes, emotions, anxiety and values.⁹

Complexity theory quite clearly has the potential to be developed in terms of a metaphysical view of the “self” that includes a spiritual dimension to our being. It is our contention that the broadening, or perhaps deepening of complexity theory, can involve the notion that from an ontological perspective we are, most fundamentally, made in the image of God and from a metaphysical perspective we long to stand in relation to God and to be in the world in terms of the Christian conception of reality. If cognitive complexity theory can take account of the spiritual aspect of the Self then there is, to use Kierkegaard’s terminology, the possibility of Christians working towards “upbuilding and awakening” within contemporary society¹⁰ through an effective online Christian presence. An aspect of the virtual conversation with non-Christians would, therefore, include the notion that there is a desire within the “self” to know God. The challenge for the instructional designer therefore becomes one of how to design an environment in which this particular aspect of Christian reality can be made manifest or apparent to non-Christians.

⁷ R. D. Tennyson and B. Klaus, “Psychological Foundations of Instructional Design Theory,” in *Instructional Design: International Perspectives: Volume 1, Theory, Research and Models* (ed. Sanne Dijkstra, Franz Schott, Norbert Seel and Robert D. Tennyson; Mahwah, NJ: Lawrence Erlbaum, 1977) 113-34, 119.

⁸ Tennyson and Klaus, “Psychological Foundations,” 119.

⁹ Tennyson and Klaus, “Psychological Foundations,” 121.

Musement as a Starting Point

The author wrote a PhD dissertation in which he argued that belief in God can be justified in a manner analogous to the way in which aesthetic judgements are justified. That is, just as aesthetic justification is a process of bringing a person to see a particular quality of a work of art,¹¹ so a Christian belief in God is to be justified in terms of bringing an individual to see that God exists. The idea of “bringing someone to see” contrasts with the philosophical concern with giving reasons or evidence that will justify a belief in God. These mechanisms for “bringing to see” are useful in the context of discussing a virtual conversational space. We would, however, add the caveat that we are not talking about the activity of justifying belief in God; rather we are talking about the process of engaging in conversation in order to come to a shared understanding and, from the Christian perspective, in order to bring others to see the world as Christians see the world. This notion of “bringing someone to see” that there is a God is commensurate with constructivism and cognitive complexity theory and in the remainder of this paper we will detail the mechanisms for “bringing someone to see that there is a God” in terms of these theories and the concomitant instructional design principles.

We can say that one of the primary aims of the instructional designer is to create an environment in which the learning content is perceived to be meaningful by the learner. We believe that the same must necessarily be true for an on-line Christian environment. Thus we would suggest that in the first instance, it is necessary for the non-Christian partners in the conversation to be in a state of what Pierce called “musement”.¹² Pierce meant by this term an attitude of open reflection, wonder and questioning. Obviously not everyone engaging with the online environment will initially be in this state and, therefore, the question becomes one of how to create a state such that visitors have a genuine interest in the Christian perspective on the world. It is at this stage that one of the constructivist principles becomes particularly important; learning takes place most readily when the content can be related to pre-existing concepts or, more broadly, when it can be fitted into an existing conceptual schema. A conceptual schema is a cognitive structure in terms of which we interpret the world. Functionally a conceptual schema can be defined as “a structural framework

¹⁰ S. Kierkegaard, *The Sickness Unto Death: A Christian Psychological Exposition for Upbuilding and Awakening* (Princeton: Princeton University Press, 1983).

¹¹ F. Sibley, “Aesthetic Concepts,” *Philosophical Review* 68 (1959) 421-50.

¹² C. S. Pierce, *Collected Papers Vol. IV: Scientific Metaphysics* (Cambridge: Harvard University Press, 1935) 311-18.

into which new knowledge is instantiated".¹³ As far as virtual Christian presence is concerned this means putting mechanisms in place to facilitate a connection between what is proposed – conversation – and the conceptual schemas of the would-be interlocutors. One such mechanism might be a series of “advanced organisers”. Advanced organisers function as a brief introductory text or graphic to bridge the gap between the learner and what needs to be learned or, in the case of virtual Christian conversation, to bridge the gap between the potential interlocutor and the subject matter and aims of the conversation.¹⁴

We must remain aware that individuals are a complex of thoughts, emotions, attitudes and prejudices and, therefore, that they must be addressed in all of their complexity. Thus we need to take complexity theory into consideration. We might say that one way of affecting the shift to an attitude of musement or genuine openness is to appeal to a person’s emotions and attitudes. In terms of creating an emotional presence, we would suggest that, in the first instance, Christians testify to the reality of their faith in such a way that the difference that their faith makes in their lives is obvious. This testament must also make some appeal to non-Christians engaging in the conversation. In this way the possibility of God becomes a “live possibility” in the conversation in the sense in which William James conceived of “live” in his famous essay, “The Will to Believe”.¹⁵ This testament might come from members of a particular church, the wider Christian community and/or great Christian figures from the past. There is no sense in which the testimony is meant to provide reasons for believing in God. Rather, the testimony is presented in order to bring about a Gestalt shift in the interlocutor such that their whole world view changes to include belief in God. It is a question of appealing to the person in their entirety through the use of testament and religious experience.¹⁶

Preparing for a *Gestalt* Shift

There are various other mechanisms for bringing about this Gestalt shift in individuals. With reference to the concept of advanced organisers, an instructional designer

¹³ Tennyson and Robert, “Learning Theory Foundations,” 57.

¹⁴ Ausubel, cited in M.P. Driscoll, *Psychology of Learning for Instruction* (Needham Heights, Mass.: Allyn & Bacon, 2001) 171-72.

¹⁵ W. James, *The Will to Believe and Other Essays in Popular Philosophy: Human Immortality* (New York: Dover, 1956).

¹⁶ J. A. Taber, “The Philosophical Evaluation of Religious Experience” *International Journal for the Philosophy of Religion* 19 (1986) 43-59, and C. F. Davis, *The Evidential Force of Religious Experience*, (Oxford: Oxford University Press, 1989).

might start the various sections of an online environment with features of the world that are either problematic or wonderful or puzzling or disturbing. These would be common features in the human experience. The purpose of this exercise would be to relate the topic of the site to the conceptual schema and emotional disposition of the individuals visiting the site. The designer would be attempting to make a connection with the visitors or to make some appeal to the visitors and, therefore, we see again that this idea is analogous to the concept in William James' essay, "The Will to Believe" that the Christian option must be a living option and that the decision to believe or not to believe must be perceived to be momentous. An advanced organiser might also be constructed in terms of pointing out particular features of the world and making a direct link with the existence of God and the reality of God in the lives of believers. Thus one might, for example, point to the wonder of creation and ask whether this does not point to a creator; one might point to the pervasive sense of meaninglessness in contemporary society and ask whether this does not point to the lack of a spiritual aspect in peoples' lives.¹⁷

Having argued that the traditional proofs for the existence of God have been shown not to work, the philosopher J.N. Findlay writes that nonetheless these arguments cause him to ask questions about why there is something rather than nothing and whether the universe has not in fact been designed by a creator. This is despite the fact that, in the case of the question of why there is something rather than nothing, "*logic has taught me to look at such a question with the gravest of suspicion*". He continues, "*That anything should exist at all does seem to me a matter for the deepest awe*".¹⁸ Findlay's perspective is very similar to that of Peter Berger who points to what he calls prototypical human gestures as signals of transcendence.¹⁹ By signals of transcendence he means,

... phenomena that are to be found within the domain of our "natural reality" but that appear to point beyond that reality. In other words I am not using transcendence here in a technical philosophical sense but literally, as the transcending of the normal, everyday world . . .²⁰

These gestures are a middle ground, a midway point between the religious and

¹⁷ G. I. Mavrodes, *Belief in God: A Study in the Epistemology of Religion* (New York: Random House, 1970) 82-85.

¹⁸ Quoted in J. J. C. Smart, "The Existence of God," in *New Essays in Philosophical Theology* (ed. A. F. A. MacIntyre; London: SCM, 1955) 45.

¹⁹ P. Berger, *A Rumour of Angels* (Harmondsworth: Penguin Books, 1971).

²⁰ Berger, *A Rumour of Angels*, 94.

the secular. In terms of bridging a gap between two different worlds using advanced organisers, we can therefore see the potential value of using such gestures in a virtual space.

Scaffolding and Structuring Theological Content

Having put advance organisers in place that will serve to bridge the gap to the world of the non-believer, the theologian and instructional designer can now think in terms of the content of the virtual environment. In terms of understanding the attempt to bring about a shift in the non-believer's perception of reality, Mavrodes refers to the idea of being presented with an extensive conceptual framework within which one can make sense of one's life and he likens this to learning a new language. The theologian provides one with a sort of key.

... if some part of it makes contact with some element in our experience so that each one illuminates and makes sense of the other, then we will take a new interest in that theology. If it goes beyond this, if it serves to light up broad ranges of our experience so that we begin to see a kind of sense in our lives, then, perhaps, we will be more than interested . . . if the terms and doctrines provide a clue as to how to respond, and if, as we try that response, we find our experience continuing to make sense then we are likely to say that the key was a true one and that we also have heard God speaking to us.²¹

Wisdom articulates the nature of the shift in terms of a presentation of features that cooperate in favour of what the Christian wishes to be said. The presentation of the ideas and concepts and emotions are like the legs of a chair. They offer support and the idea is to induce a change in attitude rather than to force a conclusion.²² This process is significantly different from either reasoning or arguing and is commensurate with the notion of genuine conversation. One might present one's beliefs in terms of the ways in which they cohere with one's other beliefs or in terms of the believer's picture of the world.

Here is an idea that is commensurate with the instructional design principle of scaffolding and organising learning such that concepts are revisited, built upon, and considered in the context of a growing body of knowledge that becomes increasingly meaningful for the learner. Thus, the instructional designer will be considering ways

²¹ Mavrodes, *Belief in God*, 87.

²² J. Wisdom, *Philosophy and Psychoanalysis* (Oxford: Basil Blackwell, 1953) 157.

²³ M. K. Smith, "Dialogue and Conversation," *The Encyclopaedia of Informal Education*, <http://www.infed.org/biblio/b-dialog.htm> (2001) [downloaded 25/8/2005].

to structure the environment such that the presentation presents a picture to the non-believer. Thus, the relations between the different elements of the environment will not necessarily be logical in the sense of progression through a coherent body of knowledge. Rather, the presentation will be oriented around attempting to achieve an attitudinal or dispositional shift and in this context use might be made of simile and metaphor, contrasts and comparisons and, finally, repetition and reiteration. These “tools” can be subsumed within learning design principles that emphasise the necessity of structuring a learning environment.²³

A Shared Space

We believe that constructivism and the modified complexity theory will inform the instructional design in such a way that the virtual space allows for effective communication between Christians and non-Christians. We have been referring to a part of this communicative process as “conversation”. Quite clearly the word “conversation” has an everyday application. We use the word to refer to verbal exchanges and to non-verbal exchanges on a particular subject. Whilst the word “conversation” does have an everyday application that is readily understood, there is also a considerable amount of philosophical and theological literature concerning the nature and objectives of what is called dialogue; dialogue is often contrasted with conversation. However, we are in accord with Smith who suggests that too much is made of the differences between dialogue and conversation, that the word “dialogue” connotes a certain type of seriousness not appropriate for conversations that we have with our equals.²⁴

As a philosopher considering Christianity, the author is working from the assumption that Christians have a particular view of the world and a relationship with the Divine and that they find both the world view and the relationship valuable. Furthermore the author assumes that Christians believe this view of the world and this relationship to be potentially valuable for others. This entails that there is a purpose to the conversation that Christians have with non-Christians; Christians “would like” others to share in their view of the world. Initially, this notion of purpose seems to be somewhat at odds with the notion of conversation considered in the philosophical literature on the subject. Writing on conversation tends to emphasise that the purpose of conversation is to be fully open to the ideas of others and to arrive at the uttermost possibility of understanding. Thus, David Bohm writes that, conversation is, at a conceptual level, not teleological in the sense that there is no

²⁴ Smith, “Dialogue and Conversation”.

aim beyond the exploration of the topic in order to arrive at shared meaning.²⁵ Gadamer's writing on conversation contains a similar idea. He writes that,

Conversation is a process of coming to an understanding. Thus it belongs to every true conversation that each person opens himself to the other, truly accepts his point of view as valid and transposes himself into the other to such an extent that he understands not the particular individual but what he says. What is to be grasped is the substantive rightness of his opinion, so that we can be at one with each other on the subject.²⁶

Smith's understanding of conversation is that, "The concern is not to 'win the argument', but to advance understanding and human well being."²⁷ Therefore, the ideal model for conversation seems to be that, individuals, who all have their own conceptual schemas or their own ways of looking at the world, come together in an open and honest attempt to truly understand what each has to say. Thought should be present in the conditions of its existence so that presuppositions, values and prejudices can be examined.²⁸ If agreement is reached, then that agreement will rest upon the participants in the conversation arriving at a common conviction.²⁹ This means that agreement is not an aim of conversation as such; rather it is a potential tangential effect of the exploration of meaning.

At first sight it would appear that the aim of bringing others to share in the Christian world view is at odds with the notion of conversation as a non-teleological and non-purposeful activity. However, this is not in fact the case; we believe that it is through sharing meaning and coming to a common understanding that Christians are most likely to bring others to see the value of their world view. Conversation provides for the possibility of the Christian community engaging with others in order, minimally, to arrive at mutual understanding and respect and, possibly, to arrive at a position of agreement concerning a particular view of reality and of our place within that reality. Under these conditions, then, there is the possibility that the "rightness" of the Christian world view will become apparent to others. In the next section of this paper we will suggest that Christian conversation can have the aim of "bringing others to see" the world as they see the world.

²⁵ David Bohm, Donald Factor and Peter Garrett, "Dialogue: A Proposal," http://www.muc.de/~heuve1/dialogue/dialogue_proposal.html, (1991) [downloaded 25/8/2005].

²⁶ H. G. Gadamer, *Truth and Method* (New York: The Crossroad, 1989) 385.

²⁷ Smith, "Dialogue and Conversation".

²⁸ Bohm, "Dialogue: A Proposal".

²⁹ Smith, "Dialogue and Conversation".

Synchronous and A-Synchronous Conversation

Conversation in a virtual world can take two distinct forms; it may be synchronous or a-synchronous. An example of a synchronous conversation would be having a conversation in a chat room. An example of a-synchronous conversation would be using a message board. In terms of encouraging interaction at appropriate points in the presentation of the subject matter of the environment, the instructional designer needs to build in interaction where it will be most useful in terms of the objectives of the particular environment. One example might be posting a topic for discussion in the early pages of the online environment in order to examine particular assumptions and prejudices – both those of the Christian and the non-Christian. Wisdom makes a particular point that is of interest to the notion of coming to a conversation in order to examine assumptions and prejudices. He writes that bringing a person to see that God exists may involve removing bad unconscious reasoning on the part of the subject. This might, for example, take the form of pointing out to a person that their aversion to Christianity is based on a prejudice. Removing bad reasoning might take the form of suggesting that believing in God does not have to do with having reasons. There are any number of options here; the point is that this “pointing out” is a part of an overall strategy that is meant to bring about a shift in the person’s perception of the world.

Conclusion

We have attempted to show not only that instructional design principles are valuable for creating an online Christian presence but also that they are necessary and that instructional design is capable of taking key Christian ontological and metaphysical concepts into account. We recognise that considerably more work needs to be done to develop a detailed theory.

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Bible College of New Zealand, Private Bag 93104, Auckland 1231, NZ
Fax +64 9 836 7801 email: nicolahc@bcnz.ac.nz
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