Research Note

The Matrix Ate My Baby: Play, Technology and the Early Childhood Subject

Andrew Neil Gibbons
New Zealand Tertiary College

Abstract

This research note summarises the doctoral thesis “The Matrix Ate My Baby”. It explores the values and beliefs that underpin assumptions about the benefits and costs of playing, of technology, and of early childhood education. It draws upon the philosophical contributions of (in particular) Heidegger, Foucault, Lyotard and Derrida in problematising non-negotiated and universal theories of play and education. Furthermore, it engages with a positive critique of the philosophy of technology in thinking about diverse and meaningful practices of supporting the play of the child.

Key Words: Technology, theories of play, philosophy

Introduction

Who knows? Perhaps in the future some level of computer literacy may be required for graduation from preschool or kindergarten (Hughes, 1998, p.109).

The observation that children are increasingly (but by no means widely) expected to have some form of measured computer literacy by school age led to the development of my doctoral thesis, The Matrix Ate My Baby: Play, Technology and the Early Childhood Subject. The thesis grew out of an interest in the impact of ‘technology’ on the experiences of ‘being’ a child and how the increasing use of, for instance, personal computers and digital cameras might impact on the child’s play.

During the early years of the project the level to which ‘being’ and ‘technology’ were indicative of the scope of the thesis was somewhat marginal to the purpose of critical analysis of the research of the benefits and/or costs of drawing the child into particular relationships with digital technologies. The question had been very much one of ‘how is play affected by new technologies?’ reflecting that the majority of literature explored how computers enhanced or endangered a child’s play.
Situating the Thesis in the Contemporary Research Landscape

Research, establishing views for and against information and communication technology (ICT) in early education, predominantly establishes particular truths of the play of the child through gathering data that reinforces what is assumed to be best practice in early education, with little critical reflection about these assumptions and how the truths of childhood (and technology) are constructed. While empirical researchers generally accept that they can at the moment “only guess at the long-term effects of computer use on a young child’s development” (Armstrong & Casement, 2001, p. x) such admissions tend to encourage the gathering of more uncritical data in the belief that education and development experts should know more about child development, and in particular how children learn to play (to learn) with new technologies.

‘The statistics’ – that body of numbers that paints the landscape – give form to assumptions about the relevance of exploring the issue of the child’s play with technology, revealing that children are rapidly entering new and complex relationships with technology (see for instance Armstrong & Casement, 2001; Dumont, 2001; Lindstrom, 2003; Kapur, 1998; Lynch & Warner, 2004; Thouvenelle et al., 1994). The same statistics often generate contradicting accounts of the value of playing with computers. Furthermore, many claims are made for the need to fill a perceived dearth of empirical facts regarding the outcomes of a child’s play with ICT (see for example Brooker & Siraj-Blatchford, 2002; Hughes, 1998).

Assumptions regarding the benefits of early exposure to a range of new technologies are transmitted through contemporary public policy that emphasises the importance of introducing children to DVDs, digital cameras, cellular phones, and computers, and the importance of having a structured and regulated framework for the organisation of appropriate ICT experiences within the early childhood curriculum (Bolstad, 2004; Thomson, 2005). For instance the Ministry of Education commits early education to the ICT world through the provision of NZ$16 million (over four years) in the 2005 budget for the ‘upskilling’ of educators. Educators can then, it follows, harness the assumed potential of digital technologies in adding value to the education of young child (Thomson, 2005).

No longer can it be stated that “little research has been conducted into the use of ICT to enrich learning in early childhood settings” (Patterson, 2004, p. 25). ICT is arguably a hot topic in research, and the media; and in contemporary policy that emphasises the importance of strategies for ICT. The play of the child is then essentially linked to technology. There are, however, contending interpretations of what it means to suggest that there is an essential relationship between the child’s play and technology.

Through the process of attempting to delimit the scope of the thesis it became clear that it was problematic to consider some toys as more technological than others. Furthermore the critical investigation of technology led to deeper reflections of not only technological objects but technological practices, questioning the nature of technology, and the role of technology in constituting the child and adult subject as particular kinds
of players (Marshall, 1999). It is accepted that play, childhood, adulthood and education are not easily defined concepts – and nor should they be easily defined. While play’s ‘ambiguity’ (Sutton-Smith, 1997) appears to be a catalyst for many attempts to determine its nature, for this thesis it is beneficial to maintain a sense of ambiguity when questioning ‘how does technology give an essence to being?’ and to refrain from delimiting some final and transparent conclusion regarding play and technology. Hence the thesis has a strong philosophical flavour.

A Philosophical Work

The philosophical investigation drew upon the work of influential critiques of technology including Ellul, Bowers, Heidegger, Feenberg and Dreyfus, and explored the nature and purpose of education through an understanding of the work of Foucault, Lyotard, Derrida, and Arendt. The work of the latter ‘group’ have had an arguably strong influence in contemporary critiques of early childhood education both in New Zealand and elsewhere. However the work associated with the philosophy of technology has rarely been used in considering early childhood education.

In this thesis, where the metaphor of the matrix is employed to determine the relationship(s) between child and technology, the philosophy of technology provides tools with which to consider: (1) the nature and purpose of play with the toy; (2) the nature and purpose of education in the early years; and (3) the essence of play theory and the construct of the playing child as a technology.

The metaphor of the matrix reflects a strong and critical interest in science fiction. The work of Philip K Dick, Huxley’s *Brave New World*, Butler’s *Erewhon*, and the movie *The Matrix* are employed to emphasise the conditions in which the child’s experiences of play and technology are situated. Dick asks us to question our freedom and our knowledge of ourselves as individuals. Huxley provides an amazingly astute account of the will to progress and its social and genetic implications for children, for education and for human relationships in an advanced technological ‘leisure society.’ What is more, he provides an account of what happens on the outside of such a society. Butler’s portrayal of a young man’s journey into a utopian society similarly challenges the progress of technology and its social ramifications. He provides a very complex exploration of the rejection of advanced machine technology yet challenges the reader to question distinctions between human and machine – at the core Butler challenges the reader to justify being human as other than being machine. And finally the Matrix emphasises that our perspective of reality is strongly shaped by our relationship to technology (perhaps even that our understanding of the world is shaped for technology).

The literature above encourages rich philosophical contemplation, and illustrates the value of drawing philosophy into the questions of technology, play and early childhood education. Such a philosophy explores the discursive boundaries that construct early education as a sector, that constructs the individuals that work and/or play within these boundaries, and that constructs the technologies through which the child plays with and learns about the world. The thesis draws upon this philosophical questioning to engage with the development of toys for the play room, of the advances of computational and
cybernetic technologies, of the interconnections between cybernetics, epistemology and Piagetian constructivism, and of the child’s role as consumer in a technological society.

In addition the thesis proposes thinking differently about not only the child’s toys, but also those of the ‘expert’ who claims to know and prescribe child’s play. Drawing the child’s play, and in particular the child’s play with certain new technologies, into the domain of the expert, appears to suggest there might be something wrong with child’s play, perhaps not that it is bad, but that it could be better. Child’s play must be progressive and inventive – to not be these things would be a concern. Indeed, progression and efficiency have been shown to legitimate, for much of the research analysed in this thesis, the construction of an understanding of play and the playing subject.

The baby born into and being in the world, is constructed to meet the needs of technology. The potential of the playing child is enframed by an understanding of the contribution of child’s play to the progress of society. In this enframing, or *Gestell* (Heidegger, 1977), the act of gathering together a particular belief regarding play is obscured by claims to the calculated truth of the playing individual. The obscuring of the rationalisation of play leads to a forgetting of the creative and poetic acts of gathering, acts that are valued for the meaning they provide in being in the world (Heidegger, 1971; Nietzsche, 1979).

**Style and Limitations**

The thesis does not gather data; instead it engages with theory and is itself a theoretical work. It is therefore limited in its not discovering how ‘real people’ experience new technologies (including theories of play). The thesis also has limited applicability in terms of how many children actually use new technologies in the early play years. For instance in 2002 approximately five percent of the world’s population used the Internet (Dertouzos, 2002). The other 95 percent, however, are judged by a five percent that dominates the development of global policy regarding technology. Similarly, while many children around the world may not experience regulated provision of education, nations are expected to develop domestic policies that reflect dominant assumptions regarding the child’s right to play and receive an education – demanding that some form of pre-compulsory programme provision be set up in line with policy of institutions such as the World Bank in order to enhance a nation’s international credibility.

In addition it is untenable to suggest that all children and adults will be transformed into the theoretical simulacra of universal play theory. People interpret and use technologies in different ways, and have different abilities and styles of learning (Feenberg, 1999): teachers situate what they learn in tertiary education institutions within their own contexts (May & Middleton, 1996); centres “are dynamic sites: spaces in which contradictory purposes, organizational tensions, conflicting wills, opposing agendas, and more-or-less spontaneous and unintended events and processes play out” (Goodson et al., 2002, p.8). Children, families, communities, societies, cultures and nations are then by no means homogenous in their construction and in their interpretation of policy.
and theory. They are formed by a complex interconnection of spatio-temporal events – events that in some way provide us with a distinct fingerprint. The ways in which we interpret and give meaning to our fingerprints is, however, an experience predominantly shaped by the construction of truths about the world. And these truths are the products of discourse.

Conducting an examination of the discourse should not be interpreted as an argument that children and adults “have passively absorbed what policy-makers and teacher-educators have told them” (May & Middleton, 1996, p.74). It is an argument that children and adults are expected to passively absorb what policy-makers and teacher educators tell them, and it is an exploration of spaces to actively engage with a wider range of values and beliefs. Much contemporary theory and policy tends to interpret the purpose of education in such a way as to disseminate key ideas in non-negotiated forms (May, 2000). That the community of researchers and practitioners interested in education before school in New Zealand does promote a healthy engagement with its values and responsibilities – guided by frameworks including Te Whaariki, the early childhood service curriculum document (Ministry of Education, 1996) – is interpreted as encouragement to engage in a problematisation of the contemporary manifestations of play theory and of the deployment of new technologies in early education.

**Problematisation**

*The Matrix Ate My Baby* argues that the child is not free to play – the child is programmed to play based upon an understanding of the child as an organic information-processing player. The programming of the child player is emblematic of an imperative to know the child that has inspired a large and diverse body of literature regarding the nature of childhood and the purpose and methods of best education. In particular, the use of information technologies to prepare the child for an age of information has become a popular interest in research of the child as an educational player.

The purpose of this thesis is to explore the programming and control of the child and adult in order to open up spaces to critically think about play as a dominant contemporary metaphor of childhood. The thesis problematises the domination of scientific theory in claims to an expert knowledge about play, and advocates for a thinking about play that acknowledges difference. Through reading the philosophy of technology and engaging with influential metaphors in science fiction, the notion of any distinctions between technology and play are troubled.

In this sense then the thesis problematises the notion of play and its uses in early childhood education. The purpose of problematising a knowledge of child’s play is to draw out the assumptions that are uncritically accepted in the transmission of value regarding child’s play. Problematisation is, however, not intended as a negative critique. Rather, problematisation of assumptions regarding play provides possibilities for understanding how play has come to provide meaning within different contexts – the problematisation is an offering of a wider understanding of what it means to play.
Ailwood gives further substance to these ideas, similarly employing the metaphor of the matrix:

> The establishment of various matrices of play has been central to the production and rationalisation of young children. These matrices are excellent examples of thought made rational, technical and practical. In other words, they provide a highly effective and deeply practical means of managing play in early childhood (Ailwood, 2003, p.295).

A knowledge of childhood provides the normalised spaces for the child’s experiences of being (Hultqvist, 2001). A matrix of discursive relationships – in the sense of bodies of knowledge, sets of assumptions that represent values and beliefs associated with the nature and purpose of being a child – constructs the spaces of childhood. The concepts associated with childhood are technologies that clear the spaces in which the child is observed, known (ibid.) and educated. Furthermore, the thesis contends that theories of play are technologies that govern complex social relationships.

The thesis does not however suppose that it is wrong to clear spaces in which childhood is observed. Heidegger (1997) in particular argued that this is the very essence of a technological relationship with the world. The concern for Heidegger is that one might forget the act of clearing and assume some essential and universal nature to childhood. Hence a philosophy of technology offers rich exploration of the multiple relationships that are observed between child, society and play. Consistent with the contemporary understanding of society as dynamic, contextual and negotiated, this thesis argues that it is important to engage with the meaning of technology and the many contexts in which technology gives meaning to being human.

For the early childhood educator, the thesis argues for a philosophical play with the construction of technologies, whether digital, theoretical or political, that attempt to give finality to the practice of being an early childhood educator. Given the contemporary shift to institutionalisation of teacher education, the thesis supports the role of the mentor (playing in the field) as central to keeping the spaces of childhood open for play.

**References**


ABOUT THE AUTHOR

Andrew is a lecturer at the New Zealand Tertiary College. He has a certificate of journalism and a diploma of teaching in Early Childhood Education, and has recently completed his doctoral studies at the University of Auckland. His interest in the philosophy of education developed out of critical reflections upon his experiences working with children with special needs, and a sense of the importance of challenging the construction and transmission of knowledge about the world. Andrew is particularly interested in promoting a philosophy of early education in New Zealand. This passion’s most recent manifestation includes contributing to the development of the NZTC publication He Kupu, exploring issues associated with the delivery of distance education. In addition Andrew’s doctoral research forms the basis of a book, forthcoming with Sense Publishers.