Chapter 3
Liminal Learning: A Theoretical Framework for Reconceptualizing the Digital Space

L Johnson Davis
San Diego State University, USA

ABSTRACT

Current educational systems have been built around the faulty metaphor of industry in which human learning is equated to machine learning or learning that is computational, linear, and void of meaning. This metaphor has been extended to how digital systems and spaces are utilized in the classroom. Recent research and conceptual frameworks built upon human learning from a metaphoric mind perspective (learning built upon meaning making and experiential connections within a social matrix), may work toward recontextualizing the use of digital technologies as methods for understanding individual experience and documenting human learning at work. A novel conceptual framework describes the digital space as a liminal learning space in which the learner enters to co-construct meaning within a social matrix, which may be evidenced by current digital artifacts. Implications for contextualizing digital technologies as liminal learning spaces are explored.

INTRODUCTION

In the 1990s television space series, Star Trek: The Next Generation, Data, played by actor Brent Spiner, is a childlike artificial life form struggling with what it means to be human. Throughout the course of seven seasons, Data’s study of humanity is a meaning-making endeavor fueled by inherent curiosity. As he lives his “life” aboard the starship, he ruminates on the nuances of what it means to be flesh and blood—reflecting on human interactions, human emotions, and the human desire for connection through fellowship and love. Data, a seemingly unemotional automaton, is on a prototypical scientific quest for knowledge; embedded in a community that provides him with ample observational data to catalog and analyze “human” qualities. Through his rich dialogue, he observes and questions the actions and behaviors of those he lives with:

DOI: 10.4018/978-1-5225-2101-3.ch003
Commander Riker’s easy-going manner and sense of humor is fascinating to me. I believe it to be one reason he is so popular among the crew. It may also be partly responsible for his success in matters of love…The need for more research is clearly indicated. (Apter, Moore, & Wiemer, 1991)

He recognizes and yearns for human feelings with which to make more concrete decisions:

I have often wished for the sense that humans call intuition, or instinct. Since Vulcans are incapable of lying, I must accept the Ambassador’s explanation as the truth. But I would still prefer a ‘gut feeling’ to back up this conclusion. (Apter, Moore, & Wiemer, 1991)

And, although mystified by many human emotions, he understands completely the human desire to be loved and the need for friendship:

I never knew what a friend was until I met Geordi. He spoke to me as though I were human. He treated me differently from anyone else. He accepted me for what I am. And that, I have learned, is friendship. (Apter et al., 1991)

Data, is, in fact, far from the emotionless android that he believes himself to be. On the U.S.S. Enterprise bounding through space, Data participates in an ontogenetical quest, one pursued by both fictional and nonfictional characters alike, to discover the “who am I.” Data, who looks at his world with childlike wonder and seeks understanding, who practices life and adapts to new information, who seeks meaning of the self in relation to others, and who does not separate living from learning, is, at his core, inherently human.

The question of what it means to be human and how we seek to gain a further understanding of our human self is framed eloquently by Gene Rodenberry’s quirky ghostly skinned creation. Data is, in essence, like us; he watches the drama of human life, love, and the pursuit of happiness like a theategoer watching a play. He is removed but at once involved in the action unfolding on stage and, in doing so, enters a space where he is neither android nor human but something else altogether. Data’s search, our collective search for meaning, may not seem at all relevant in discussions of deconstructing the education-industrial complex’s pervading influences on how and what we learn, but it is, indeed, inexorably intertwined. For deconstruction requires that we disassemble frames, peel back layers, and challenge the very concept of what human learning is. We must do this, as Data did, to not only seek the truth about who we are as a human species but, most importantly, to begin a reconstructive process that will help us chart a course toward a future in which we use our technologies as partners in the co-construction of our meaning making rather than as dominators of our very thoughts, desires, and dreams.

These two distinct futures underscore an inherent duality that has existed and has framed philosophical and psychological conversations around human thinking and, ultimately, human potential for over two millennia. At one end lies the computational theory of the mind fueled by philosophers and philosophies that have laid the foundation for linear thinking models in which the human mind is procedural, algorithmic, logical, and systemized. Cartesian concepts of a mechanized mind, Darwinian ideals of impersonal natural selection, behaviorists’ notions of uncontrollable instincts, artificially programmable models of human intelligence, and data scientists’ conquest of knowledge through “big data” provide the solid footing for defining humans as predictable and programmable machines. This mechanistic framework is woven through all of our societal systems, framing the human experience as one that can be narrowed
Related Content

[www.igi-global.com/article/collaborative-governance-matters-to-e-government-interoperability/122570?camid=4v1a](www.igi-global.com/article/collaborative-governance-matters-to-e-government-interoperability/122570?camid=4v1a)

E-Government Portal Updates' Evaluation: A Comparative Analysis
[www.igi-global.com/article/e-government-portal-updates-evaluation/121536?camid=4v1a](www.igi-global.com/article/e-government-portal-updates-evaluation/121536?camid=4v1a)

Critical Success Factors in E-Democracy Implementation
[www.igi-global.com/chapter/critical-success-factors-in-e-democracy-implementation/215862?camid=4v1a](www.igi-global.com/chapter/critical-success-factors-in-e-democracy-implementation/215862?camid=4v1a)

A Model of European Medicine Agency (EMA)'s Decisions on Human Medicines
[www.igi-global.com/article/a-model-of-european-medicine-agency-emas-decisions-on-human-medicines/143726?camid=4v1a](www.igi-global.com/article/a-model-of-european-medicine-agency-emas-decisions-on-human-medicines/143726?camid=4v1a)