Chapter 16

Worlds in the Making: Embedded Post-Constructivism, Katamari-Style Learning, and the Secret Life of Software

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ABSTRACT

This chapter introduces and discusses a thesis related to perceived changes in the ontological status of constructivism, and the opportunities and challenges the changes pose for educators. Recommendations are made about how cultural-elders in particular can address the challenges successfully, in order to take full advantage of the opportunities—one of which is the opportunity to use immersive 3D virtual worlds in our collaborative work with students (who have already internalized the new/changed conditions) to facilitate the teaching and learning of LARGE internal matters including but not limited to dispositions and attitudes. The chapter explores and mines the uses and significance of the immersive 3D console-game Katamari in a variety of ways and for a variety of purposes, and a focused analysis and comparison of reproductive processes within constructivism and software is also undertaken to understand the full extent of their ultimately comingled, and hence exponentially reproductive, ontology.

INTRODUCTION

Indeed, and as astonishing as it may seem, constructivism has triumphed. The current world is saturated with it. We cultural-elders might have preferred to deliver this news ourselves, or at least have it delivered to us in reasonably resplendent, delightful yet measured Newtonian-scale and fashion, via pronouncement from horseback or hoisted palanquin perhaps, or via a thoughtful monograph so that we might then pass the important news on to students! Instead the news has arrived in electronic-scale in the form of a virtual sticky ball rolling around in a computer-game environment that adroitly and experientially represents

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the pervasive software-enhanced embedding of constructivism in everyday life. WHO WOULD HAVE THUNK IT? But there it is. The hard-earned concepts of cultural-elde rs have become the soft-earned experiences of youth. Yet we all have much to look forward to, and much to learn from exploring how the triumph of constructivism took place.

In this chapter I explore in particular the internal mechanisms involved in transforming constructivism from a theory-and-practice formation associated with schooling to an experiential-knowledge formation embedded in everyday life. For me this transformation is breathtaking, epochal. I mean what began as a relatively arcane branch of philosophy (with a lineage often traced back to Giambattista Vico in the 16th century) and then later became a critically acclaimed yet practically marginalized theory of learning (articulated by the likes of John Dewey, Jean Piaget, and Lev Vygotsky) has become in our era a pervasively promulgated, taken for granted, matter of fact, post-constructivist fact of life. YES, the transformation involved software—or more precisely the “marriage” (1992) of technology and constructivism that David Perkins calls such insightful attention to—but how so? What are the mechanisms that enable such amazing things to happen to theories when they are conjoined with software? It could be argued software only played an external role in the transformation to post-constructivist conditions, by providing a better system for distributing constructivist ideas. But my view is that software also played, and continues to play, a deeper role—a role that is indirect, yet significant, in the internal dynamics of knowledge-production, reproduction, and recombination. My focus in this chapter is on articulating and exploring these internal dynamics and their interrelations and manifestations.

I utilize the immersive 3D computer game Katamari as a quintessentially representative and evocative object of study, useful for articulating the above internal dynamics and their external manifestations within the new post-constructivist era of education. At first glance Katamari may appear to be an unlikely candidate for such emblematic status. I mean, as already noted, the game basically features a sticky ball rolling around in a virtual environment packed with objects, adhesively picking up some objects, bouncing off others, growing in size as it rolls. But if you imagine a snowball-effect with positive rather than negative connotations you are close to grasping the game’s powerful internal logic. Then if you imagine that the smaller objects it picks up are bits of content or components of a skill that are relatively easy for learners to ‘pick up on,’ and imagine the larger objects as more difficult or complex matters to learn, you are well on your way to understanding the power of Katamari as a metaphor for current post-constructivist conditions and knowledge-construction practices. In the present context (the LARGER WORLD as well as the text-based virtual world of this chapter) Katamari represents post-constructivism incarnate or, in current parlance—including enlarged all-caps and gratuitously multiple end punctuations—it is BEAST!!

The game uses size, weight, and surface area to determine if an object will stick to the katamari. This allows slender objects, such as pencils, that are wider than the katamari, to be picked up, and these will alter how the katamari rolls until more objects are picked up. Animals such as cats will chase the katamari, knocking things from it, but once the katamari is great enough, it will scare the animals away, and they can be rolled up once they are chased down. As objects stick to the katamari, the katamari will grow, eventually allowing objects that were once hurdles to be picked up, and creating access to areas that were formerly blocked. In this manner, the player might start the game by picking up thumbtacks and ants, and slowly work up to the point where the katamari is picking up buildings, mountains, and clouds. (Wikipedia, 2004)
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