

Ratava's Line: Emergent Learning and Design Using Collaborative Virtual Worlds

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1 Introduction

Ratava's Line is an online, 3D virtual world fashion and interactive narrative project created collaboratively by students at both the Fashion Institute of Technology (FIT) in New York City and at Interactive Arts at Simon Fraser University (SFU) in Vancouver, Canada, using emergent, collaborative 2D and 3D systems. This distance learning project, developed over two months and culminating in an online event in multiple, remote locations, integrated three key design elements: the translation of original 2D fashion designs from FIT students into 3D avatar space; exhibits of artwork of student and professional artists from New York City and Vancouver in virtual galleries; and creation of an interactive narrative "fashion cyber-mystery" for online users to participate in and solve in a culminating, cyber-physical event.

The overall project goal was to explore how online collaboration systems and virtual environments can be used practically for distance learning, fashion and virtual worlds design, development of new marketing tools including virtual portfolios, and creation of cross cultural online/physical events. The result of this process was an interdisciplinary, cross-institutional, international effort in collaborative design in virtual environments, and a successful exercise in emergent, collaborative distance learning.



Figure 1. One of several 3D 'virtual fashion-cyber mystery show' spaces, here before the virtual crowds arrived. These models "wearing" original fashion designs are click-able, revealing additional 3D galleries of the designers' work.

Ratava's Line is a collaborative design / e-learning research project between two university professors/researchers and their students from two different countries working with and about online virtual tools for fashion and virtual world design. The project began in March 2002, when Daria Dorosh, Fashion Design Professor at FIT in New York, and Steve DiPaola, Computer Graphics Professor at SFU in Vancouver, Canada, after being introduced by virtual worlds expert and FIT project facilitator Galen Brandt.

2 The Project

Initially, original fashions were designed and drawn by Dorosh's FIT students using traditional 2D methods. DiPaola's SFU students translated these drawings into 3D, designed and modeled avatars, and placed the virtual garments on the avatars using a variety of software and tools. SFU students then designed a fashion world comprised of multiple 3D environments and placed the "virtual mannequins" in-world. Finally, students at both schools collaborated on an interactive narrative - a fashion cyber-mystery that included fashion avatars and additional narrative characters to take place in-world at a culminating event for students, faculty, press and outside participants. Students collaborated on all aspects of character design, story writing, and creation of an international, online, two-city event. The event included a meta-look at what is real and what is virtual in the fashion industry, computer graphics, media events, and the collaborative process itself. In addition, students and outside facilitators collaborated to create virtual portfolios of the students' work in the form of virtual galleries for presentation to faculty and prospective collaborators, and clients..

Collaboration occurred entirely via virtual online systems – no one from FIT or SFU (including the faculty) ever met physically during the project. The researchers, looking to understand how technology can help provide new design and learning skills, guided and documented the students as they learned to work with new design and learning skills. The collaboration took place across a range of environments -- 2D, 3D, physical, virtual and live -- and ultimately across a range of media: fashion show, art show, interactive narrative and game, and live performance. Students, faculty, and outside and industry facilitators collaborated as a distributed international team, exploring the full range of interdisciplinary communicating, thinking, working, negotiating and presentation of results. Adobe Atmosphere was used as the web 3D client and builder. The school collaborated closely with the Adobe Atmosphere team whose product was in beta at the time (thus the software itself was emerging).

The emergent process used in Ratava's Line was modeled on that used in industry, in which a proof-of-concept rapid prototype is conceived, developed and brought to market using an iterative, collaborative process. This process proved ideal for the project and demonstrates its appropriateness in a pedagogical context. Indeed, it opens the door for new ways of looking at and constructing curriculum as a series of project-based collaborative iterations on cross-cultural themes and disciplines.

See <http://www.sfu.ca/sfufit> for additional information and to enter the design worlds discussed here.

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