#### **Report TIDSE 2003**

#### **Technologies for Interactive Digital Storytelling and Entertainment**

March 24 - 26, Darmstadt http://www.zgdv.de/TIDSE2003/

#### Monday (location Jagdschloss Kranichstein)

#### **Keynote speech**

Chris Crawford

The speech was about fundamental problems in Interactive Storytelling, especially the divide between artists and scientists. First these two groups of people needed to learn to talk to each other. Next they needed to talk to business people. Only if all three worked together could storytelling and entertainment, especially games, have success on the market.

The speech was very entertaining; Chris Crawford was like an actor on stage. In the discussion there was critique on how he painted a very black & white view of the world, it isn't like that anymore. He replied that the talk should rouse the listener to fill in the gray.

#### Session: Storytelling

## 1. Story, Plot and Character Action: Narrative Experience as an Emotional Braid

S. Nath, Central Saint Martins College of Art & Design Southampton Row, London, WC1B 4AP, UK http://www.synesis.tv

Very complicated talk on narrative. The few things I understood were that the storyteller controls the audience so their behaviour can be determined in advance, and that it is important to monitor the development and patterns of emotions in the course of the story.

#### 2. Player-Protagonist Motivation in First-Person Interactive Drama

A Framework for Aristotelian Interactive Drama Jeff Rawlings and Joe Andrieu, Realtime Drama, Inc. 2211 Channing Way, Santa Barbara, CA93109 rawlings@aol.com, joe@andrieu.net

They presented a framework for a game in which the player is in a virtual world and reacts to situations presented to him. Their MAO is "Entertain, Inspire and Motivate", motivation being most important. Their goal is to align the player motivation with the protagonist motivation, therefore they need to find out the player motivation before the story in the game can unfold. They do this by observing the player's interaction. Standard example: player is walking up the street, cat comes up and rubs against player's leg. Player can ignore cat, bend down and stroke her, or kick her. Any of these actions would influence the further development of the story. However, they

have no idea yet how to convey to the user what interaction possibilities he has and how he can act them (my question!!).

Session: Games

## **3.** Game Mechanics: Describing Computer-Augmented Games in Terms of Interaction

Sus Lundgren & Staffan Björk, The PLAY studio, The Interactive Institute Hugo Grauers Gata 3, 412 96 Göteborg, SWEDEN http://www.playresearch.com

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They tried, tested and analysed a lot of games for the basis of their research. They have identified different types of games based on their interaction mechanics, which they call the "game mechanics". In their future work they want to elaborate on the descriptions of the game mechanics. It seems like their research is very user oriented.

#### 4. Is every kid having fun? A gender approach to interactive toy design.

Marcelle Stienstra and Jettie Hoonhout, Philips Research Laboratories, University of Twente

Prof. Holstlaan 4, 5656AA Eindhoven, the Netherlands, +31 40 274 5133 marcelle stienstra@hotmail.com, jettie.hoonhout@philips.com

Jettie presented the result of an experiment about new forms of interaction with the computer. Incentive for this research was the belief that one of the main requirements for a game to be fun for kids is that it is active. To replace mouse and keyboard, they designed 3 toy-like interaction devices and tested with children which they enjoyed most. They showed videos of how the kids played a computer board game that was on the screen, and interacted with it using these devices.

#### 5. The Quest Problem in Computer Games

Susana Tosca, Department of Digital Aesthetics and Communication, IT University of Copenhagen

Glentevej 67, 2400 Copenhagen, Denmark tosca@it-c.dk

Susana provided a definition of the term "quest". She showed examples of games whose game mechanics (see talk 3) were quests, developed by students at the IT University of Copenhagen. She also talked about the player-protagonist problem as in talk 2.

#### **Tuesday (Location ZGDV)**

Session: Storytelling

6. IDtension: a narrative engine for Interactive Drama

Nicolas Szilas. Idtension

1, Rue des Trois Couronnes, 75011 Paris, France +33 1 43 57 35 16 nicolas.szilas@libertysurf.fr

Nicolas wants to develop a concrete interactive drama. Once this is accomplished, it can be generalized, but first he wants a functioning interactive drama based on a good narrative model. This does not exist yet, so he is developing a narrative model and describing it in his paper.

#### Session: short papers

#### 7. Children as Designers of Full-Contact Poetry

Anindita Basu and David Cavallo, MIT Media Laboratory 20 Ames St., Cambridge, MA 02139 {anindita, cavallo}@media.mit.edu http://learning.media.mit.edu

Anindita described a workshop she held with teenagers about making full-contact poetry. The Squeak environment used for creating full-contact poetry, the web server is called a Swiki. Poetry in this environment can be anything, and can contain sounds and images. The teenagers were very shy to produce anything at first which the others might laugh at, but after a while they did.

### 8. Three Angry Men: An Augmented-Reality Experiment in Point-of-View Drama

Blair MacIntyre1, Jay David Bolter2, Jeannie Vaughn2, Brendan Hannigan1, Maribeth Gandy3, Emanuel Moreno2, Markus Haas1, Sin-Hwa Kang2, David Krum1 and Stephen Voida1

1 College of Computing, 2 Wesley Center for Media Center, School of Literature, Communication and Culture, 3 Interactive Media Technology Center Georgia Institute of Technology, Atlanta, Georgia, USA 30332

One of them presented a story in an augmented reality environment. The reality is a room with a round table and chairs around it. The augmented reality are characters who sit in the chairs and discuss with each other. The user can sit in the chair of anyone of the characters. When looking through the head set he can see the other two from that point of view. For example, the "Three Angry Men" are an unreasonable white man, a pacifying white man and a black man representing a minority. From the point of view of the unreasonable man, the other white man appears weak and indecisive in his demeanour, and the black man uneducated and primitive. From the point of view of the pacifying man, the unreasonable man looks aggressive and foolish, and the black man calm and superior.

The reasons for choosing AR before VR are

- 1. The place itself could be of importance, so that the augmented reality adds to the experience of being in that place.
- 2. The world itself is "free", it doesn't have to be built.

#### 9. Distributed Storytelling for Narrative in Spacious Areas

Peter Hoffmann, Michael Herczeg, IMIS Institute for Multimedia and Interactive Systems

Willy-Brandt-Allee 31a, Media Docks, D-23554 Lübeck {hoffmann, herczeg}@imis.mu-luebeck.de

Peter Hoffmann presented a concept for adapting navigation through and information about an exhibition to the user's interest. The current state of the art are POI's (points of information), which show the same information to everybody. The goal is a nomadic information system. That is however too expensive and big a project. Instead, he based the concept on NOI (net of information). As a user moves through an exhibition, he can access the net from various points. Based on the user's path he gets information that is probably most interesting to him. Users could be identified with a patch they get with the entrance ticket.

#### Session: Storytelling

#### 10. Design of the HEFTI Storytelling Engine

TeongJoo Ong and John Leggett, Department of Computer Science, Texas A&M University
College Station, Texas, USA
{teongjoo, leggett}@cs.tamu.edu

This was quite complicated but probably interesting as comparison to Cuypers.

# 11. The Combination of Instructional and Narrative Models for e-Learning Inga Schön, Peter Hoffmann, Michael Herczeg, Institute for Multimedia and Interactive Systems, University of Lübeck Media Docks, Willy-Brandt -Allee 31a, 23554 Lübeck, Germany {schoen, hoffmann, herczeg}@imis.uni-luebeck.de

Inga Schön explained a concept for improving learning by wrapping the data in a story. The theoretical constructs used are the ARCS model, attention, relevance, confidence, satisfaction, and the Aristotle Narrative model. This talk had a very critical discussion session, because nothing new was presented. It was not shown how educational material could indeed be disguised in a story, or how users could interact with it. One obstacle was probably that the presenter had difficulty with English.

## 12. Integrating Plot, Character and Natural Language Processing in the Interactive Drama Façade

Michael Mateas 1, Andrew Stern 2 (co-authors listed alphabetically)
1 Dept. of Computer Science, Carnegie Mellon University, 2 InteractiveStory.net
michaelm@cs.cmu.edu, andrew@interactivestory.net

Andrew Stern presented a demo of a game. In the game, the player was invited to the home of a couple he had been friends with some years ago. There is no virtual figure in the game world to represent the player. The view on the screen is as though the player were right in the middle of everything. He can talk to the two characters by typing a line. The characters react to what the player says. The game is programmed so that whatever happens, conflict arises and the two characters start arguing. The player can influence them with his comments and change the outcome of the evening. The story feeds from a large library of complex behaviours, which they call "story beats". This was one of the few tangible projects that showed what the goal of their research is.

#### 13. The Virtual Storyteller: Story Creation by Intelligent Agents

Mariët Theune, Sander Faas, Anton Nijholt, and Dirk Heylen, University of Twente PO Box 217, 7500 AE Enschede, The Netherlands {theune|anijholt|heylen}@cs.utwente.nl

Here a concept was presented where agents create a story.

#### 14. Planning Formalisms and Authoring in Interactive Storytelling

Fred Charles 1, Miguel Lozano 2, Steven J. Mead 1, Alicia Fornes Bisquerra 2 and Marc Cavazza 1

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{f.charles, steven.j.mead, m.o.cavazza}@tees.ac.uk

2 University of Valencia, Dr Moliner 50, (Burjassot), Valencia, Spain {miguel.Lozano, Alicia.f.bisquerra}@uv.es

Fred Charles described an environment in which the user does not have much interaction. Rather, he watches the development of the story as though it were a SitCom, and can interact at some points. Fred showed a demo, which was apparently based on the SitCom "Friends", but the virtual characters in it looked more like the Incredible Hulk and Pamela Anderson

#### 15. Building an Interactive Drama Architecture

Brian Magerkom and John Laird, University of Michigan, Advanced Technology Laboratory

1101 Beal Ave., Ann Arbour, MI 48109

Brian Magerkom talked about a game environment in which the player becomes a character in a story that has a predefined course, the author's intention. However, the player is free to do what he likes, so the system tries to make the player perform the actions that are necessary for the progress of the story. If nothing can make the player behave as he should, the story changes to another one.

#### Wednesday (location ZGDV)

Session: Media

# 16. A framework for mixed media - emotive dialogs, rich media and virtual environments

Anton Eliens, Claire Dormann, Zhisheng Huang and Cees Visser, Intelligent Multimedia Group, Vrije Universiteit
Amsterdam, The Netherlands
{eliens,claire,huang,ctv}@cs.vu.nl

These were the most aesthetic and interesting slides, created not in powerpoint, but in DLP+X3D, which Anton Eliens talked about. He showed a way of presenting the Vrije Universiteit virtually in 3D, enhanced with comments presented by humanoid characters.

# 17. Documenting *Digital Dialogues*: Engaging Audience in the Construction of a Collective Documentary Across Time and Space

Aisling Kelliher, Ali Mazalek, Glorianna Davenport. Interactive Cinema, MIT Media Laboratory

20 Ames Street, Room E15-368, Cambridge, MA, 02139, USA {aisling, mazalek, gid}@media.mit.edu/

Aisling and Ali talked about the Symposium *Digital Dialogues* they had attended, which was aimed at bringing craftspeople and technology together. Their part in it was to provide a means to all participants of documenting their experiences in a shared web space. The aim was to give an account of what had happened through both time and space. For the timeline, they created a weblog (blog), for the space dimension, they provided a haptic interface that resembled a map of the complex. Everybody could shoot short videos of anything they wanted, then upload their clip via an interface, giving it a name and an annotation. The videos appeared sequentially in the weblog, and in the haptic interface they appeared where they had been shot. Everything they said seemed picture-perfect, ready to be printed, even the answers in the discussion.

#### 18. Building a Bridge between Video Clips and Stories

Elizabeth Phillips and Alan Parkes. Computing Department, Lancaster University Lancaster, LA1 4YR, UK e.m.phillips@lancaster.ac.uk, app@comp.lancs.ac.uk

Elizabeth presented her PHD research at halftime. She is working on designing a system that can generate video stories from video clips. Frank's cup of tea!

## 19. Augmented Reality and Hypervideo Supporting Distributed Communities for Education & Training

Matthias Finke, Reiner Wichert. Computer Graphics Center Fraunhoferstr. 5, 64283 Darmstadt, Germany {Matthias.Finke, Reiner.Wichert}@zgdv.de http://www.zgdv.de

Reiner Wichert demonstrated a 3D Tetris game in augmented reality. He had a white tray, which he filmed with a little camera. The camera was connected to the PC and the output on the screen was the 3D Tetris game. Very impressive.

#### **Demos**

# 1. Dino Hunter - Collaborative Learn Experience in Museums with Interactive Storytelling and Kids Innovation

Axel Feix, Anja Hoffmann. Digital Storytelling, Computer Graphics Center - ZGDV e.V.

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Kerstin Osswald, Sebastian Sauer. ion2s - buero fuer interaction

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Dino hunter is a game developed for natural history museums. To let visitors experience the hard task of archaeology themselves, they can search for fossils in the museum. Fossils are pieces of paper that are recognized by scanning with a special PDA, hidden amongst lots of paper that is just that. Next they can puzzle together the piece they find to create the skeleton of a prehistoric animal. Also, looking at the skeletons of the exhibition through the PDA shows a view of them with flesh, in real life, making appropriate sounds.

#### 2. IZA as a Multimodale Information Kiosk

Stefan Göbel, Johanna Dechau. ZGDV Fraunhoferstrasse 5, 64283 Darmstadt, Germany Stefan.goebel@zgdv.de, johanna.dechau@zgdv.de

This kiosk provides a user with multimodal access to information in an intuitive fashion. A virtual contact person guides the user through the system and offers choices of topics and media. The user can signal his preferences just by pointing at the screen or by saying it out loud. The system uses a text-to-speech generator to create the voice of the virtual contact person.