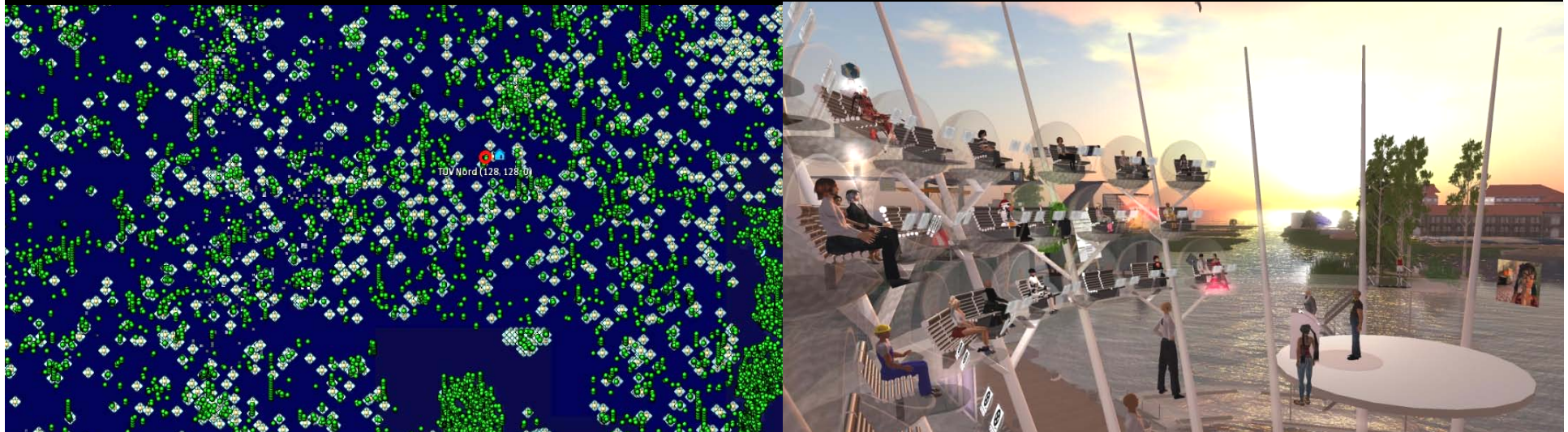


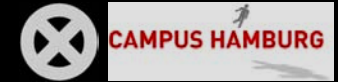
Avatars in Class: Campus Hamburg in 3D.

VWBPE 2011 | Virtual Worlds Best Practices in Education



Second Life „North 1“ | HAW Hamburg | March 18, 2011 |

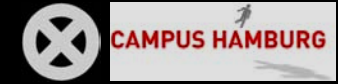
Welcome to Campus Hamburg in 3D.



The Campus was created in 2007 by BÜRO X Media Lab with the support of the City of Hamburg (Hamburg@work, GameCity) and the Hamburg Chamber of Commerce.



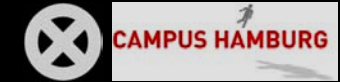
Going live on November 27, 2007.



The 3D Campus opened its virtual doors after 6 months' planning with international lectures held by Andreas Hebel-Seeger and Jörg Förster for University of Hamburg.



Local projects, international network.



Since 2007, Campus Hamburg has evolved into a platform for research and development focused on avatar based education in virtual 3D environments.

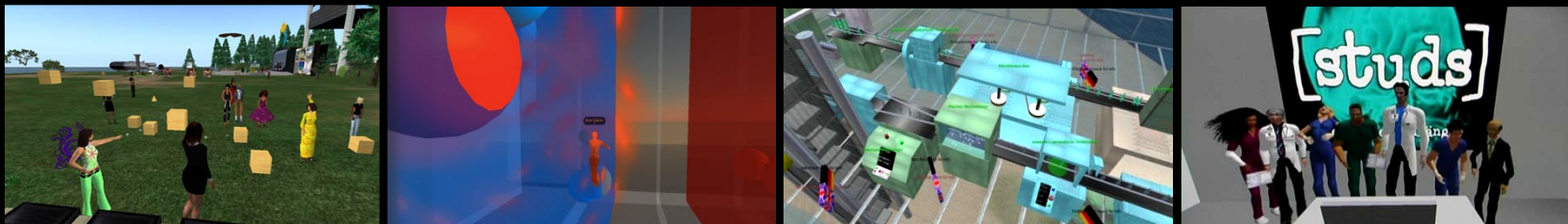
Hosting virtual meetings, events, and conferences.



Exploring game based learning scenarios.



Creating immersive experiences not possible in real life.



Panelists and contributors to our presentation today:

[Sue Gregory, Grad. Dip. Ed.](#) | SL: Jass Easterman
University of New England, Armidale, Australia

[Micha Becker, Dipl.-Ing.](#) | SL: Sanders Beaumont
HafenCity University

[Frank Boerger](#) | SL: Boerger TUVNORD
TÜV NORD Group

[Prof. Dr. Andreas Hebbel-Seeger](#) | SL: ahs Planer
mhm Macromedia University

[Dr. Torsten Reiners](#) | SL: Tyke McMillan
University of Hamburg | Institute of Information Systems

[Prof. Dr. Wolfgang Svoboda](#) | SL: Professor Svoboda
HAW Hamburg, Department of Media and Information

[Hanno Tietgens](#) | SL: Xon Emoto (Keynote + Moderator)
Campus Hamburg in 3D | CEO BÜRO X Media Lab

Inhabit all Worlds.

<http://slurl.com/secondlife/University%20of%20Hamburg/120/123/25>

Dr. Torsten Reiners

reiners@econ.uni-hamburg.de

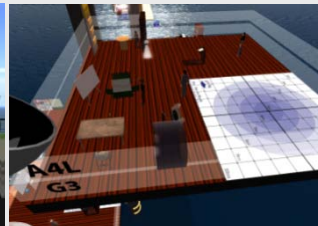
Education and Research Virtual Worlds
2008 - 2011



LECTURES



AVATARS



SOFTWARE
DEVELOPMENT



LECTURE HALL

Inhabit all Worlds: Project overview.

CONTAINER TERMINAL | QUEUE SIMULATIONS | SUPPLY CHAIN SIMULATION | VIRTUAL THEME RELATED LECTURES | PRODUCTION PROCESS SIMULATIONS | CONTEXTUAL LEARNING ENVIRONMENTS | IMMERSIVE EDUCATION TECHNOLOGIES | PLATFORM INTEROPERABILITY (e.g OPEN WONDERLAND | 3D BODY CONTROLS (Wii) | AVATAR TRACKING | HARASSMENT SIMULATION | MOBILE COMPUTING | AUTOMATED ASSESSMENT LAB | CONTENT MANAGEMENT, INTER-EXCHANGEABILITY

Project Name	Realization by	Lit.	Short Description
Container Terminal	T.Reiners, S.Wriedt F.Burmester	[2] [35]	First project demonstrating the processes on a container terminal with focus on the waterside.
Queue Simulation	M.Ebeling	[35]	Simulation of a pharmacy queue, where the user can vary various parameters like kind of queue, customer arrival number of pharmacists.
Supply Chain Simulation	S.Wriedt	[35]	Interactive teaching scenario for the bull-whip-effect using the container terminal as supplier and the pharmacy customer.
3DDE-Lecture	T.Reiners	[6] [13]	Lecture with international guest speakers and demonstration of production and logistics locations in Second Life. The course combined classroom and distance education as both reality and virtuality was projected in both worlds.
Bottle Factory	A. Erlenkötter H.Miu, F.Sommer C.-M.Kühnlentz	[9]	Student project about a production unit for a soda drink demonstrating processes in lectures and to learn about requirements for designing production equipment.
Interactive Classroom	T.Reiners C.Dreher N.Dreher H.Dreher S.Gregory, B.Tynan	[6] [30] [13]	The joint project with the Curtin University was about transferring software development into Second Life, where the students learn the whole software development cycle. The results are shown on the <i>Australis 4 Learning Island</i> .
Business Department	T.Reiners, S.Wriedt	-	Providing a space for institutes in the department
ePUSH	A.Hebbel-Segger C.Kuhlenkampff	[8]	The virtual world part of the project was about creating a seminar room, whereas the main technological development consisted of a holodeck implementation, where scenarios (e.g., arrangement of chairs/desks, objects) can be switched through a panel.

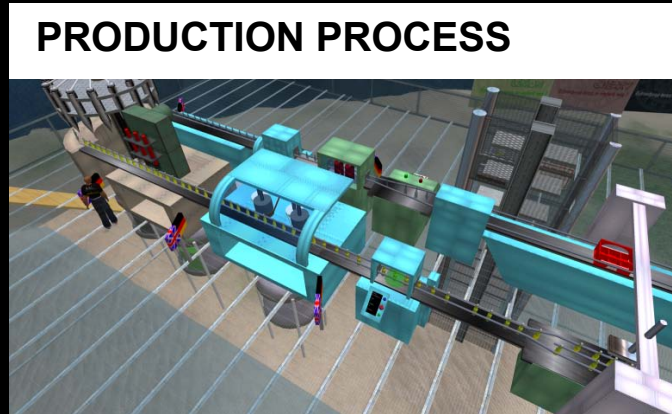
Graffiti (OpenWonderland)	S.Büttner M.Naumann L.Visser	[26]	Interactive pin-board in Project Wonderland which is accessible and synchronized from other media devices (iPhone), web-sites, and worlds (Second Life).
3D Wii-Remote Input*	S.Leder	[26]	Extending the Wii-Remote input by J.C. Lee [19] to the third dimension and transferring the input to multiple worlds at the same time.
Avatar Tracking/Reporting*	Johannes Siep	-	Reports about movements, position, and actions of avatars on a web-site.
Interactive 3D Catalog*	C.Kuhlenkampff M.Wolter B.Altmann A.Wolter, R.Lindow	-	Designing and building an interactive catalog for 3D objects including a web-based repository. Later applications are, e.g., shopping support for stores like IKEA or a portable repository of all objects someone owns.
Harassment Simulator	J.Sponholz E.Born	[28]	Role play inhabits a viral role for virtual worlds. This project demonstrated how a simulator for harassment at the workplace could be realized.
Virtual Navigation	C.Miu	-	Using the iPhone to navigate through building: i.e. projecting information about locations on the camera and/or virtual representation of the building.
Automated Assessment Lab*	C.Dreher H.Dreher T.Reiners	[27]	For the interactive classroom and to demonstrate an automated essay grading software, we set up a lab including an advanced classroom, interactive posters, and a drop box for assignments.
Object Security Framework	T.Reiners S.Wriedt A.Rea	[25]	Introduce a feasible concept of object security. The proposed framework protects property and presents a methodology for exchanging objects across multiple 3DDE.

Inhabit all Worlds: Examples.

SIMULATION of Logistics and Production



CONTAINER TERMINAL



PRODUCTION PROCESS

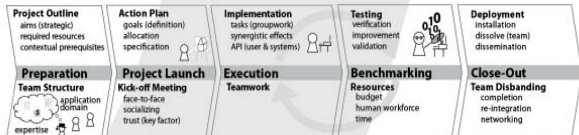


SUPPLY CHAINS

COLLABORATION, COMMUNICATION, SOCIALIZING

Team Meeting in 3D Space

Michael Arthur Schuler



Motivation

Impact of 3D spaces on (virtual) team meetings
Define tools for sophisticated project management
Map all (meeting) processes in a 3D space
Comparative study to evaluate the team motivation

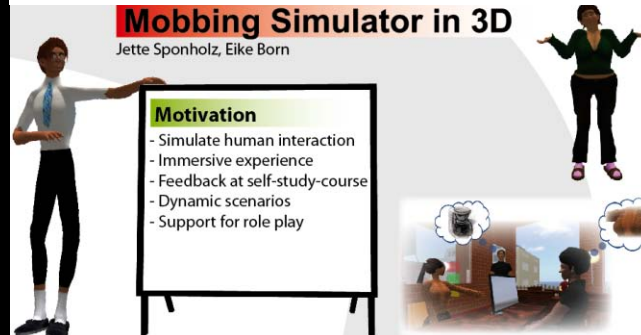


MEETINGS

HARRASSMENT SIMULATOR

Mobbing Simulator in 3D

Jette Sponholz, Eike Born



Motivation

- Simulate human interaction
- Immersive experience
- Feedback at self-study-course
- Dynamic scenarios
- Support for role play



Cooperation with UNE (AUS)

DISTANCE EDUCATION

Inhabit all Worlds: Future Perspectives.

Shopping in 3D: Mobile 3D CMS

Christian Kuhlenkampff, Ronja Lindow, Andreas Wolter, Matthias Greifenberg, Björn Altmann



YouTube-Demo

Motivation

- App to visualize, administrate, and buy/sell 3D objects
- Communication and storage on dedicated server
- Catalog functionality for (real) shops (e.g., Ikea)
- On-device storage of owned objects

The next big thing?
Augmented Reality Concepts
Mobile Computing | Shopping
The AVATAR as interface?

University of New England, Armidale, Australia



“Virtual Classrooms with Jass Easterman”

Sue Gregory, Lecturer ICT Education



School of Education, University of New England

Part of the Australis4Learning Initiative, associated with the University of Hamburg via Campus Hamburg in 3D

in Second Life: <http://slurl.com/secondlife/Australis%20%20Learning/134/136/22>

University of New England, Armidale, Australia



“Virtual Classrooms with Jass Easterman”

2008-2011: Learning in a virtual world



Weekly sessions in-world

University of New England, Armidale, Australia



“Virtual Classrooms with Jass Easterman”

2008-2011: Learning in a virtual world



Engagement



Role-Play

More information <http://www.virtualclassrooms.info/>

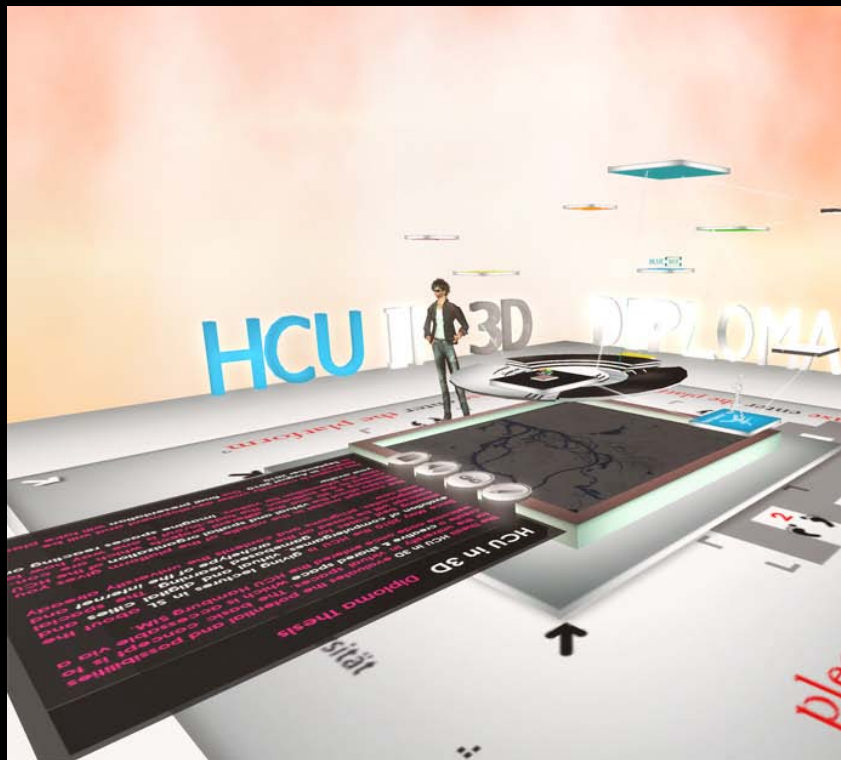
HCU in 3d

Potential and Spatial Organization of Higher Education in the Synthetic World of Second Life" Diploma and research thesis (Apr 1, 2010 - Feb 6, 2011) to

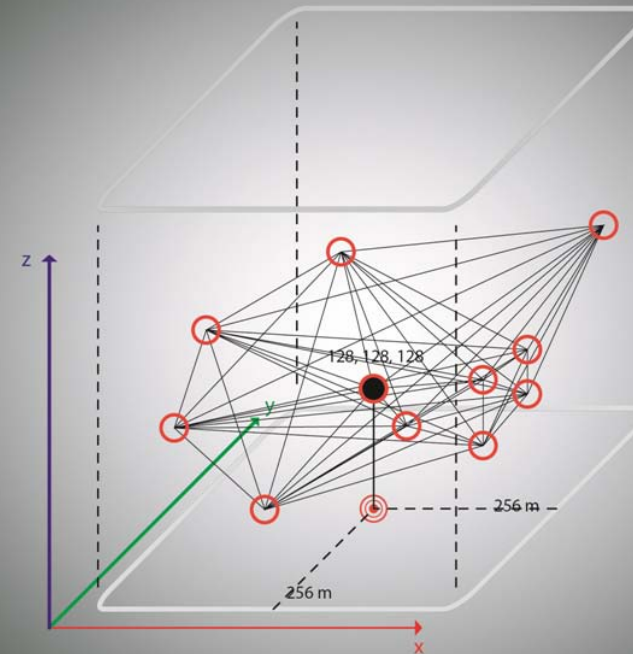
- identify and occupy the topics for a university of the built environment and metropolitan development;
- develop a spatial organization for the institution
- develop strategical handling with new media technologies in research and education
- draft and establish immersion and applicability in the field of urban planning and architecture

HCU in 3d - approach

CONCEPT DEVELOPMENT

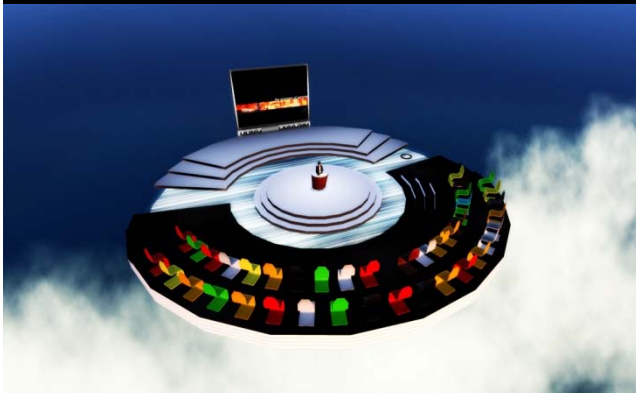


SPATIAL ORGANIZATION



HCU in 3d - showcases

LECTURES



THEORY



LEARNING ENVIRONMENTS



BEYOND PARTICIPATION 3D

IBA HAMBURG 2013

COLLABORATIVE

TÜV NORD Group, Hamburg/Hannover



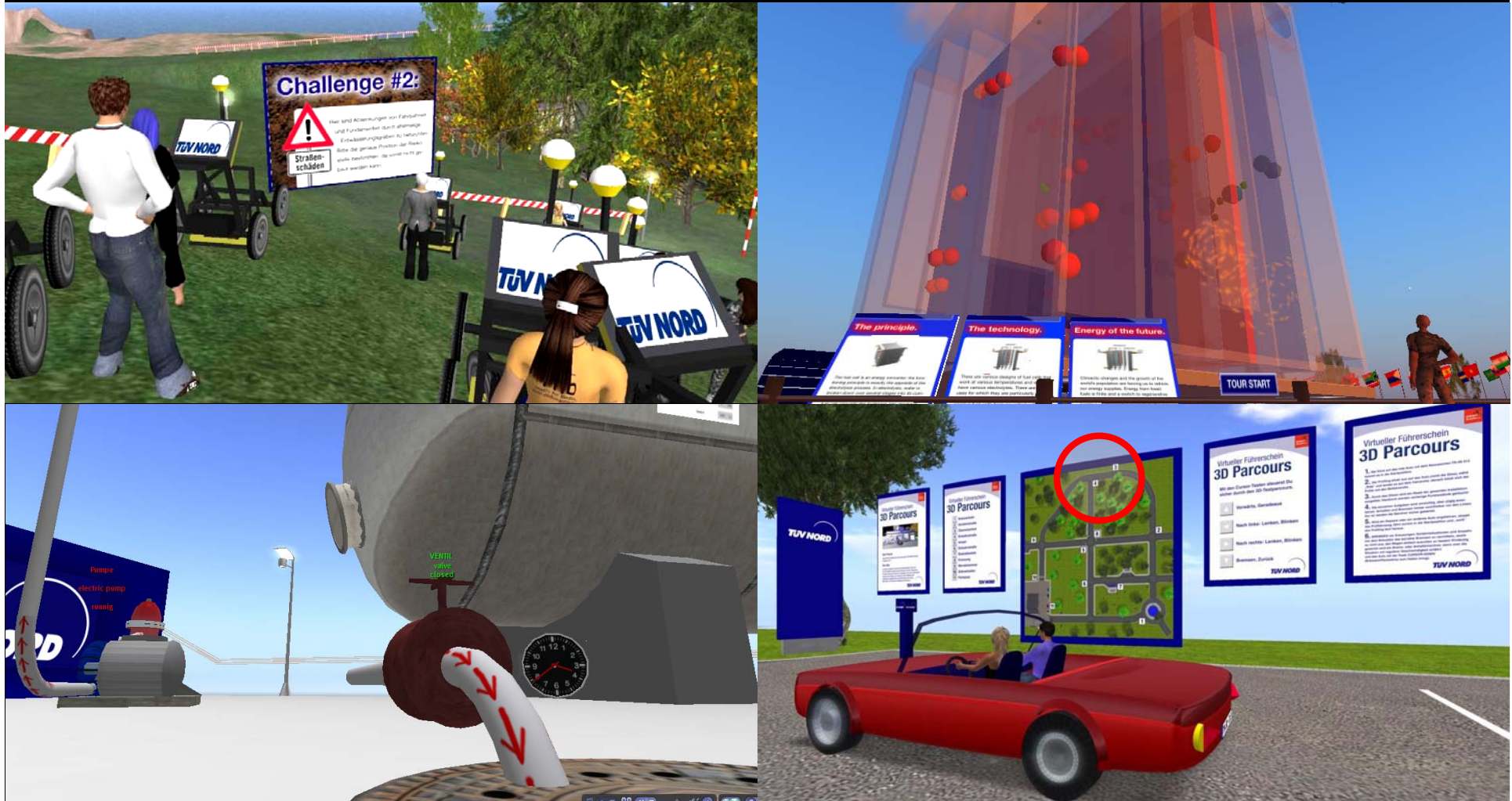
TÜV NORD IN 3D: Driving knowledge in a knowledge-driven enterprise.



TÜV NORD Group, Hamburg/Hannover



TÜV NORD started its 3D internet presence „TUV Nord“ in 2007 in Second Life to share knowledge, recruit in-world, explore immersive branding and game based learning.



TÜV NORD Group, Hamburg/Hannover



Corporate trainings in 3D turn a profit, **saving \$3,126 (Ø) per participant** in travel time and costs, and improving the carbon footprint.

Case study: <http://www.buerox.de/tuev-nord/index.html>



Blended Learning in Virtual Worlds

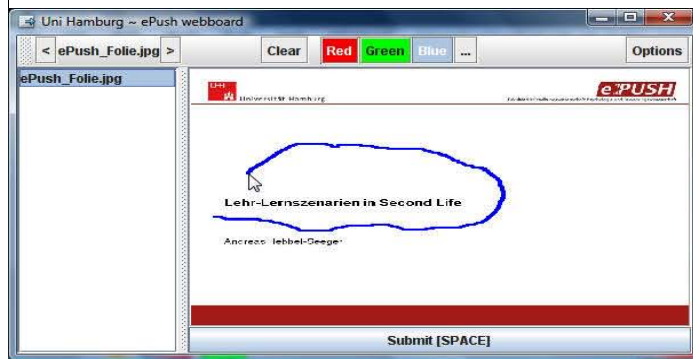
Prof. Dr. Andreas Hebbel-Seeger / ahs Planer

Macromedia
University of Applied Sciences
Gertrudenstraße 3
D-20095 Hamburg

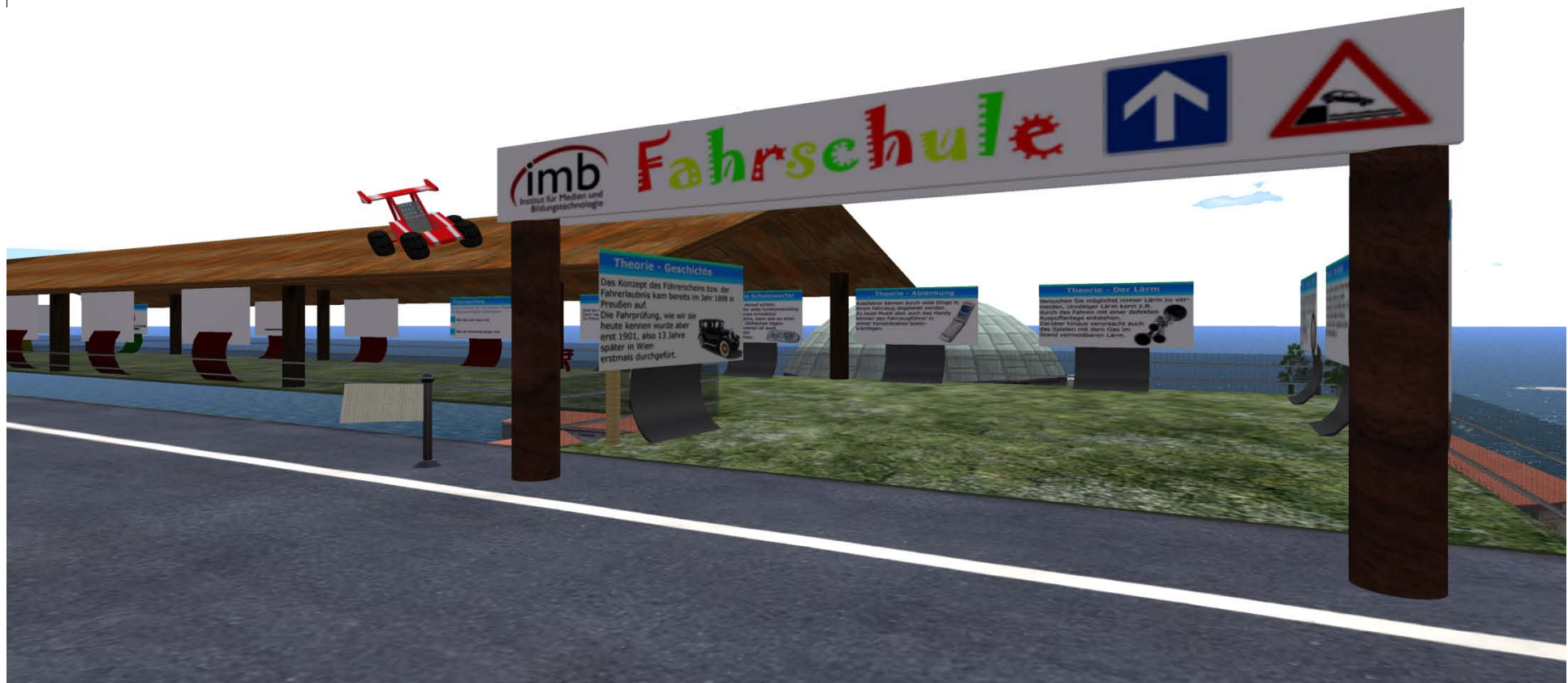
eMail: andreas.hebbel-seeger@mhmhk.de



2007 University of Hamburg, institute of sport science:
Crossworld and crossmedia lectures | 2007-2008 faculty
of education: Exploration, extension and evaluation of
learning scenarios with the use of a holodeck



2008-2009: Augsburg University, institute for media and education technology | Project based exploration of use cases and opportunities of VR



Since 2009: Macromedia University of Applied Sciences
media and communication | Crossworld lectures, LMS-
bonding (Sloodle), Visualization of ideas and processes
relating to sport and events

<http://slurl.com/secondlife/Campus%20Hamburg/68/204/23>



DMI goes Second Life

Hochschule für Angewandte Wissenschaften Hamburg
Fakultät Design, Medien und Information, Department
Information

Dipl.-Des. Christian Küttler

Prof. Dr. Wolfgang H. Swoboda, M.A.

Projektpartner:

Baltic Sea Virtual Campus Consortium (BSVC)

Platform: 3D Sim "Campus Finkenau" in Second Life

<http://slurl.com/secondlife/campus%20Finkenau/119/106/23/>

20 students each term, since SS 2008

DMI: Didactic approach and objectives



// Working with media, creating and organizing events

// Developing communication skills and media literacy

// In focus: Student life and politics of higher education

DMI: Projects



Campus Finkenau in Three-Dimensionality

// Faculty Design, Media & Information

Bachelor's Programme Media & Information

// Information & Media Literacy

Communication Competence

// Future in Information Science & Management

DMI: Our hosts in real life, plus creators of the video live stream by ELBE-Studios.

<http://www.elbe-studios.de>

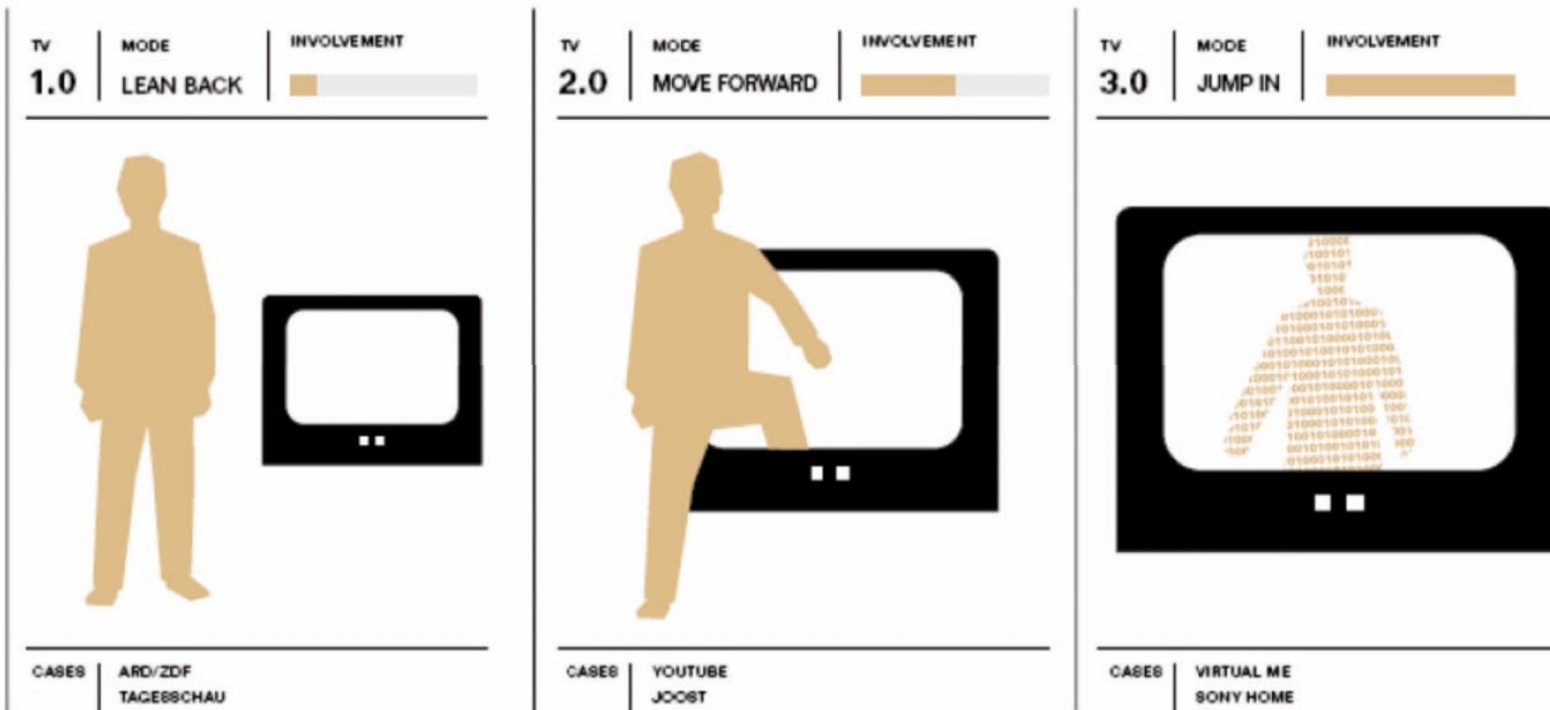


Perspectives.

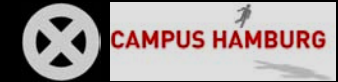
So, where are we? And where do we go from here?

Thank you: Trend One, Hamburg, 2009

trendone | TV EVOLUTION
MULTIMEDIA COMMUNICATIONS



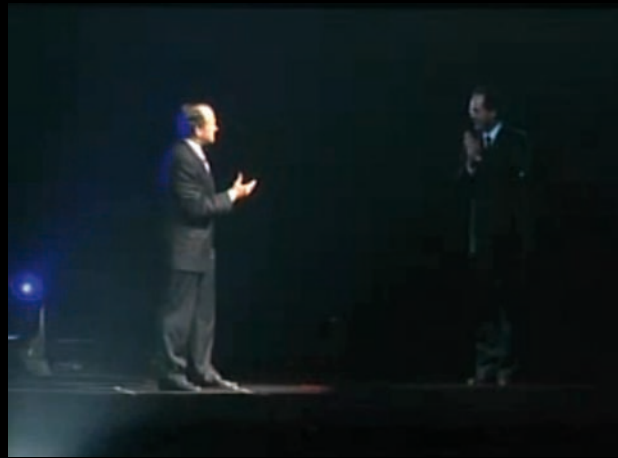
Perspectives.



Technology is evolving in quantum leaps.



Leia & Obi Wan
Lucasfilm 1977



Chambers & de Beer
Cisco Systems 2007



Milo & Claire
Microsoft 2010

Perspectives.

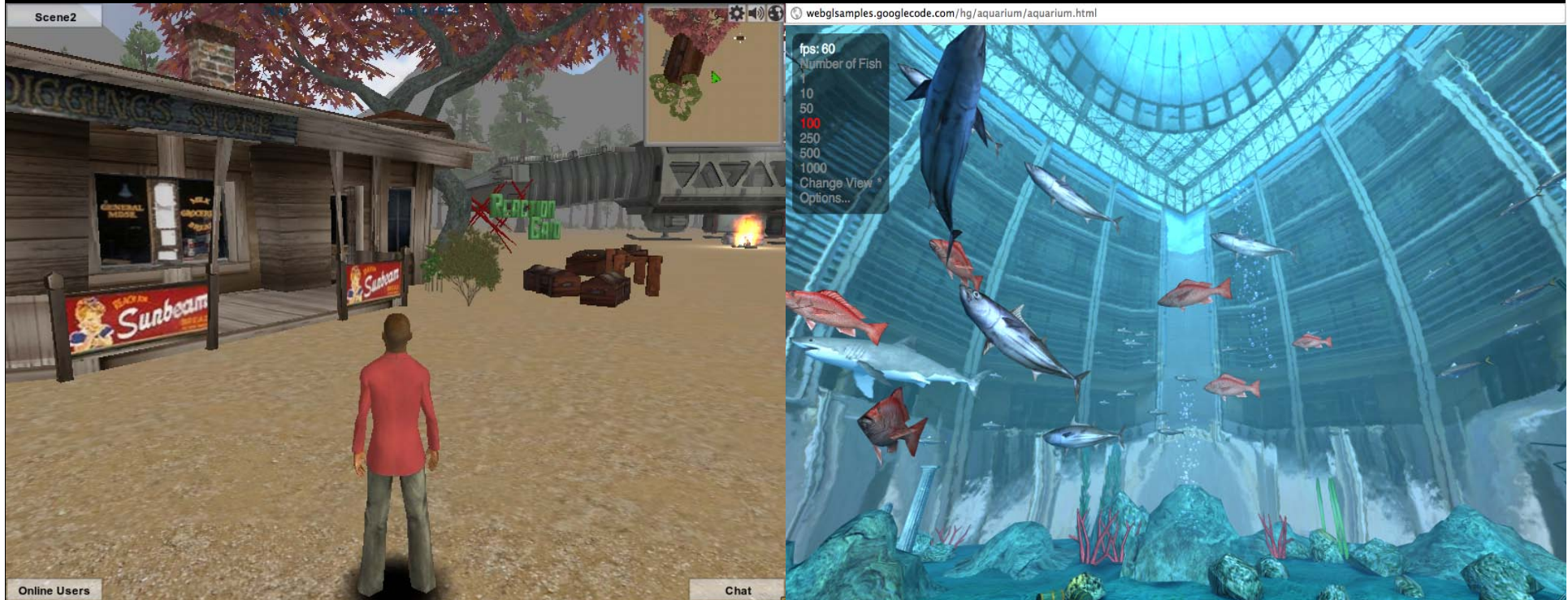
1,2 billion avatars have been registered so far, some of them quite mobile.



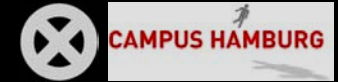
iPhone 2011 (Blue Mars Mobile), iPhone 2012 (?)

Perspectives.

Think OpenSim, think WebGL, think Unity
– the social web is coming alive in 3D.



Perspectives.



Avatars have come a long way.

How far can they go in
collaboration, creation and
immersive education?

Please join the discussion of our panelists.

Thank you very much for engaging
and participating.



Questions welcome:



Hanno Tietgens | Xon Emoto

Ludwigstr. 12, D-20357 Hamburg (Germany) | ht@buerox.de
@HannoTietgens on Twitter | Xing Facebook LinkedIn