#### Sense-making and user-driven innovation in Virtual Worlds 2008-2011

http://worlds.ruc.dk/

- new market dynamics and management,
- social and cultural innovation,
- knowledge construction

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 (1) through theoretical and methodological reflection to discuss the concepts of user driven innovation and innovation processes in the practices of Virtual Worlds (VW)



 (2) critically to analyse such innovation processes and potentials in collaboration with actors in Virtual Worlds





(3) to develop process- and dialogueoriented methods for collaboration and the communication of research with actors outside of the scholarly community





• (4) by means of qualitative case studies to provide empirically based research knowledge about innovation in Virtual Worlds in the areas of: new market dynamics and management, cultural innovation, construction of knowledge, and knowledge sharing



- research team:
  - 1 professor, 2 associate professors, 2 ph.d. students, 2 post.doc, 1 project manager
- partners:
  - Roskilde University, Research group on communication forms, and knowledge production
  - Copenhagen Business School, LIKE: leadership, innovation, knowledge, and entrepreneurship
  - Innovation Lab, Consultancy
  - UNI-C, Centre for Education and Research



associate partners:

- Saxo Bank in Second Life and real life
- Second Life business Wonderful Denmark, SL RL
- Second Life business Power-Match, SL RL
- Roskilde Library
- Danish Library Center
- Info Island Denmark, Second Life libraries, SL RL
- Øresund University, Entrepreneurship Academy
- Knowledge Centre Vestsjælland
- Tag-art, Virtual Move Statens Museum for Kunst SL future:
- Danish Architectural Firms
- Virtual Archaeology
- Virtual Robotics



- case studies
  - Wonderful Denmark, Power-Match, Info Island Denmark, Library Hangouts, Metanomics (coming) and Innovation Lab (coming)
- participatory observations
- video-interviews
- sense-making moment by moment interviews
- Iaboratory experiments based on Sense-Making Methodology
- focus groups
- design as research



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# Metrotopia: a laboratory

- City of superheros and –heroines
  <u>– one theme among others</u> to come
- design aimed at the study of:
  - communication, media reception, social interaction, design, and innovation
- Roskilde School ;-) of experimental studies that employ virtual worlds' laboratories
  - video



#### helpers and provocateurs

- bots in the MMORPGs
  - actant model: project axis (subject object), communication axis (giver – receiver) and the axis of conflict (helper – adversary).
  - immidiate occasions for sense-makings, attention and motivation is provided by the project, and the helper and adversary bots.
  - complexity in the programming
  - simple and stereotyped behaviours



#### helpers and provocateurs

- bots in e.g. Second Life
  - openess: no immidiate project axis (subject object) or axes of communication (giver receiver) and conflict (helper adversary)
  - uncertainty and complexity: no immidiate occasions for sense-makings, intentional and attentional navigation and motivation
  - simple and generic in the programming
  - ??? complexity in behaviors and interactions
    - Video



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# **learning bots**

#### Experiments in Metrotopia

- Existing bots
  - Pikkubots, SL-bots, Eliza and Pandora chatbots
  - simple and stereotype: collect info, exchange messages, gatekeepers, shop and bar assistants, simple question answers, simple dialogues and behaviours
- Learning bots
  - agents of the unforeseen, uncertainties, compelxities
  - ability to build up experience based on earlier situations and the capacity to store and apply existing experience to new situations
    - Video



# **leadership and innovation**

- one out of many possible application:
  - bring our bots into fields, islands, sims, etc. aimed at innovation practices
  - especially, in the field of leadership of and in innovation processes
  - to act as the provocateurs the adversaries of the actant model – in the field of creative leadership in innovative practices
  - to provoke and initiate the develop of methods by which to help innitiate and train creative and collective leadership and selfleadership



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