



The Danish Strategic Research Council,  
KINO Committee



# MODES OF ENGAGEMENT

VIRTUAL WORLDS RESEARCH PROJECT, Roskilde University & CBS

<http://worlds.ruc.dk/>



Communication Studies, Business and Information Technology  
Roskilde University, Denmark  
Management, Politics and Philosophy  
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# Virtual worlds

- *Engagement* driven media
  - What do we know about the experience of engagement?

# Overview: How to engage

- **Teaching and learning** (Bers 2006; Egerton, M. 2002; Ferraz & Wellman 2007; Gough 2009; Huizenga et al. 2009; Stokes 2007; Virvou & Katsionis 2008)
- **Theology** (Kemp 1973)
- **Psychology** (Boeckmann 2002; Leung 2009)
- **Democracy and policy** (Boeckmann 2002; Chan & Pan 2008; Leung 2009; Moy et al. 2005; Watt & Flanagan 2002)
- **Organisational studies** (Macey et al. 2009)
- **Therapeutic intervention** (Addington & Penn 2005; Flaskas 2007)
- **Health care** (Forbat et al. 2009)

# Four studies

- In a study of *STUDENT ENGAGEMENT*, Shernoff et al. (2003) suggests a contextualization based on: The culmination of concentration, interest, and enjoyment. In this, they take flow theory as their theoretical point of departure.
- O'Brian and Toms (2008, 2010) have conducted comprehensive, empirical as well as conceptual studies of the experience of engagement. The aim of their research is to develop a tool for *MEASURING ENGAGEMENT*.
- A model of engagement is proposed with respect to modes and phases of interactive experiences with artworks in Bilda & Edmunds' (2008) article about designing for *CREATIVE ENGAGEMENT*. This study aims to develop a more general-purpose instrument to be used in computer-based interaction design processes.
- Finally, coming from the realms of aesthetics and arts is Morrison's (2007) study of musical listening and different *MODES OF ENGAGEMENT*.

# Student engagement

- Education (Shernoff , Csikszentmihalyi, Sneider, 2003)  
Longitudinal sample of 526 high school students: conditions under which they reported being engaged.
- Experiential qualities
  - Enjoyment
  - Interest
  - Relevance
  - Flow (challenges/ skills)
- Challenges/ skills
  - Apathy: challenges low/ skills low
  - Relaxation: challenges low/ skills high
  - Anxiety: challenges high/ skills low
  - Flow: challenges high/ skills high

# Measuring engagement

- Video gaming, online shopping, web searching, educational software (O'Brian and Toms 2008, 2010) . Semistructured interviews (2008); two factoranalyses (N=440; N=802) (2010).
- Process and temporal patterns
  - Iterative stages
    - point of engagement
    - period of engagement
    - disengagement
    - reengagement
- Experiential qualities
  - Measurement factors
    - focussed attention,
    - felt involvement,
    - aesthetics,
    - perceived usability,
    - novelty,
    - endurability

# Creative engagement

- Interactive artworks (Bilda & Edmunds' 2008). Beta Space provides an environment for artists, designers, and technologists to design, implement and evaluate artworks with real audiences. Observations, contextual interviews, video-cue recall, quantitative and qualitative analyses of protocols of non-verbal and verbal behaviour. 10 interactive artworks.
- Process and temporal patterns
- Sequential phases
  - Adaptation,
  - Learning
  - Anticipation
  - Deeper understanding
- Experiential qualities
  - Transformative dialogue
- Interaction
  - Unintended
  - Deliberate, intended/ in control
  - Intended/ uncertain
  - Unexpected

# Web of engagings

- Music: listening to a Mendelssohn string octet (Morrison 2007).
- Process and temporal patterns
- Experiential timing:
  - immediate presence
  - over time
  - beyond time
- Experiential qualities: webs of engaging
  - default (quasi-listening)
  - aesthetic
  - theoretical
  - associational
- Acting: Active processes and verbs
  - construct
  - accord
  - recognise
  - attribute



# Modes of engagement

- “On one level, ‘modes of engagement’ can be thought of as the various realms within which we:
  - [i] aurally [sensually and perceptually] and cognitively construct patterns, lines of continuity, formal relationships
  - [ii] accord significance in other realms such as the emotional, associational, religious, even therapeutic
  - [iii] recognize, even construct from musical raw materials or attribute to the aforementioned patterns and formal elements, aesthetic properties (...)
- That is, modes of engagement define the various parameters within which significance can be established, the various parameters within which the engaged find the engaging to be meaningful.” (Charles Morrison, 2007 p. 404)

# Active processes

- “But on another level, the modes must also be considered as *active processes* on the part of the listener, as the verbs ‘construct’, ‘accord’, ‘recognize’, ‘attribute’ from the foregoing explanation suggest.
- Insofar as a particular mode of engagement is an active process undertaken by the listener, it is itself also an aspect of the broader musical *experience*: to construct, accord, recognize, and attribute are to engage; to engage is to experience.” (Ibid)

Situation	Time/ emergence	Modes	Qualities
Education (Mixed modes)		Challenge/ skills: Apathy (L/L) Relaxation (L/H) Anxiety (H/L) Flow (H/H)	Interest Enjoyment Relevance
Video games Online shopping Web searching Educational software (Quantifiable)	Point of engagement Period of engagement Disengagement Reengagement		Focussed attention Felt involvement Aesthetics Perceived usability Novelty Endurability
Interactive artworks (Observational)	Adaptation Learning Anticipation Deeper understanding	Unintended Deliberate Intended/control Intended/uncertain Unexpected	Deeper understanding: Transformative dialogues
Music listening (Analytical)	Immediate presence Over time Beyond time	Construct Accord Recognise Attribute	Default quasi-mode Aesthetic mode Theoretical mode Associational mode