

Individual and social evolution: through digital gaming, out of the box

**University and Cyberspace: Reshaping Knowledge
Institutions for the Networked Age**

June 29th, 2010

Carlo Fabricatore, Ph.D.

CEO,

Initium Studios

Senior Lecturer in Game Design and Development,

University of Worcester (UK)

carlo.fabricatore@initium-studios.com

Daydreaming on learning and development



Daydreaming on learning and development

Wouldn't it be great if ordinary people could...

- Learn the nature and mechanics of ecosystems, and act to preserve their balance and facilitate their development
- Learn the nature and mechanics of politics, economics and culture, and act consequently, to build and nurture healthy social systems
- Learn and understand the impact of religious beliefs and moral frames of reference on civil societies, and act to guide and support the development of collectivities, facing the quandary of good vs. evil
- Understand the nature and mechanics of epochal phenomena such as organized crime, warfare and terrorism, and act to build a better future for collectivities

Daydreaming on learning and development

Wouldn't it be great if ordinary people could...

- Learn all this, and more, interacting with peers, negotiating meanings and building knowledge and understanding in a collective effort, transcending geopolitical boundaries
- Learn and act consequently not because of obligation, but because intrinsically motivated by the challenges they face
- Learn all this, and more, at any age, any time

Daydreaming on learning and development

The good news

- All this is possible
- All this is happening
- All this, through digital gaming
- All this is important, because of the pervasiveness of digital games
 - Approximately one third of the world's population plays video games
 - Average gamer is 35 years old (26% over 50)
 - Gender: 44% women (33% adult women)
- Why? How?

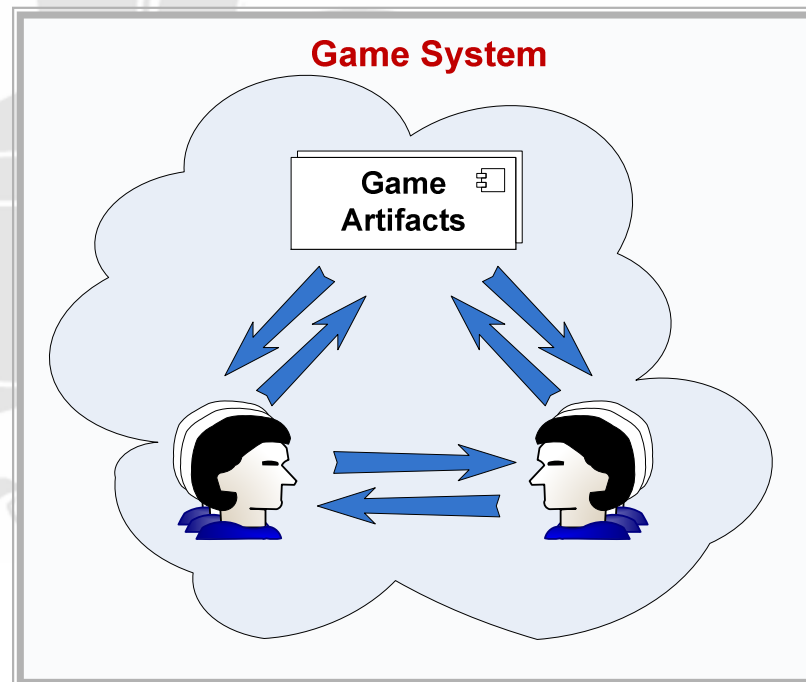
Games, gamers and play communities



Games, gamers and play communities

Games as systems

- Players interacting with each other and game artifacts, according to rules, in the pursuit of game goals
 - Dialogic player-game system relationship, defining the gaming experience



Games, gamers and play communities

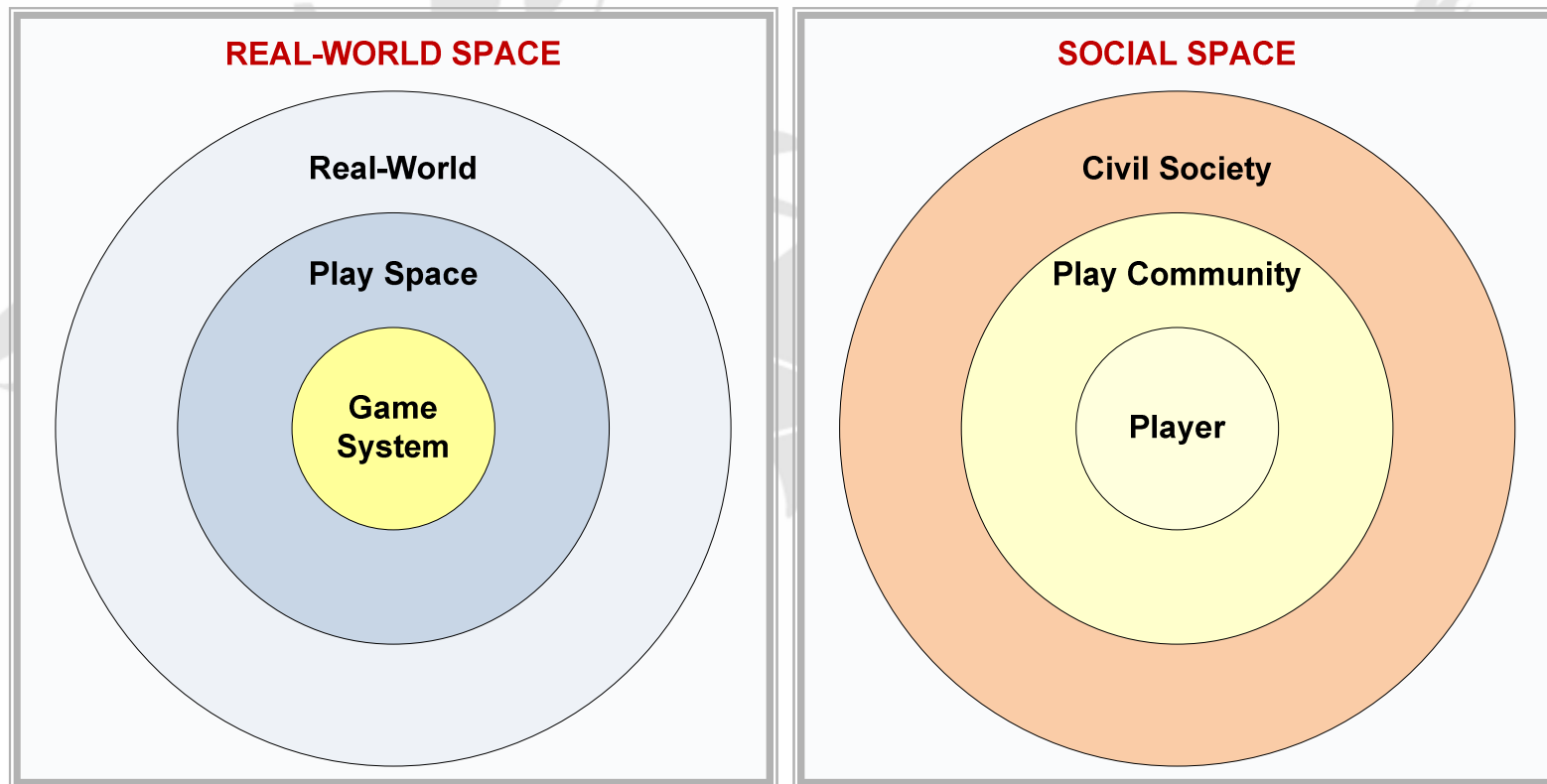
The gamer's attitude

- **Conditions for the play experience:**
 - **It's a game because the player thinks so**
 - Social acceptance of a system as a game
 - Subjective acceptance of a system as a game
 - **The game must engage the player**
 - Provision of meaningful and “fair” challenges and rewards
 - Provision of meaningful and entailing contexts
 - Allow developing a sense of mastery
 - **As long as it lasts, the play experience is the most important thing for players**
 - Sustain the acceptance
 - Sustain the motivation

Games, gamers and play communities

Play space and play community

- Players associate in play communities, building preferences, beliefs, meanings and knowledge, within and outside the game system



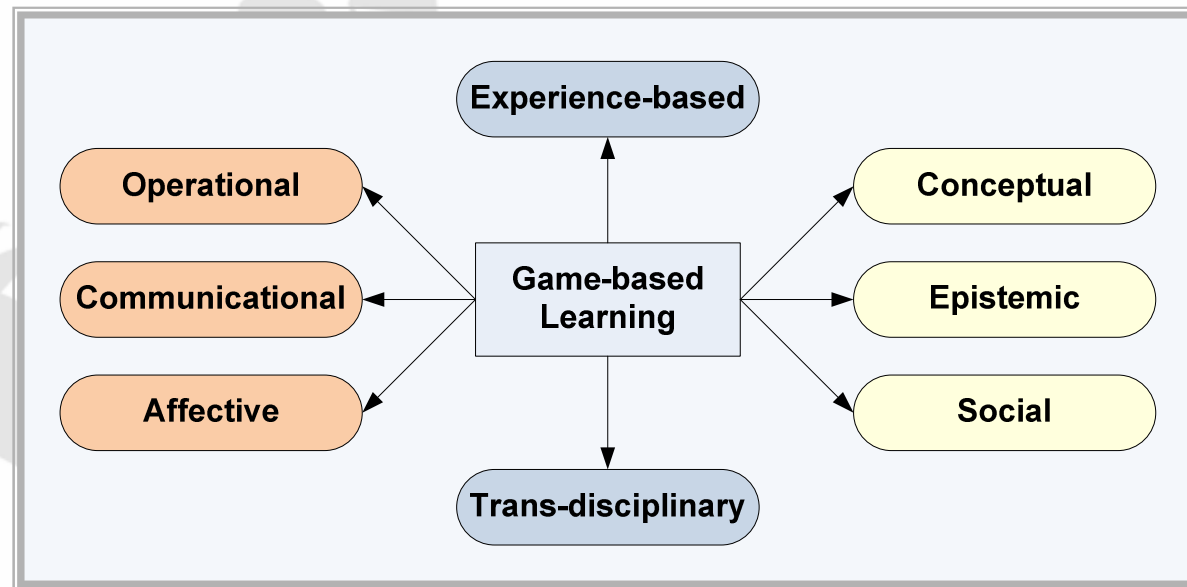
Game-based learning and development



Game-based learning and development

Nature of game-based learning

- Games require comprehensive learning



Game-based learning and development

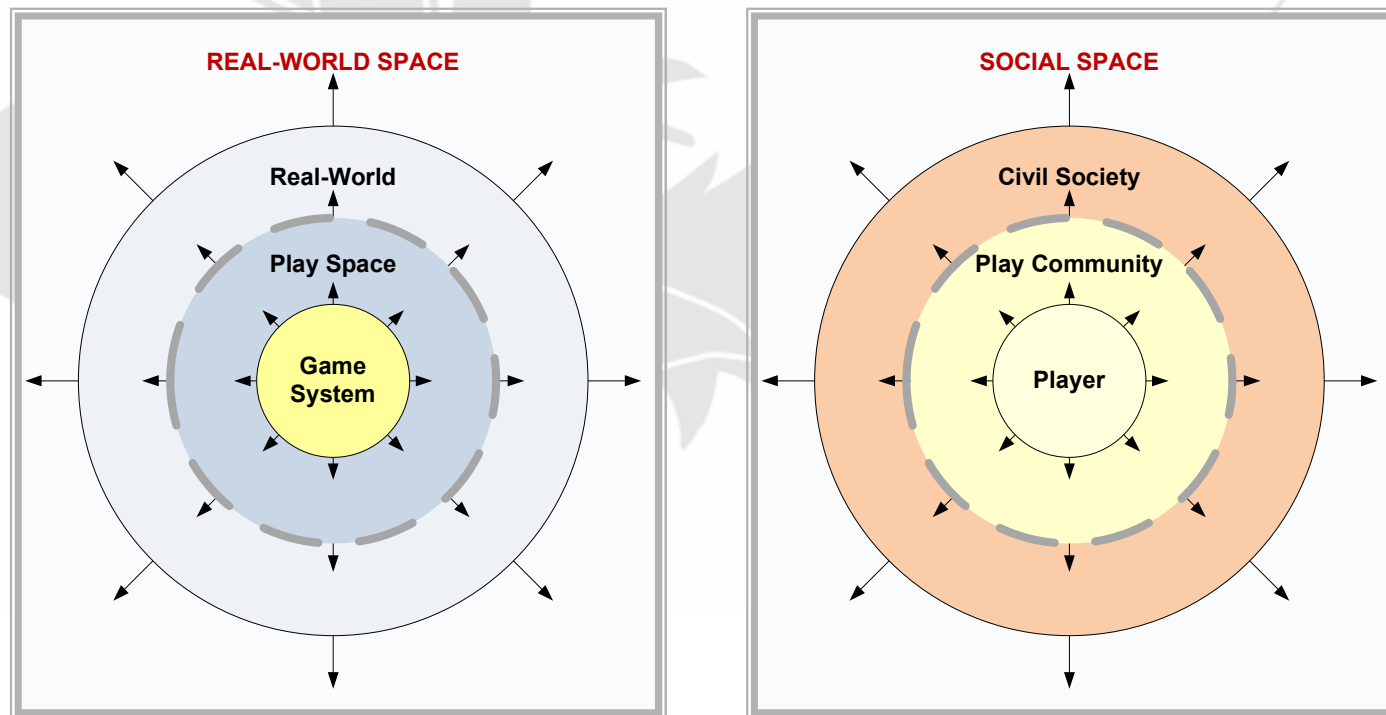
Nature of game-based learning

- Learning is made meaningful and intrinsically motivating by the game context
 - Games are natural learning environments
- Learning is free and open
 - Power-knowledge networks are not an issue
 - Frames of reference created, destroyed and transformed freely
- Learning-acting cycles lead to the development of players as both individuals and communities

Game-based learning and development

Propagation of game-based development

- Development can propagate from the game space to the rest of the “real-world”
 - Knowledge transfer, based on contextual analogies
 - “Real-world” perceived as a game



Development beyond “boxes” through “digitality”



Development beyond “boxes” through “digitality”

Transcending boundaries

- Transcending geopolitical barriers, uniting people
- Access contexts and systems otherwise out of reach, through simulation
- Achieve meaningful contextual learning beyond the time-space boundaries created by the society and traditional schooling contexts

Facilitating and supporting development



Facilitating and supporting development

It glitters, but is it all gold?

- Game-based development: not necessarily evolution
 - Polar outcomes: you can learn how to help your brothers, or kill them
 - Linking the game space with the rest of the “real-world” space: propagation of development must often be supported

Facilitating and supporting development

Development and evolution

- Work is required to:
 - Create game systems capable of generating positive, socially relevant development for players
 - Support propagation of development from the game space to the “real-world”
- Aim: game-based education models and practices
- Agents: universities?
 - Research, to generate models
 - Action, to facilitate and support game-based evolution

Wheels for the mind

Life must be lived as play
(Plato)

Don't play what's there, play what's not there
(Miles Davis)

