



Critiquing Software Interactions

Exposing the invisible effects of software on the problem solving processes

Lindsay Grace
Armstrong Institute for Interactive Media Studies
Miami University

ACHI: Panel Presentation





- Software Studies: 2009
 - Lev Manovic at UCSD
- Software Philosophy: 2009
 - An analysis of the underlying themes and philosophies integrated into software
 - Diagnosing how the design of existing systems effects the design of new systems
 - Expose the qualities of software interactions, software interoperability, and programming conventions that may effect the problem solving process



Key Philosophies of Software

- The Heavy Use of Analogy
- The abundant Application of Reductivism
- An Emphasis on Transferred Agency



- Critical Gameplay:
 - Software Philosophy for **Game Design** and production
 - Begins with application of **Critical Design**
 - Diagnose key questions in how games are played
 - Create games that illustrate alternate ways to play
 - Exhibited in Europe (Greece), South America (Brazil) and North American (various) in 2009-2010







Critical Gameplay:

How do game mechanics effect the way we problem solve, socialize, or even view the world?



Critical Gameplay


- When we **shoot** do we learn to **destroy obstacles** instead of **working around** them?



Critical Gameplay
Does the **binary world**
of
enemies and adversaries
teach us to **ignore the**
gray in the everyday?



Critical Gameplay
Are we forgetting how to **play with**
each other, because **playing**
against each other is
more common?



Iterative Design and Development

- Investigating these practices yields a fundamental evaluation of the design process
 - IDEO Design Thinking
 - Iterative design
 - Collective, multidisciplinary practitioners
 - Global Game Jam



- Can we invert gameplay mechanics to better Harness Human-Computation in games?
- Can iterative processes like Design thinking and prototype thinking yield better HCI?

