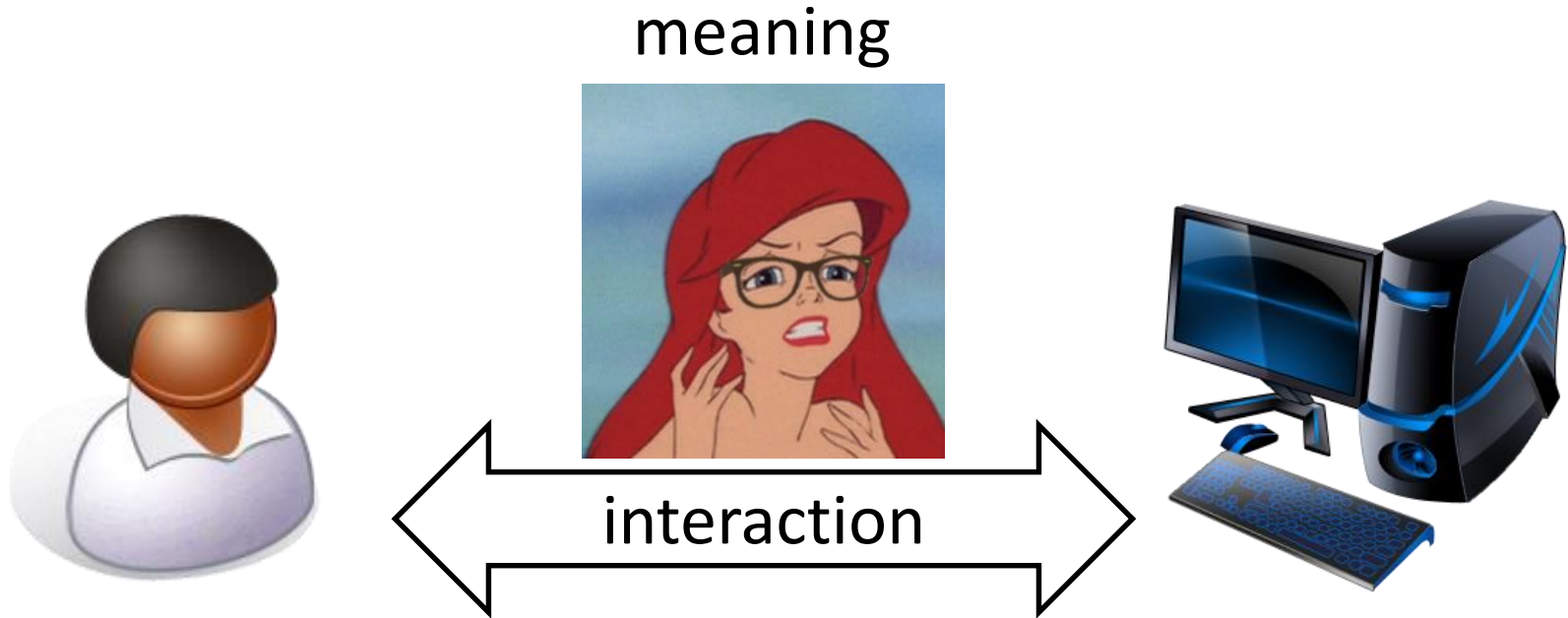# Meaningful Play

The Grand Challenge

Create a game that is meaningful to the audience who plays it.

Whence Meaning?

- The game itself is not meaningful.
- Meaning emerges from the player's interaction with the game.

meaning

interaction

Why Watch Play?

Why do I have students play a game while you, the class watch?

Why not simply describe the game to you?

How would you describe *9:05*?

Descriptive Definition

Meaningful play emerges from the relationship between player action and game outcome.

A description or report in the form of "when the player does x, y happens in the game."

E.g. When I move my bishop from C1 to A3, your knight is removed from the board.

Evaluative Definition

Meaning emerges when the relationship between player action and game outcome is:

• Discernable

(results of actions effectively communicated)

• Integrated into the larger context of the game

(results of an action have not just local but global effect on the game; i.e. the action has meaning for the game as a whole)

Challenge

Design a game such that the player can clearly understand the short term and long term consequences of his or her choices.

Game Design

Design is the process by which a designer creates a context to be encountered by a participant from which meaning emerges.

Step 1: Designer makes context.

Step 2: Player participates in context.

Step 3: Meaning emerges.

Step 4: Profit!

Iterative Design?

The Treachery of Images, René Magritte 1929

Semiotics

The study of how meaning is made from signs.

A sign:

• Represents something other than itself.

• Is interpreted.

• Meaning results when it is interpreted.

• Context shapes interpretation.

Signs

- Usually do not have any necessary connection to the thing they signify.

- Vocabulary of signs is simply agreed upon by all participants.

- Games provide context (e.g. rules, setting) that help us interpret signs.

- Signs gain meaning only by being part of a larger system.
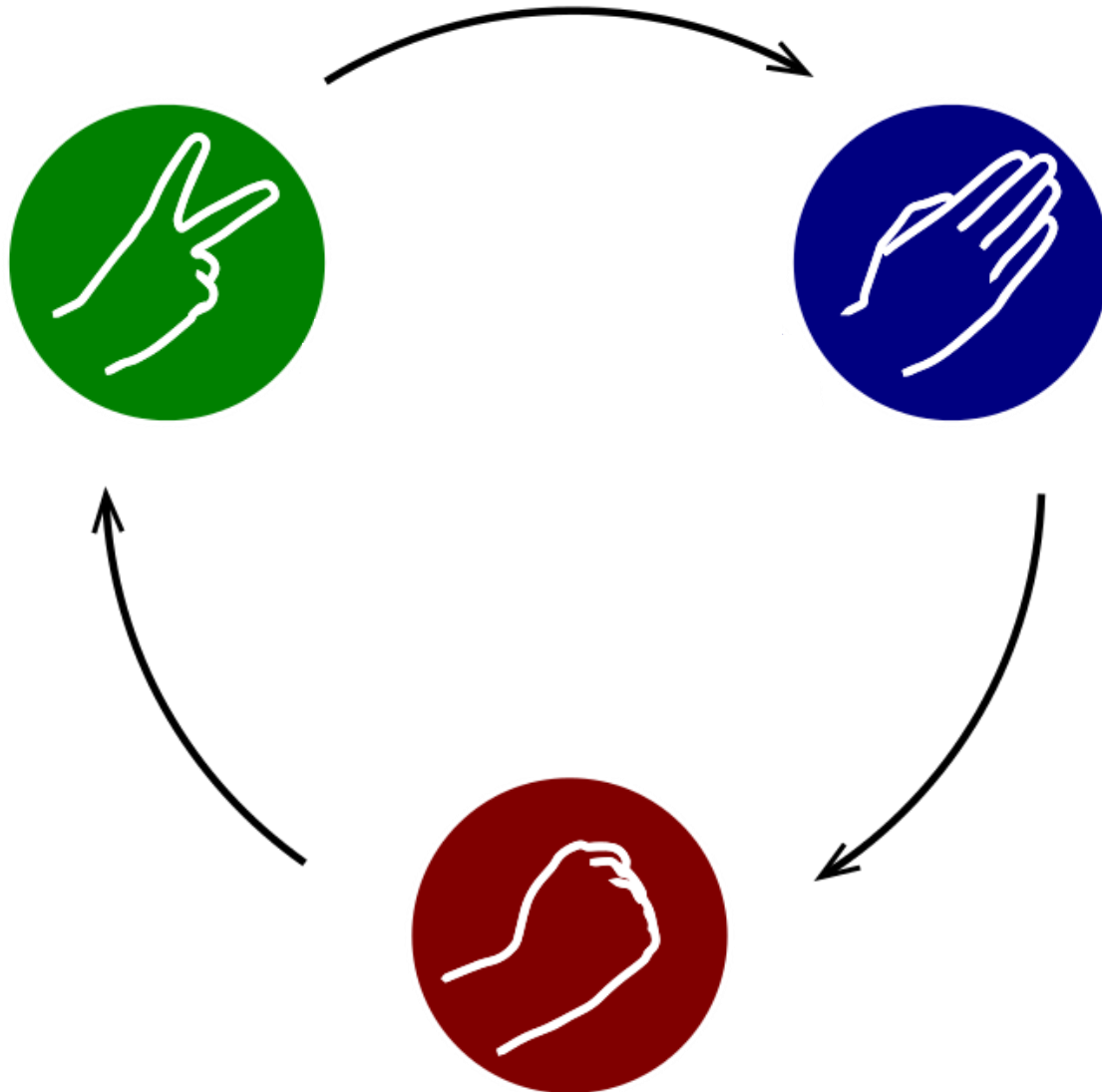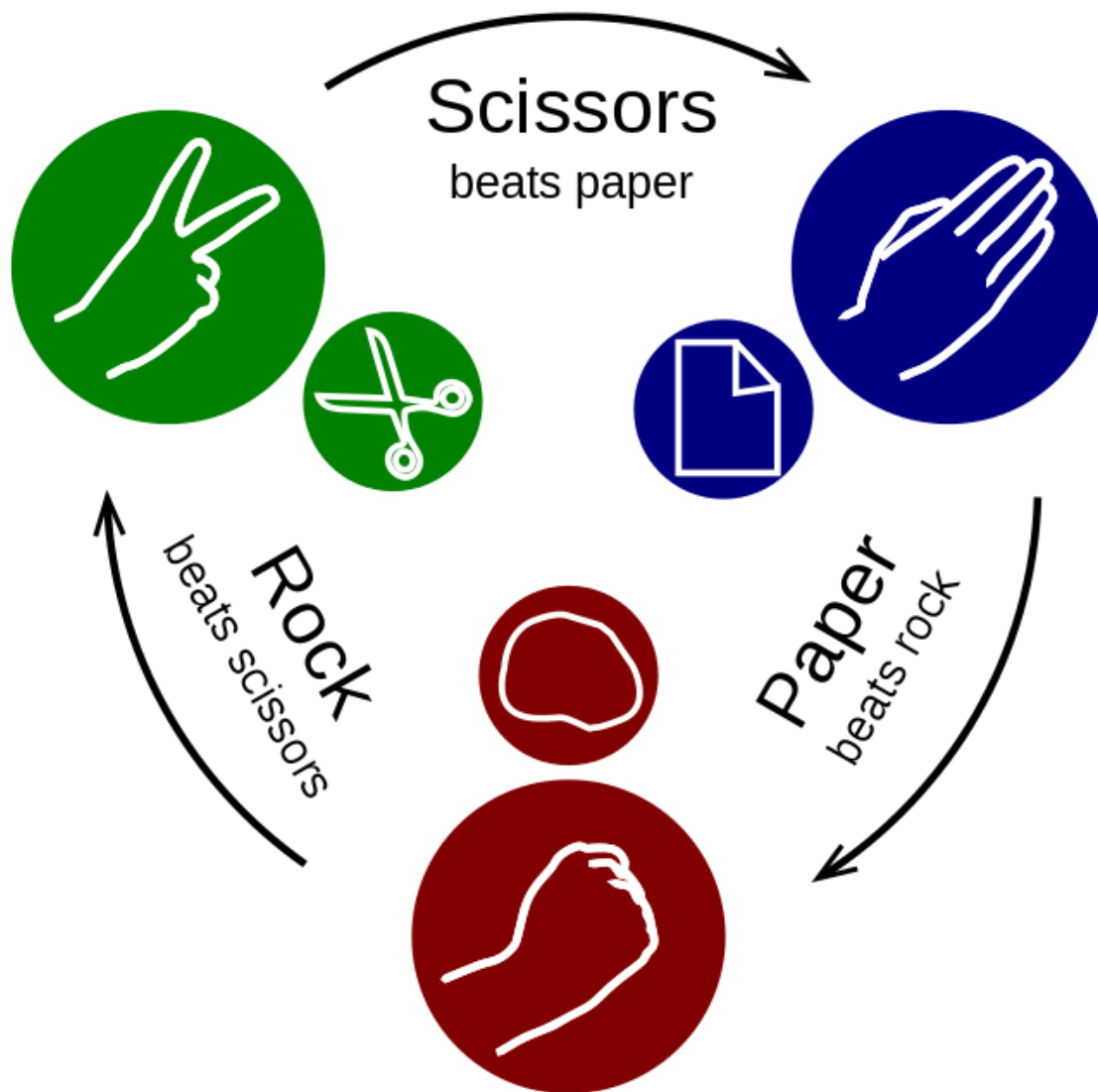
Spacewar! 1962

Fist

Fist, Palm

Fist, Palm, Two Fingers

Rock, Paper, Scissors

Challenge

Design a game whose system of symbols makes the game intuitive and easy to understand.

In other words, save yourself some trouble in explaining the game by choosing a good setting and vocabulary.
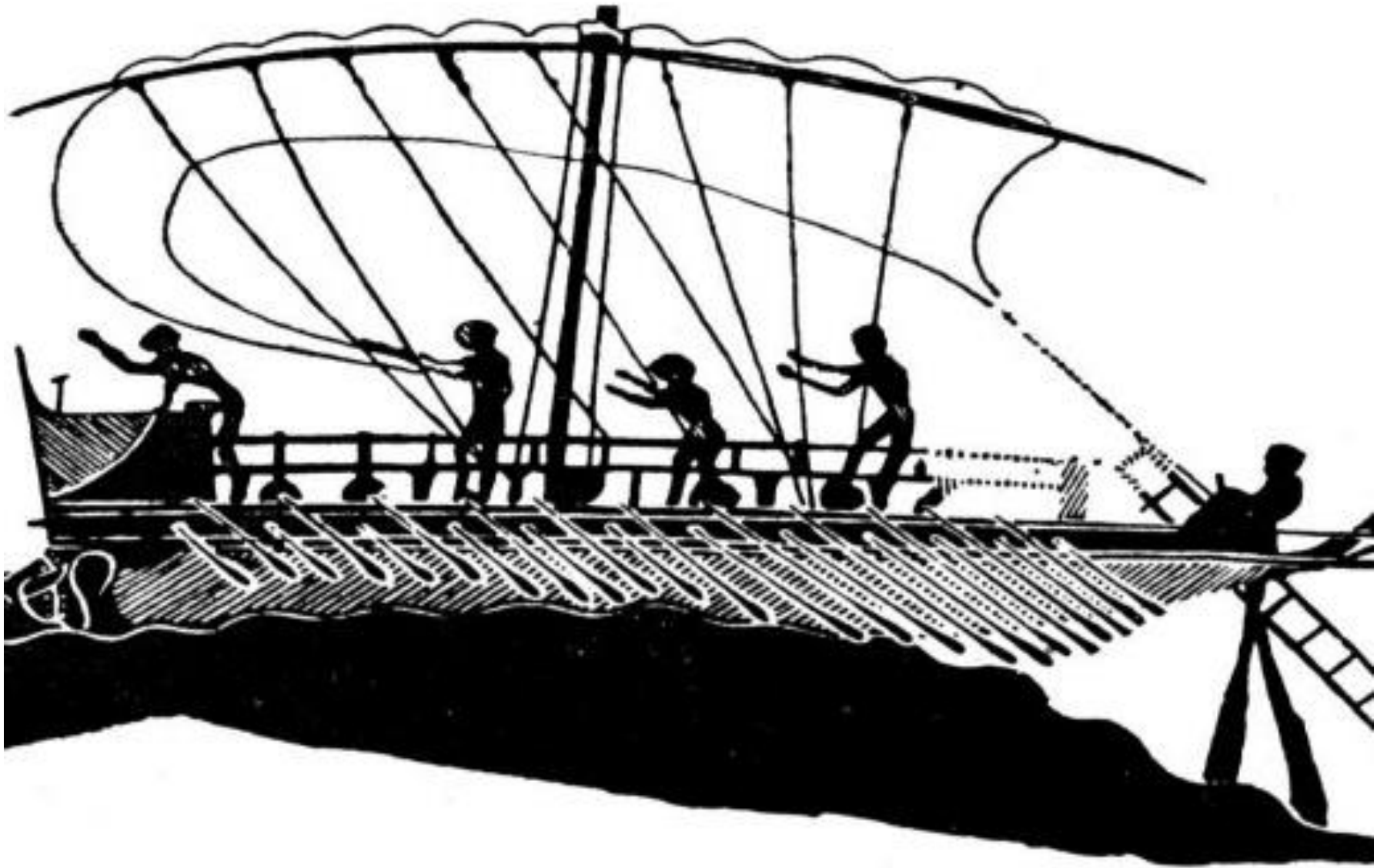
Systems

A group of interacting, interrelated, or interdependent elements forming a complex whole.

Prosopagnosia

The Ship of Theseus

The Drive to Digitize

- The world is inherently fuzzy.

- We are programmed to discretize it into simpler, meaningful units to make the world easier to handle and easier to control.

- Games are simpler worlds.

Open and Closed Systems

Closed Systems are isolated from their environment.

Open Systems take input from and/or give output to their environment.

Framing a System

- Objects
- Attributes
- Internal Relationships
- Environment

Chess

Framing Chess as a System of Rules

- Objects: board, pieces
- Attributes: starting positions, movement rules
- Internal Relationships: position of pieces
- Environment: the game itself

Deep Blue vs. Gary Kasparov, 1997

Framing Chess as a Cultural System

- Objects: Gary Kasparov, Deep Blue
- Attributes: pieces of each player, game state
- Internal Relationships: 2 men at a table
- Environment: sci fi, space race, cold war

Interactivity

Interactivity is a conversation between you and the game. It iterates. You take action to change it, and it responds by changing you.

Interactivity should not be accidental; it should be designed.

Modes of Interactivity

1. **Cognitive:** intellectual and emotional, the impression a game makes

2. **Functional:** use of the objects (e.g. material components)

3. **Explicit:** making choices that are a design part of the experience

4. **Beyond-the-Object:** outside the system

Zork, Infocom 1981

```
West of House                              Score: 0  Moves: 3
```

███████████████████████████

West of House
You are standing in an open field west of a white house, with a boarded front door.
There is a small mailbox here.

> **examine mailbox**
The small mailbox is closed.

> **open mailbox**
Opening the small mailbox reveals a leaflet.

> **get leaflet**
Taken.

>

Short and Long Term

- **Tactics:** short term choices whose consequences are local in time, space, etc.

- **Strategy:** the long term trajectory that the player intends.

How does this relate to meaningful play?

Poker

Challenge

Design a game in which choices are both tactical and strategic.

Anatomy of a Choice

1. What happened before the choice?
2. How is the player prompted to choose?
3. How did the player communicate the choice?
4. What are the results of the choice?
5. How are the results communicated to the player?

The Elder Scrolls IV: Oblivion, Bethesda 2006

Anatomy of a Choice

1. What happened before the choice?
2. **How is the player prompted to choose?**
3. How did the player communicate the choice?
4. What are the results of the choice?
5. How are the results communicated to the player?

Loony Labs

Chrononauts

Back to the Future

Anatomy of a Choice

1. What happened before the choice?
2. How is the player prompted to choose?
3. How did the player communicate the choice?
4. **What are the results of the choice?**
5. **How are the results communicated to the player?**

Losing Control

You cannot directly create the meaning of your game. You can constrain it through design, but only by inviting a play and allowing interaction does meaning arise. This necessarily implies giving up some control and producing a co-created experience.

Summary

Descriptive Definition of Meaningful Play: when the player does x, y happens.

Evaluative Definition of Meaningful Play: an action has meaning if the outcome is discernable and integrated into the larger context of the game.

Game Design: a designer creates a context to be encountered by a participant from which meaning emerges.

Semiotics: signs represent something other than themselves and are interpreted based on the context of the game.

Systems are framed in terms of objects, attributes, internal relationships, and environment.

Modes of Interaction: Cognitive, Functional, Explicit, Beyond-the-Object.

Anatomy of a choice: What before? What prompt? Player communication? What after? Game communication?

Challenges

- Choose a setting and vocabulary that helps the player understand the game.

- Choices affect both the short term state of the game (tactics) and the longer trajectory (strategy).

- Player can clearly understand these short term and long term consequences.

- Release the game and let players co-create meaning with you in your game.

- Grand challenge: create meaningful play.