

# Video Game Design

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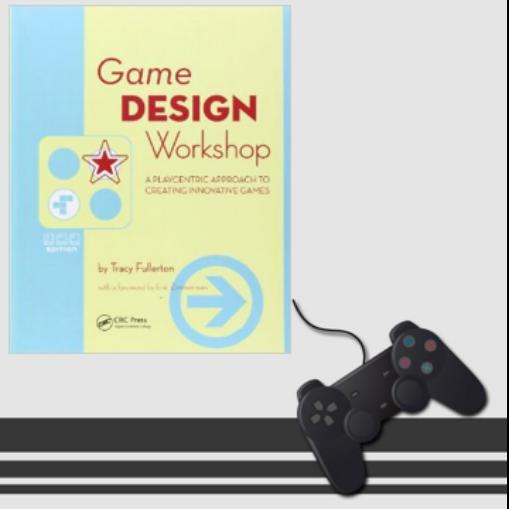
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## Formal Elements of Games

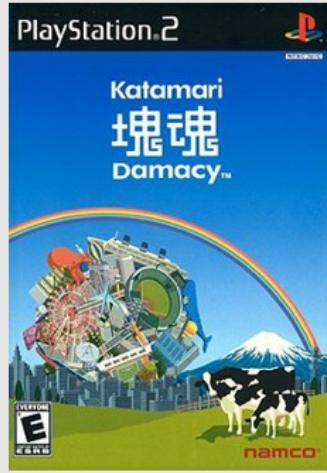


# Formal Elements of Games

- Based of Chapter 3 of Game Design Workshop  
by Tracy Fullerton



# Formal Elements of Katamari Damacy



## Players

- 1 player
- 2 players (split screen mode)



## Player Interaction Mode

- Single player versus game



## Player Interaction Mode

- Player versus Player



## Other interaction modes not in Katamari Damacy

- Multiple Individual Players vs. Game (bingo)
- Multilateral Competition (poker, Quake, etc.)
- Unilateral Competition (tag, Scotland Yard)
- Cooperative Play (LotR board game, EverQuest co-op quests)
- Team Competition (Battlefield 1942, football)



# Objective

- Primary: Make your Katamari as big as the **King of All Cosmos** requires
- Secondary:
  - Pick up presents
  - Substantially surpass the kings expectations of katamari size
  - Various side quests



## General Objective Categories



- **Capture** items in the environment
- **Explore** the environment
- Lesser Objectives:
  - **Chase** creatures in environment
    - Be chased if you're too small
  - **Align** items you roll up (in optimal orientation)



## Other General Objective Categories not in Katamari Damacy

- Chase (Terminator)
- Race (Gran Turismo)
- Rescue or Escape (Super Mario Bros., Ico)
- Forbidden Act (Operation)
- Construction (SimCity)
- Solution (Monkey Island)
- Outwit (Trivial Pursuit)



## Procedures

- Starting Action
- Progression of Action
- Special Actions
- Resolving Action



## Starting Action

- Globe menu



## Progression of Action

- Dual Stick Controls (“tank style” like BattleZone)
  - Speed charge up
  - Quick turn around
- Shoulder buttons
  - Look mode
  - Jump (for view)



## Special Actions

- None – there are special objectives, but procedure remains the same throughout



## Resolving Action

- Generally no special action is taken to complete a level (just wait for time to run out as dictated by **System Procedures**)
- One of the side quests requires selecting when to end level



## System Procedures

- Explicit Rules (such as time limit)
- AI
- Collision Detection
- Etc.





## Rules Defining Objects/Concepts

- Katamari is an object that the prince pushes to collect junk
- Simplified objects representing things from the real world



## Rules Restricting Actions

- Time Limit
- Physical boundaries
- Path blocked by obstacles



## Rules Determining Effects

- Roll over a small object, you pick it up
- Attempt to roll over a big object, will cause you to bump against it and jar some items loose
- Small animals run away
- Big animals attack





# Conflict

- **Obstacles**
  - Large items
  - terrain
- **Opponents**
  - animals
- **Dilemmas**
  - Deciding where to go to pick stuff up



## Boundaries

- Continuously evolving based on perspective
  - Size of Katamari dictates what is a boundary or not
  - Too small: can't roll over steps, fences, etc.
  - Get too big, you get closed off from small passage ways



# Outcome

- Meet Kings objective? Move on to next level until all levels are complete (award: see ending sequence)
- Fail? Try level again!
- Find present? Available item to use in future levels (mostly just decorations)
- Fail? Try level again!
- Try to set personal bests



## Formal Elements – Summary

- Players & Interaction Modes
- Objectives
- Procedures:
  - Starting Action
  - Progression of Action,
  - Special Actions,
  - Resolving Actions
- Rules
  - defining objects/concepts, restricting actions, determining effects
- Resources
- Conflict
- Boundaries
- Outcome

