

CART 315

# GAME PROTOTYPING

M Bethancourt



# GENRES

**how many can we name?**

# ACTION

- SubGenres: Action-Adventure, Action-Arcade, Fighting, Platformer, Stealth, Beat 'em Up
- Common Attributes: Button Mashing, Time constraints, mechanical challenges

# ADVENTURE

- SubGenres: Graphical Adventures, RPGs, MMORPGs, Horror
- Common Attributes: Story, Surprise, Emotions, Character / Growth, Exploration, Depth

# SHOOTER

- SubGenres: Arcade Shooters, Shoot 'em Ups (Shmups), First person, Third Person
- Common Attributes: Learned controls, Weapons, button-mashing, multiplayer options, Clear Objectives,

# CONSTRUCTION/MANAGEMENT

- SubGenres: Life/Pet Simulation, God games, Sports Management
- Common Attributes: Slow-paced, Optimization, Toys

# MUSIC/RHYTHM

- SubGenres: Music platformer
- Common Attributes: Fast-paced, Button mashing, Skill-based, Timing Accuracy

# PUZZLE

- SubGenres: Puzzle platformer
- Common Attributes: Cleverness, Analytical thinking, Problem-solving, pattern-recognition



# SPORTS

- Common Attributes: Lifelike, Active, Strategy

# STRATEGY

- SubGenres: Real-time, Turn-based, Tower defense
- Common Attributes: Experience, Cleverness, Non-trivial choices, Tactical, Difficulty

# VEHICLE SIM

- SubGenres: Driving, Flying
- Common Attributes: Extremely Life-like, Multiple Camera Angles, Real-time

# **SHMUPS!**

# STANDARDS

- Third-person Perspective
- Movement via x/Y Axis
- No control of camera axis (often scrolling)
- Avatar faces direction of stroll
- generally one button (shoot) but sometimes jump
- Co-op as second hero, never enemy
- Often no ending



**SPACE INVADERS - ATARI 1978**

**SCORE**  
05900

**TIME**  
74



**SKY RAIDERS - ATARI 1978**

# GALAXIAN

- An exciting full colour space game for 1 or 2 players
- The Galaxian starship travels the Galaxy in search of aliens
- When Galaxian encounters the alien force the aliens send squadrons to attack the Galaxian
- Player uses controls to guide Galaxian in an endeavour to eliminate alien force and attacking squadrons with its laser gun

- Player scores as each alien ship is destroyed by Galaxian fire power. Alien ships have different score values which increase when they attack in squadron formation
- The game is over when Galaxian is hit 3 times by alien lasers



#### DIMENSIONS

33 DEEP  
67 HIGH  
26 WIDE

1UP      HIGH SCORE  
3300      3300



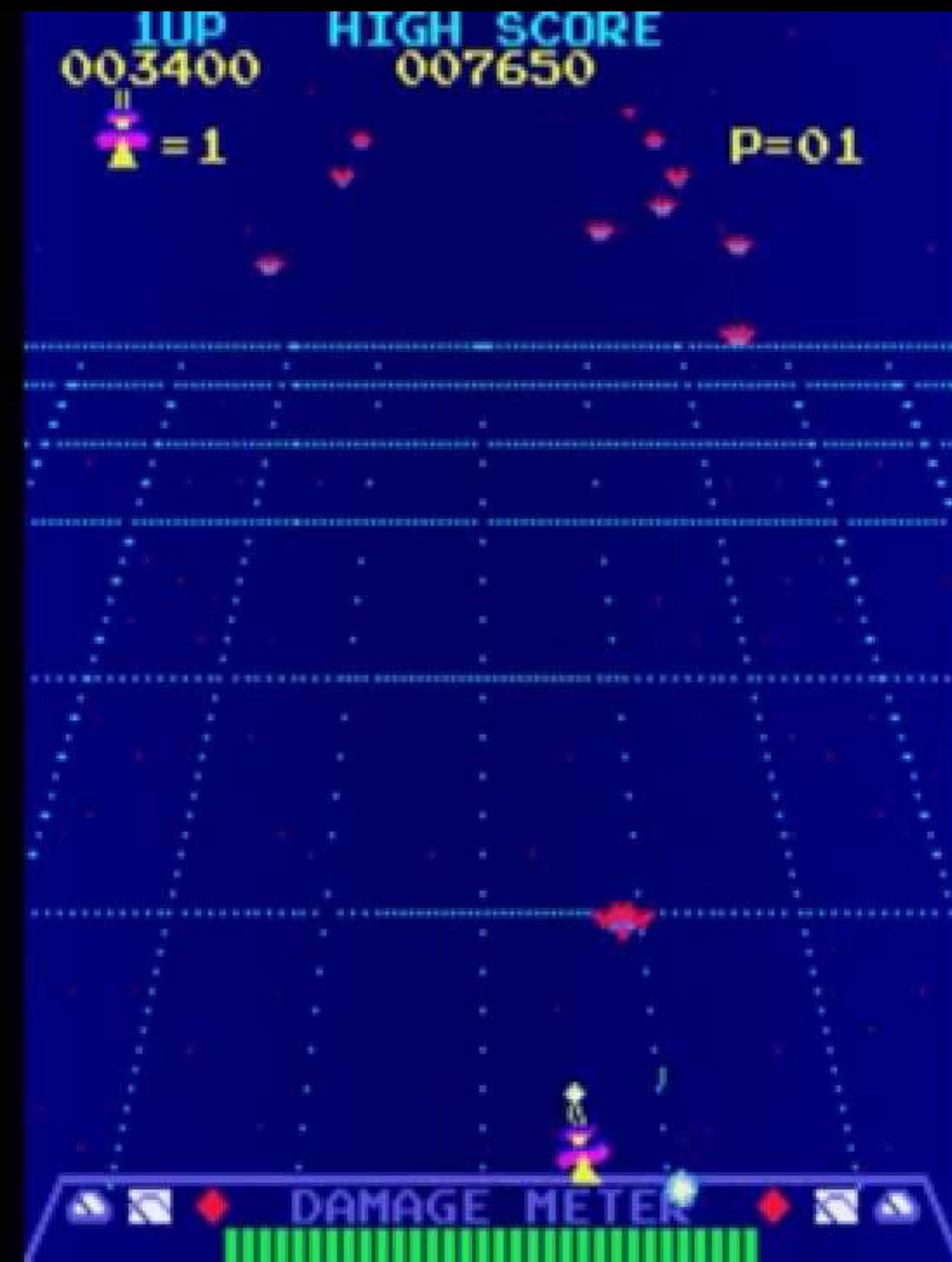
**GALAXIAN - NAMCO, 1979**



**COSMIC GUERILLA - UNIVERSAL , 1979**



**HELI FIRE - NINTENDO, 1980**



**RADARSCOPE - NINTENDO, 1980**

UNIVERSAL

COSMIC SERIES

# ZERO HOUR



1ST  
3155

TOP

0

BONUS

2771

5

ZERO HOUR - UNIVERSAL, 1980



The most technically advanced  
video game ever created.  
And the most sensational!

# DEFENDER

Your mission, as Captain of the Defender, is to protect the humanoids stranded on the planet from their alien abductors. The scanner will help you determine strategy to shoot down the alien ships before they reach the humanoids. If you destroy the aliens only after they've captured their prey, you must return the humanoids to the safety of the planet or they will fall to their death. If an alien carries its victim out of your range, the humanoid will mutate, joining the alien force, and take to the assault with deadly vengeance!

The challenge becomes ever more intense as action progresses. Fighter ships and mines will test your skill. A direct hit will destroy a mother ship but smash it into a swarming mass of mini-ships which then must be wiped out! And if you don't act quickly, the cosmic batter will attack!

Use your 2 escape options only if all else fails. Your "smart bomb" power is limited and "hyper-space" puts you into an unknown time warp. But

beware! If all the humanoids are abducted, the entire planet will explode in a blinding flash!

Dimensions:

1 or 2 player upright:

Height: 70" (177.8cm) Width: 26" (66.1cm)  
Depth: 30" (76.2cm) Weight: 255 lbs. (562.1kg)  
110/220 volt

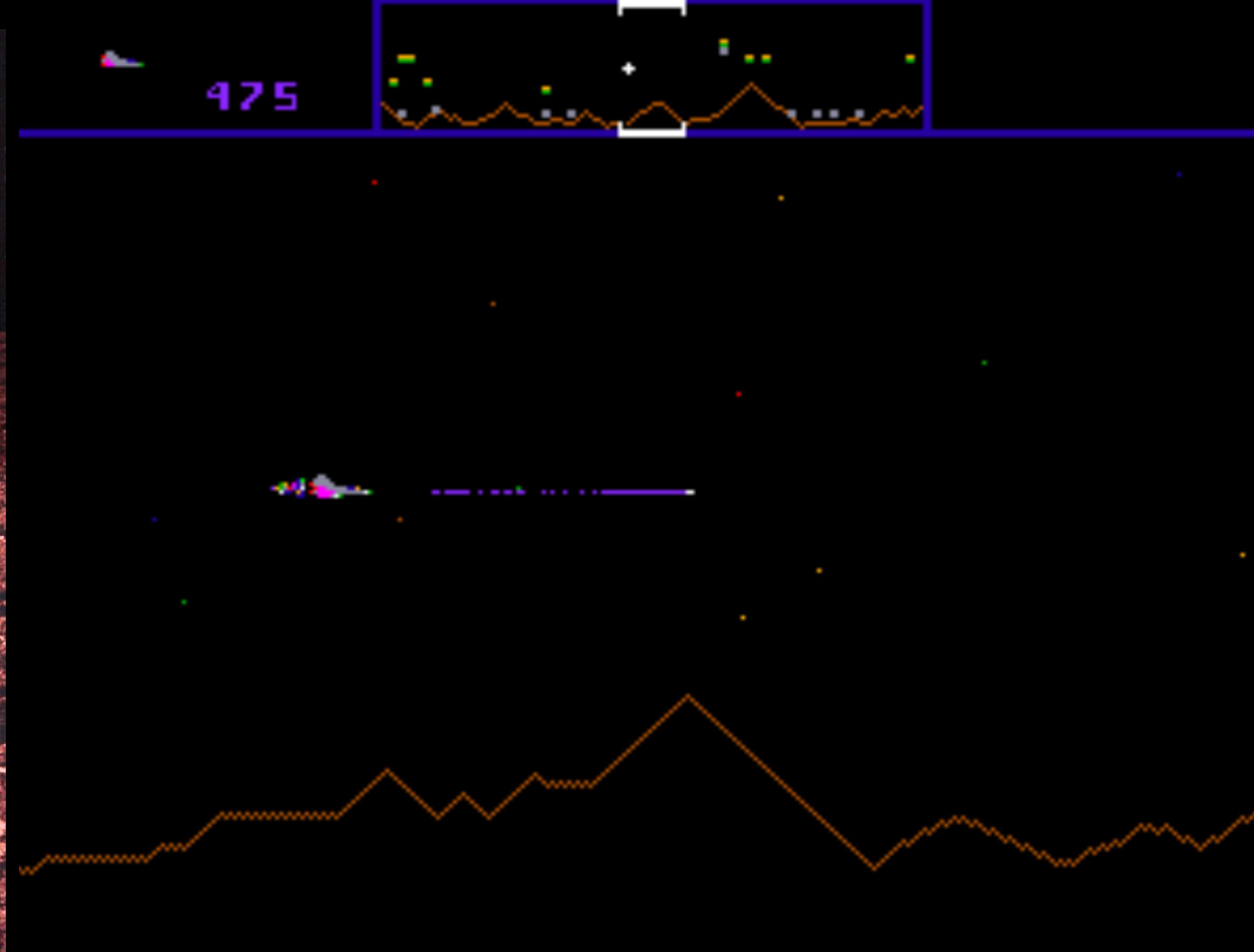
1 or 2 player cocktail table:

Height: 27½" (70.3cm) Width: 30" (76.2cm)  
Depth: 27" (68.9cm) Weight: 144 lbs. (318.8kg)  
110/220 volt

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475

# DEFENDER - WILLIAMS ELECTRONICS, 1981

## ANOTHER WINNER FROM STERN!

Yes, we've done it again — we've come up with another big profit-making game. If you want to scramble up your share of it, just give a call for Scramble.

### How To Play:

- One or two people can play.
- Insert coins.
- Select one or two player button.

### The Objective:

- To successfully invade five Scramble Defense Systems in order to reach and destroy Enemy Base.
- Enemy Rockets, Fuel Tanks, and Mystery Targets are destroyed by pressing Laser and Bomb buttons.
- Joy Stick moves player's Aircraft up or down, and accelerates or decelerates the Aircraft.
- Hitting Fuel Tanks achieves extra fuel for Aircraft.
- If Aircraft hits a mountain or oncoming Rocket, the Aircraft is destroyed.
- Player awarded additional Aircraft at designated score.
- Game is over when all Aircraft are destroyed or when fuel runs out.

### The Scoring:

- Each Rocket destroyed scores 50 points.
- Each oncoming Rocket destroyed scores 80 points.
- Each Flying Saucer destroyed scores 100 points.
- Each Fuel Tank destroyed scores 150 points.
- Each Enemy Base destroyed scores 800 points.
- Level of difficulty increases after each Enemy Base is destroyed.
- 10 highest scores-to-date register on screen.

# STERN

Stern Electronics, Inc.  
1725 Diversey Parkway  
Chicago, Illinois 60614  
(312) 935-4600/Telex 25-4657  
Toll-Free Service No. (800) 621-6424



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1UP HIGH SCORE  
4180 10000

1ST 2ND 3RD 4TH 5TH BASE



# SCRAMBLE - KONAMI, 1981

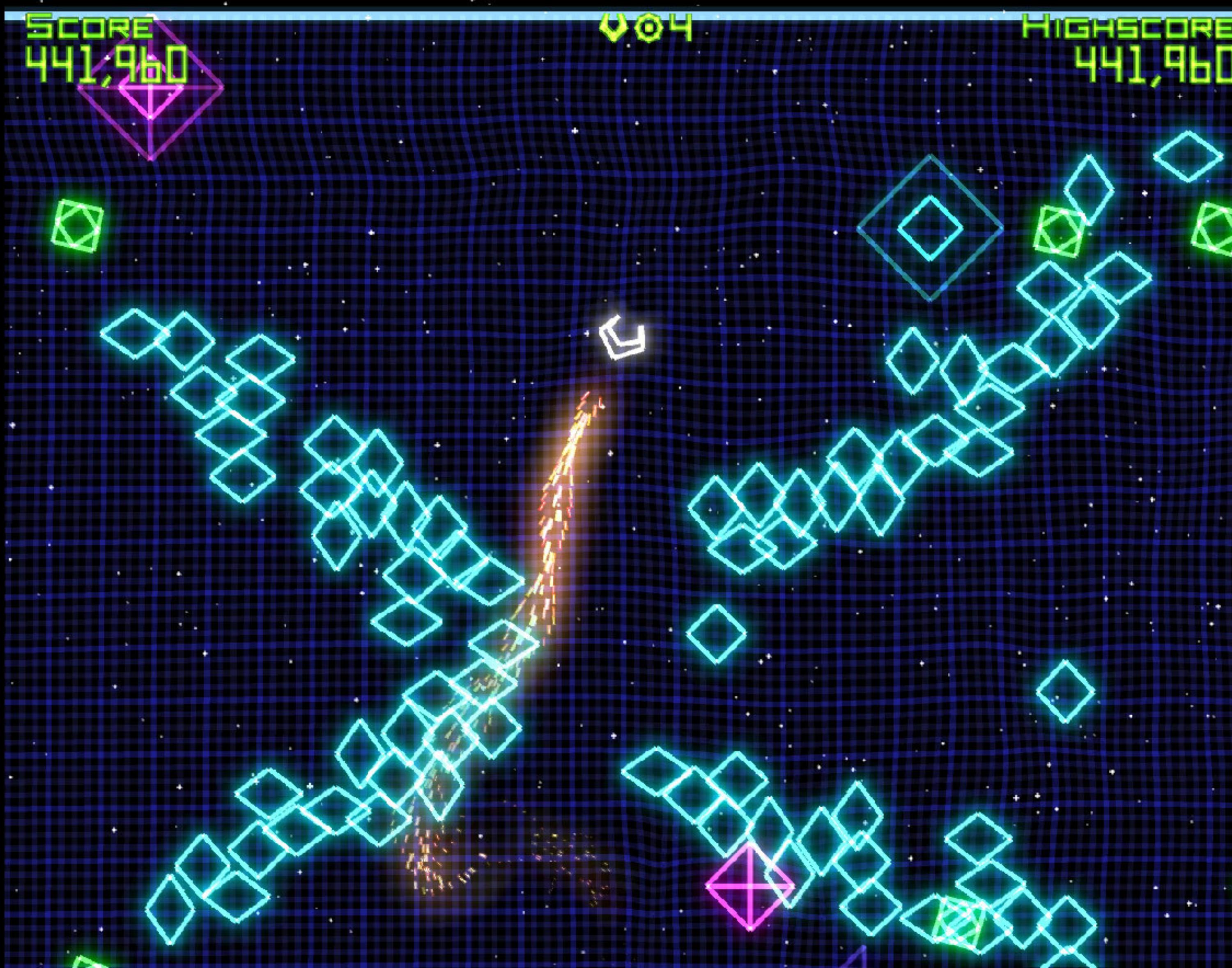
# A FEW ADAPTATIONS



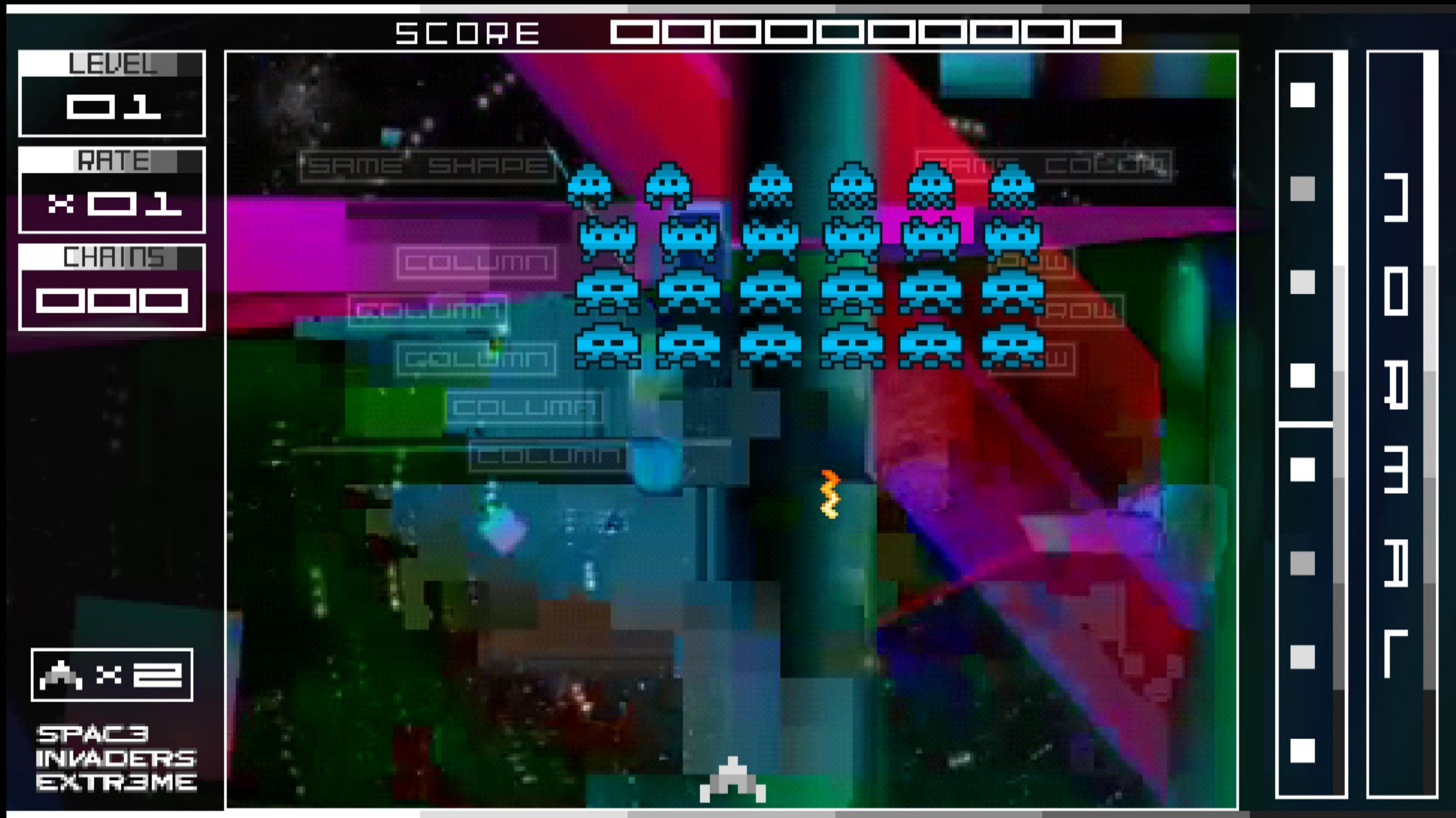
**CONTRA - KONAMI, 1987**



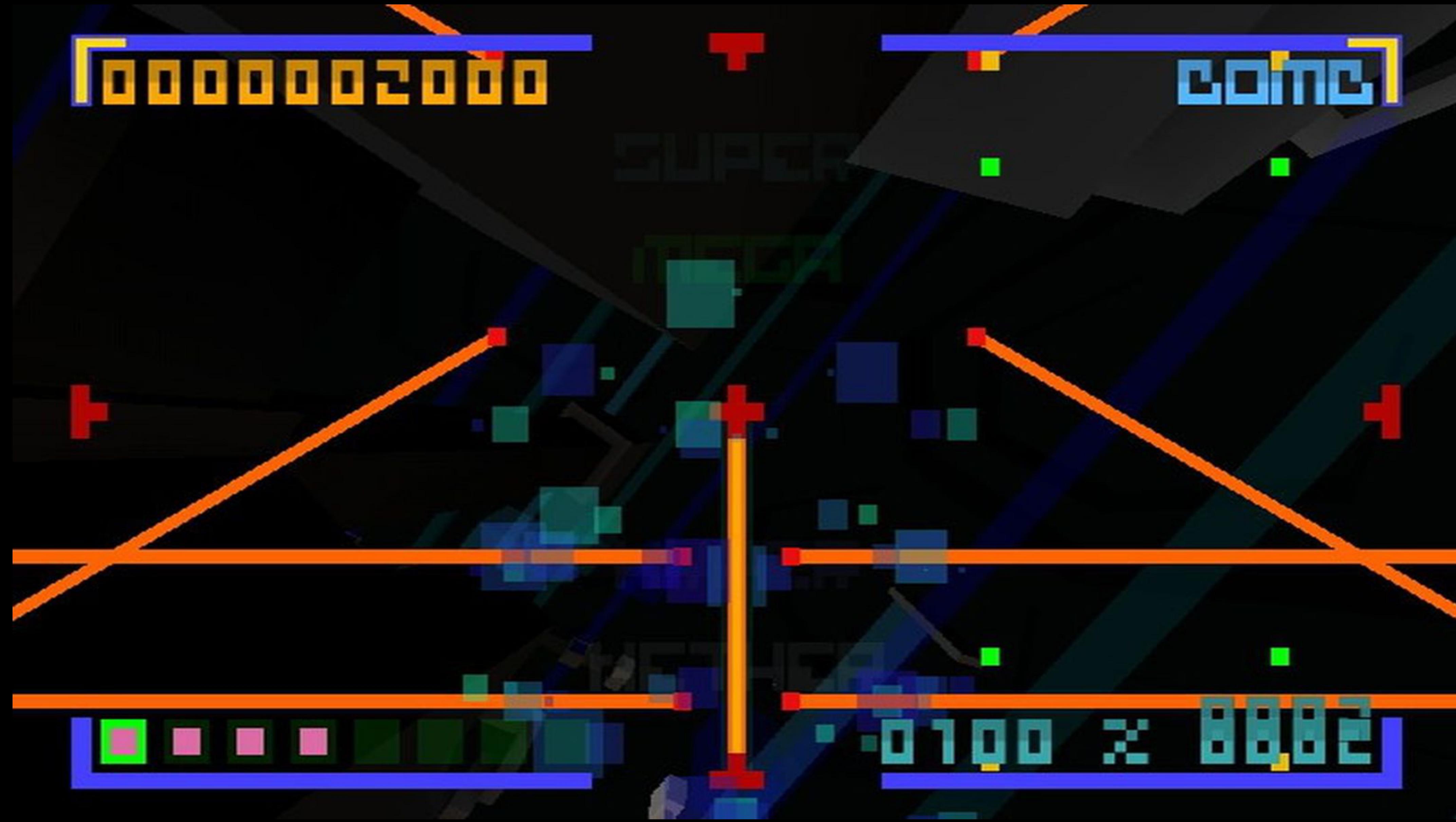
**PARODIUS - KONAMI, 1988**



**GEOMETRY WARS - BIZARRE CREATIONS, 2003**



SPACE INVADERS EXTREME - TAITO / SQUARE ENIX, 2008



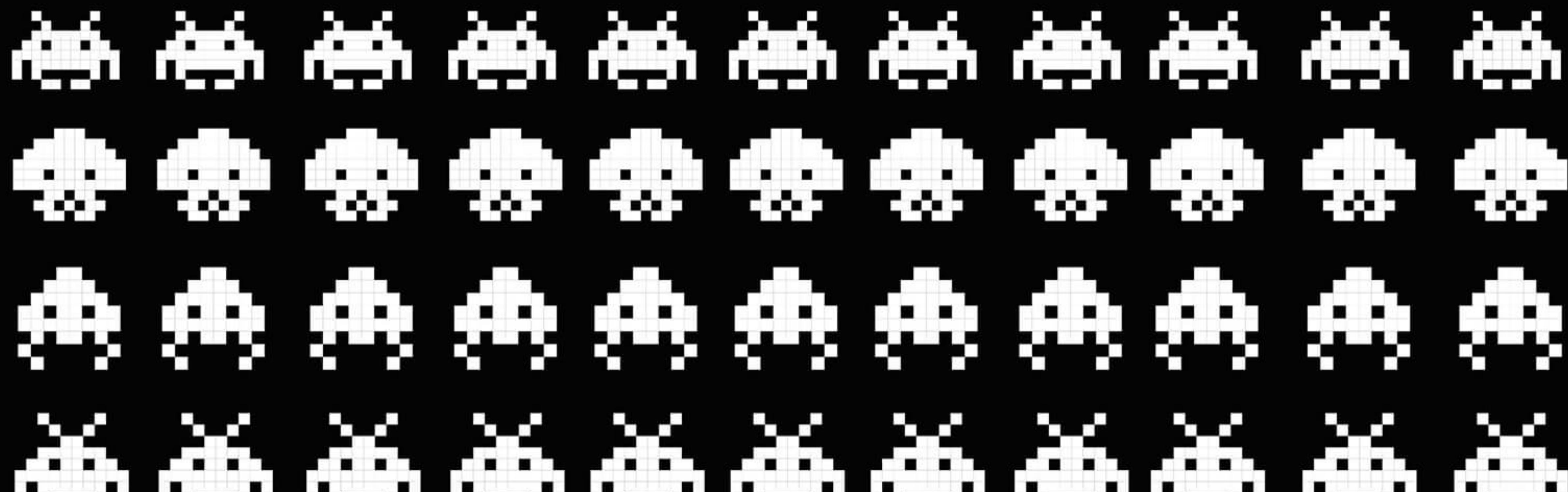
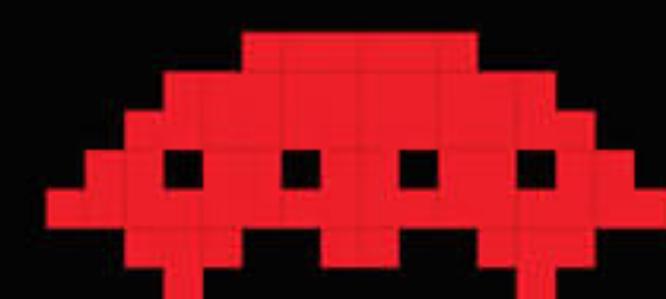
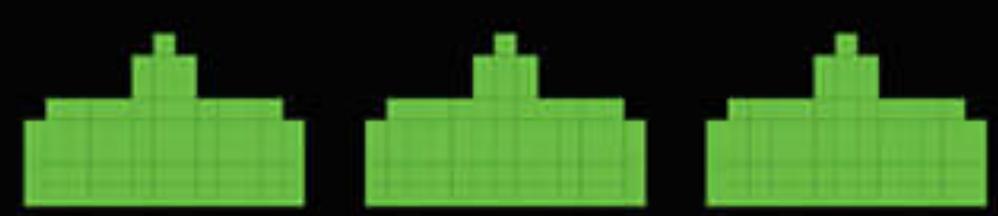
BIT.TRIP CORE, 2009 - GAIJIN GAMES

# **SHMUP REMIX**

SCORE  
10

HI-SCORE  
60000

LIVES



**WAYS TO BEGIN THINKING  
ABOUT THIS**

**‘ELEMENTAL’ REMIX**

# FULLERTON'S FORMAL ELEMENTS

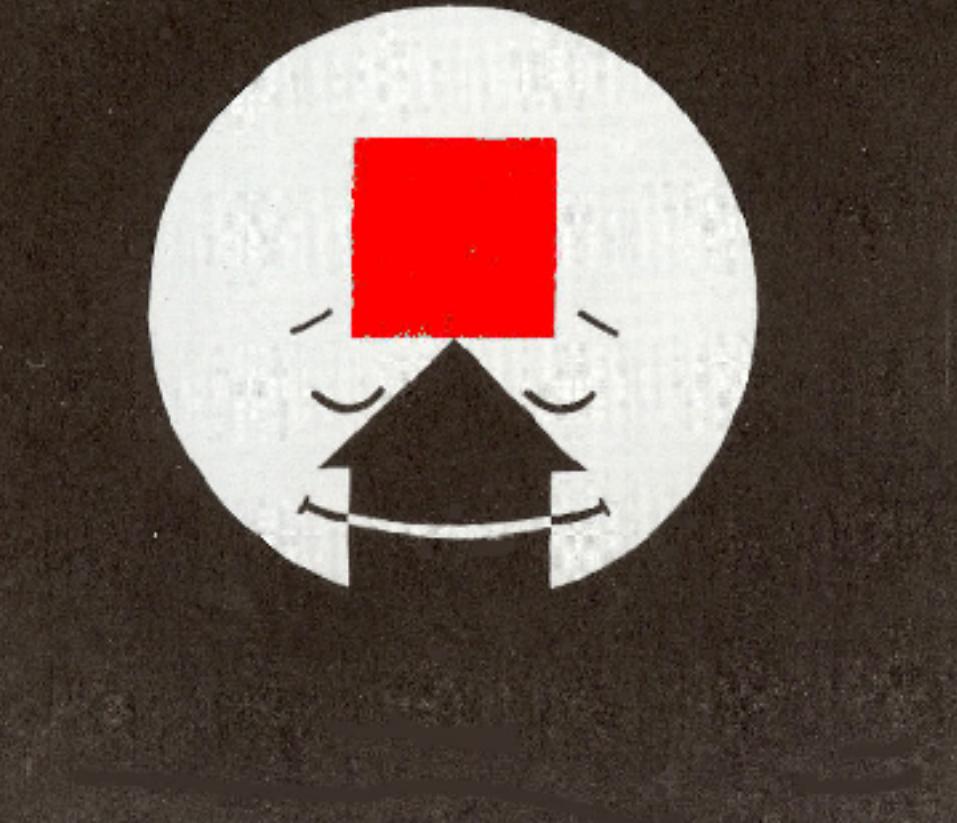
- Players
- Objectives
- Procedures
- Rules
- Resources
- Conflict
- Boundaries
- Outcome

# FULLERTON'S FORMAL ELEMENTS

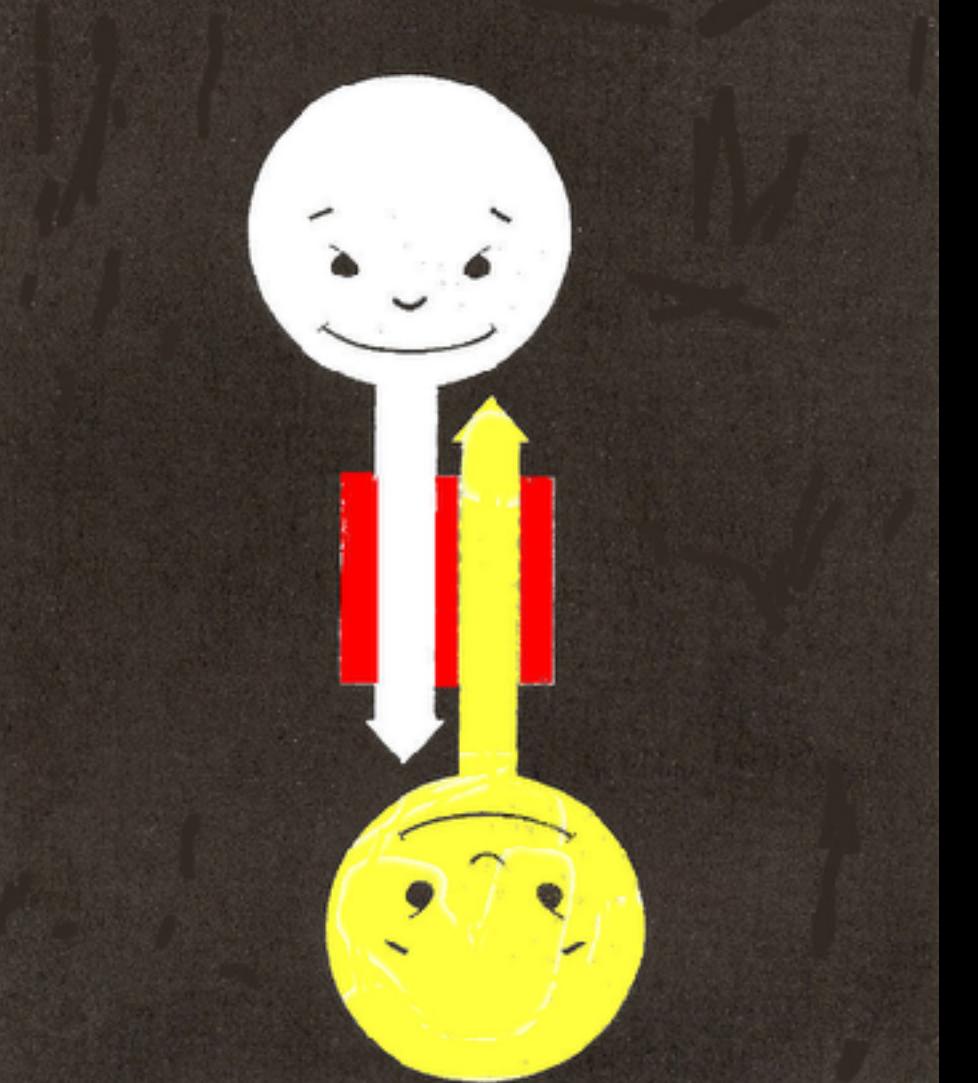
- Players
- Objectives
- Procedures
- Rules
- Resources
- Conflict
- Boundaries
- Outcome

# AVEDON'S INTERACTIVE PATTERNS —

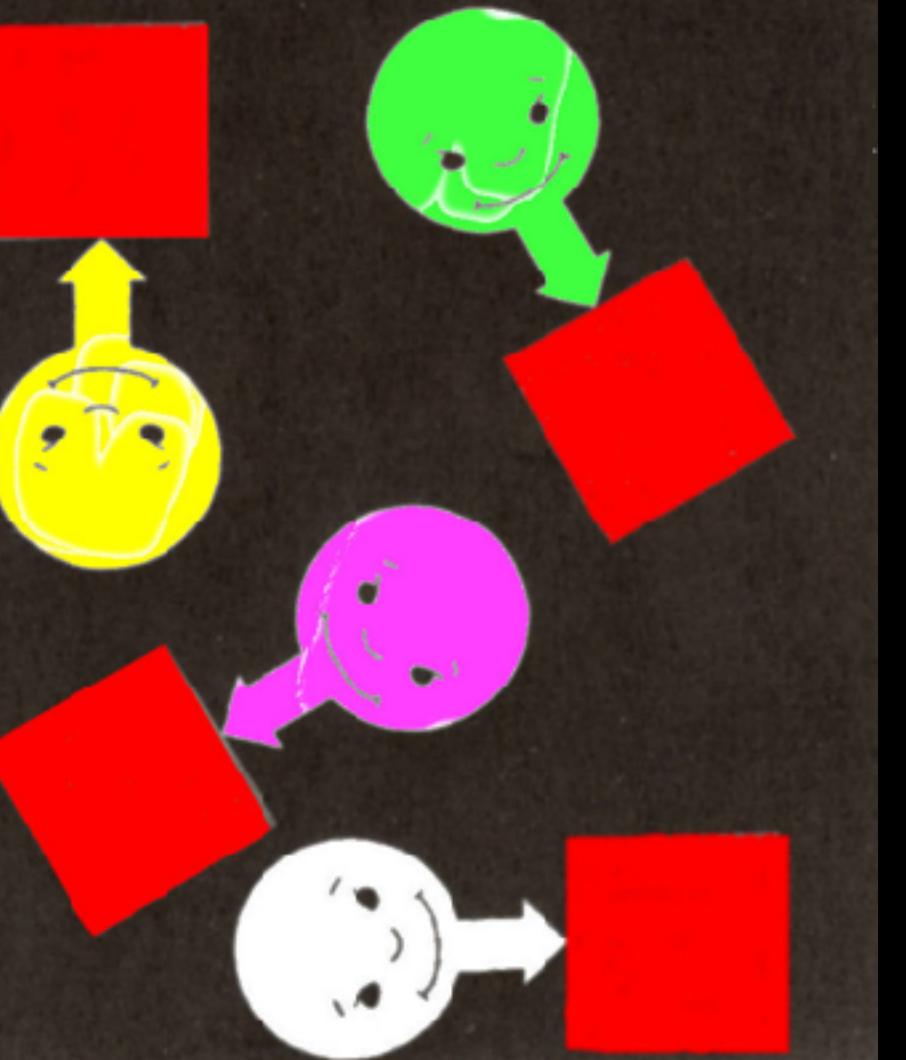
## Intra individual



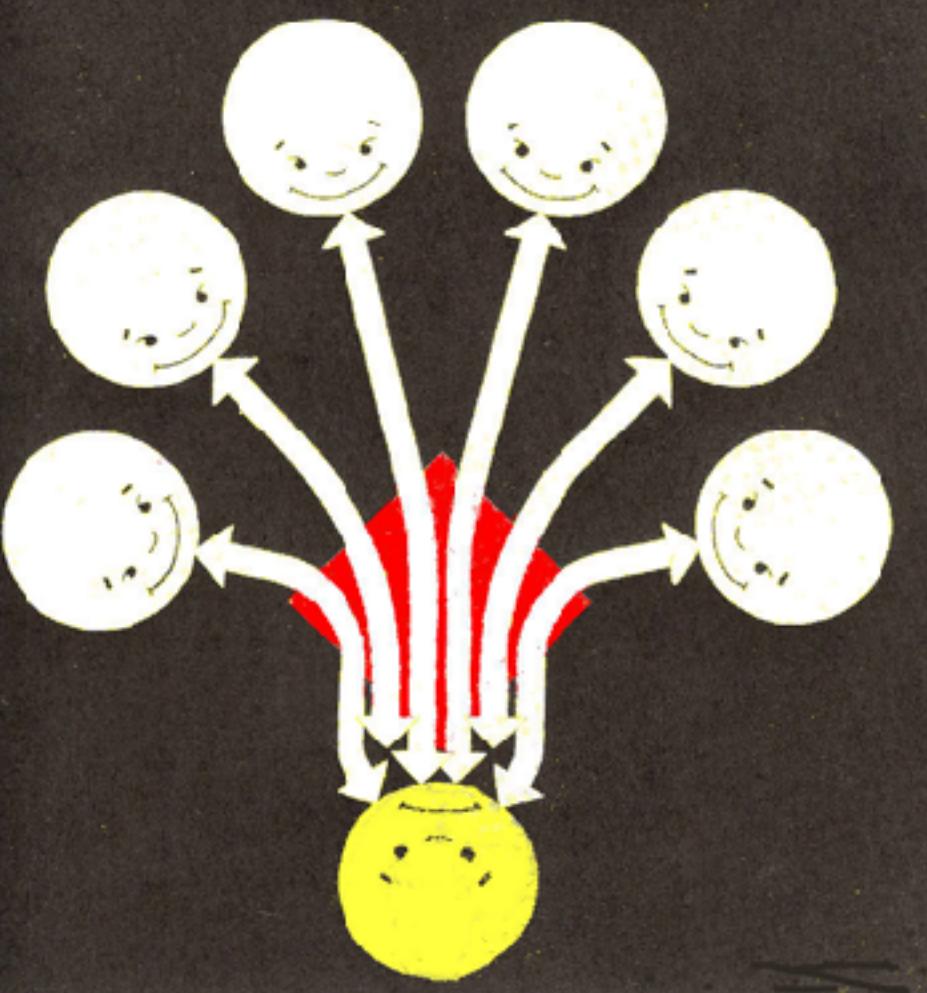
## Inter individual



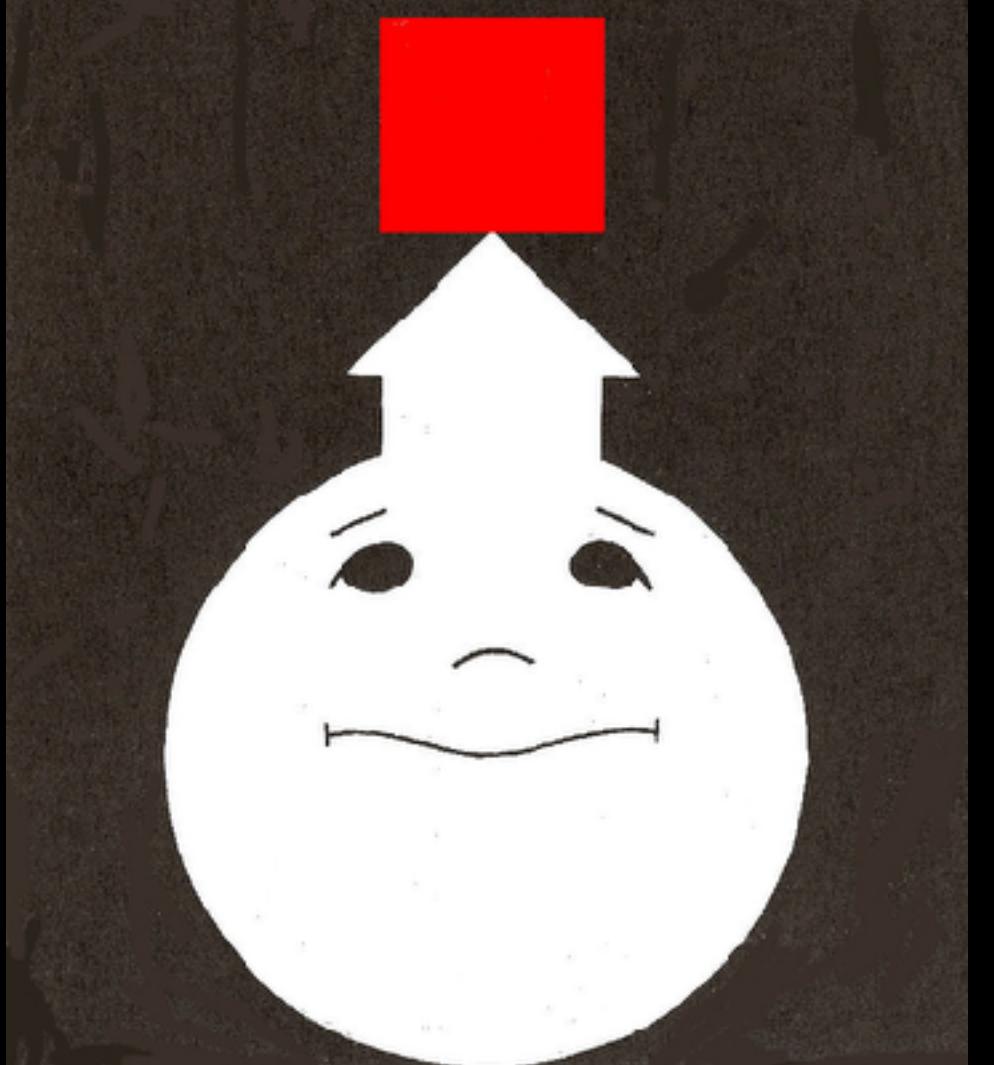
## Aggregate



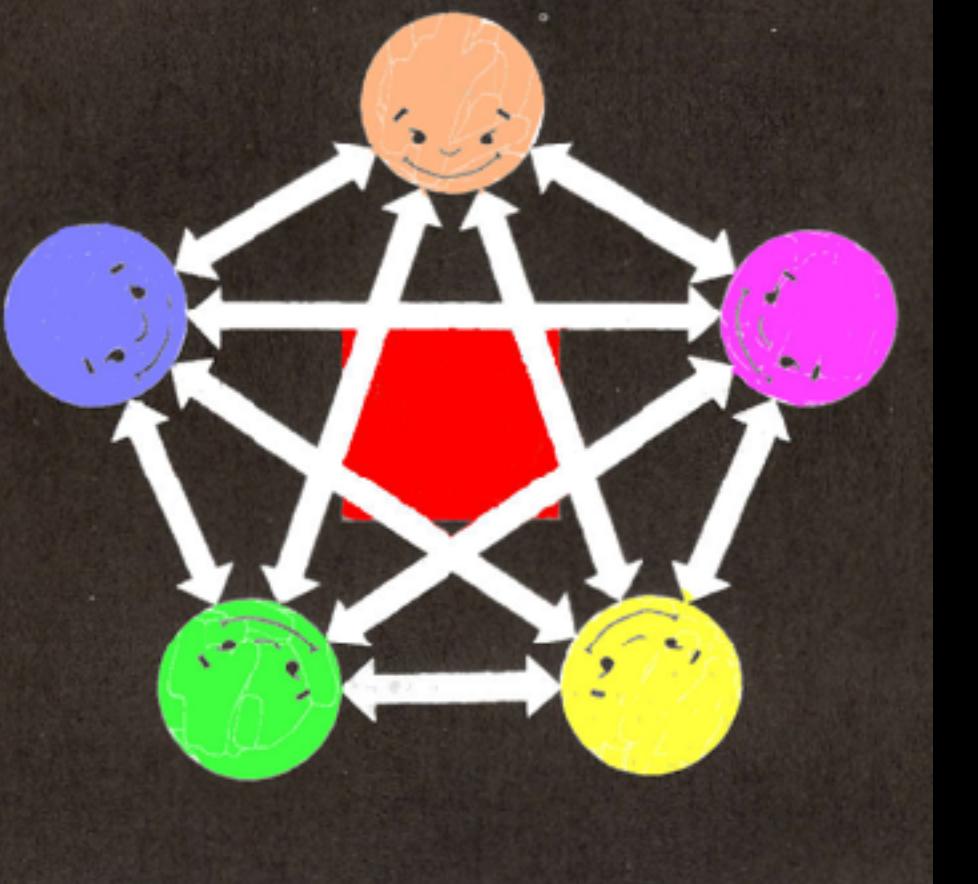
## Unilateral



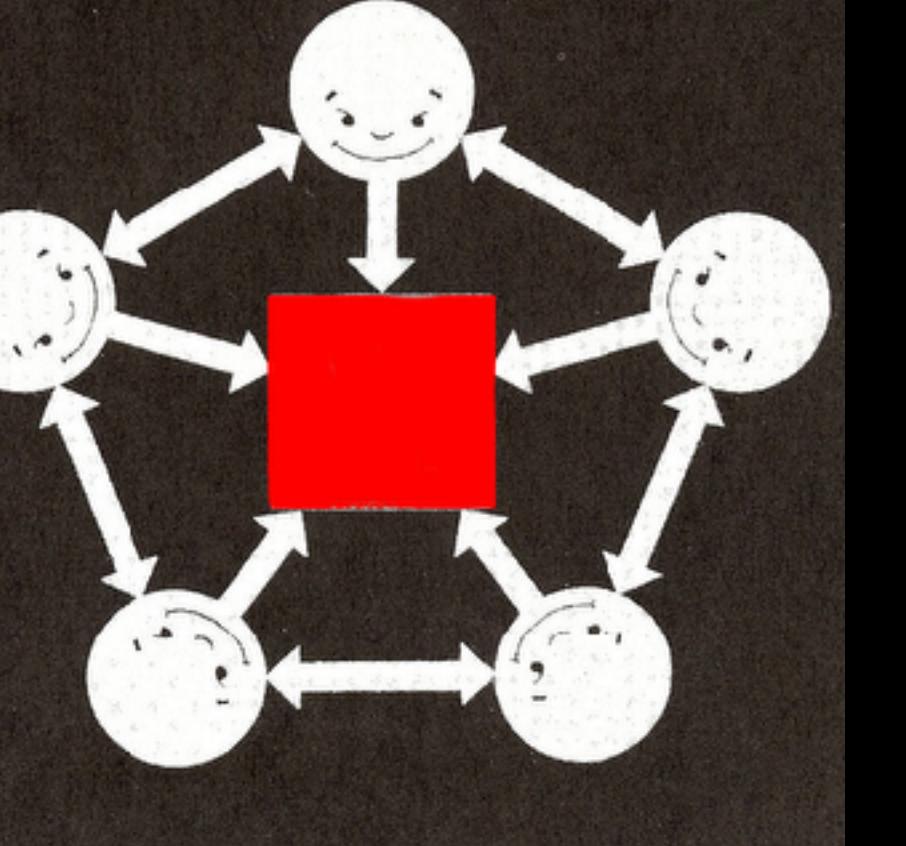
## Extra individual



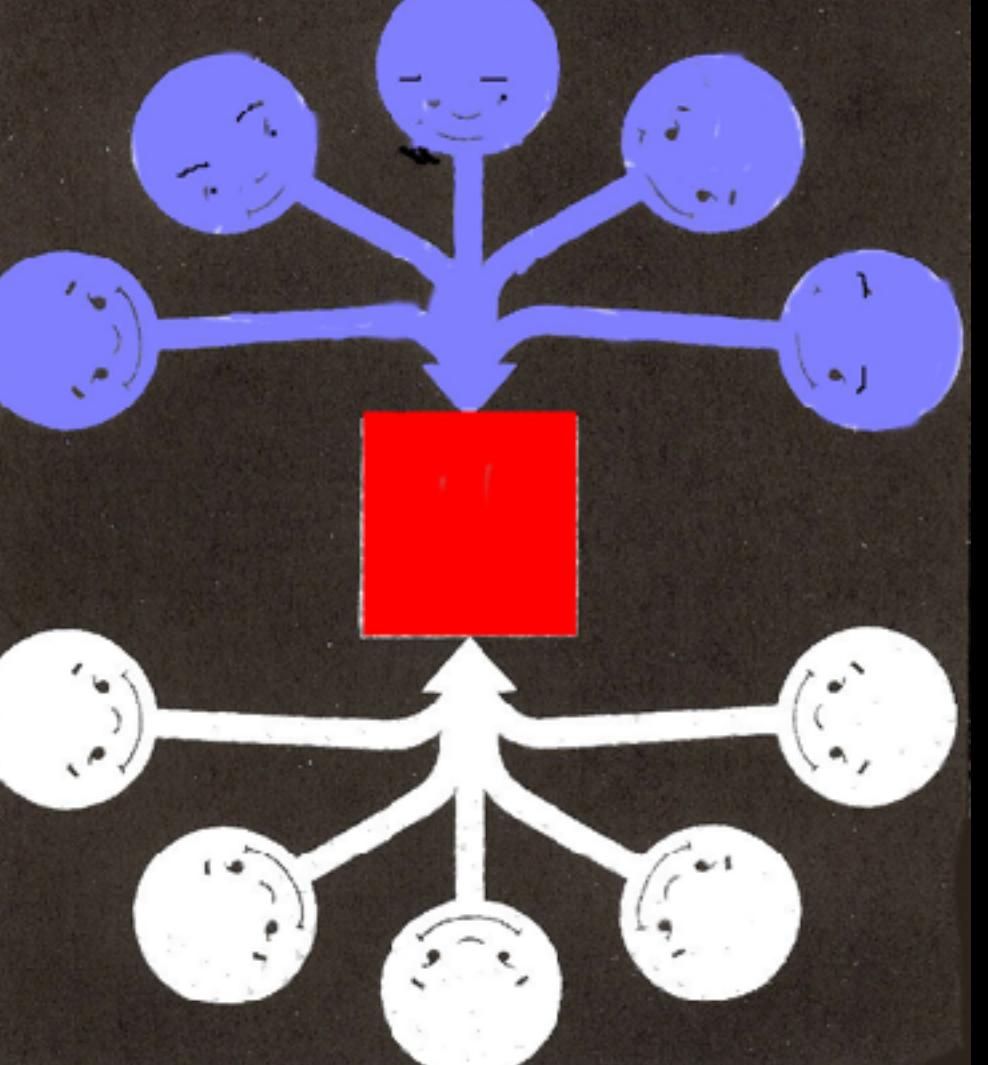
## Multilateral



## Intragroup



## Intergroup



# FULLERTON'S FORMAL ELEMENTS

- Players
- Objectives
  - capture
  - chase / race
  - alignment
  - rescue / escape
  - exploration
  - solution / outwit
- Procedures
- Rules
- Resources
- Conflict
- Boundaries
- Outcome

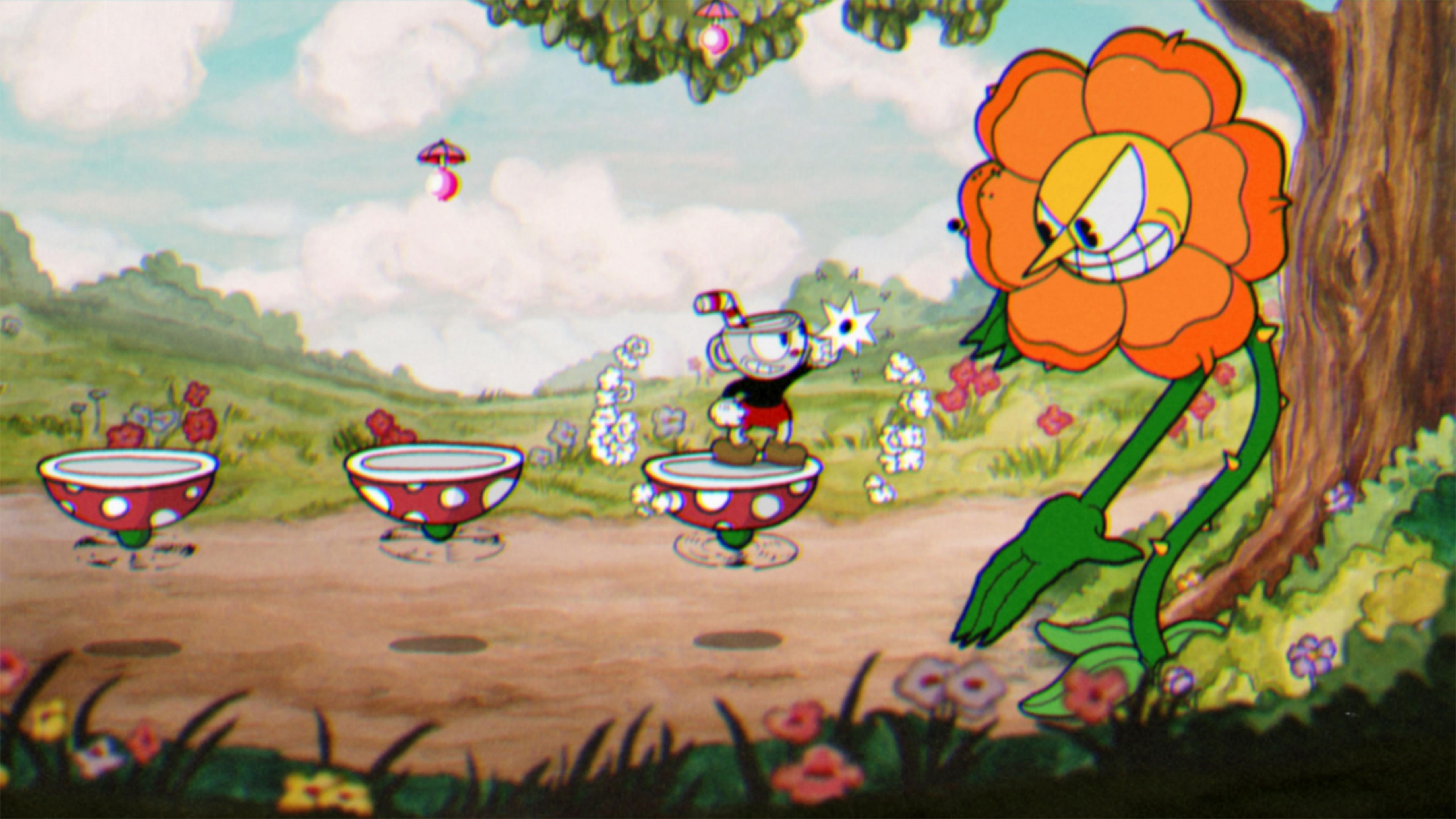
# FULLERTON'S FORMAL ELEMENTS

- Players
- Objectives
- Procedures
- Rules
- Resources
- Conflict
- Boundaries
- Outcome
- lives / units
- health
- currency
- actions
- objects
- terrain
- time

**'THEMATIC' REMIX**

1308





2/4

01.35.98

GEM HIGH

520

