

# Architecting a Multiverse

Cooperative Design in Dead Space 3

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Seth Marinello - March 26<sup>th</sup> 2013

# Phases of CO-OP Development

Concept

Technical

Gameplay

Experience

The background of the image is a dark, monochromatic scene of a celestial body's surface, likely the moon. In the upper left, a large, dark, spherical object, possibly another moon or planet, is partially visible against the black sky. The foreground shows a rugged, rocky terrain with various sized rocks and craters, illuminated from the side, creating deep shadows and bright highlights. The overall mood is mysterious and desolate.

# PHASE I

Concept

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# Why add CO-OP?

- Disconnect between SP & MP in DS2
- Observations from the success of Hardcore Mode and NG+
  - DSI and DS2 are games that players replay over and over

# Why add CO-OP?

- We are good at immersive narrative levels
- People enjoy playing our content repeatedly
- CO-OP allows for a totally new and different way of experiencing what we are already good at making.

# Dead Space 3 CO-OP Design Goals

- Single Player is untouched
- CO-OP feels like an extension of the core experience

# Existing Patterns



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Single Player



Cooperative Play





Single Player



Cooperative Play

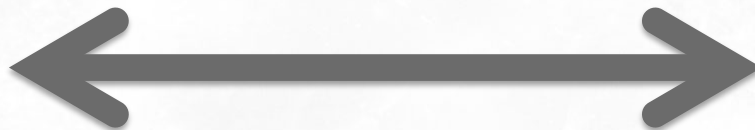


Game  
Progress

Single Player

Cooperative Play

Freely move between modes





# PHASE II

Technology

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DON'T LET SCIENCE  
GET IN THE WAY OF



**AWESOME  
TOWN**

Video

with the PlayStation 3™ and Xbox 360™  
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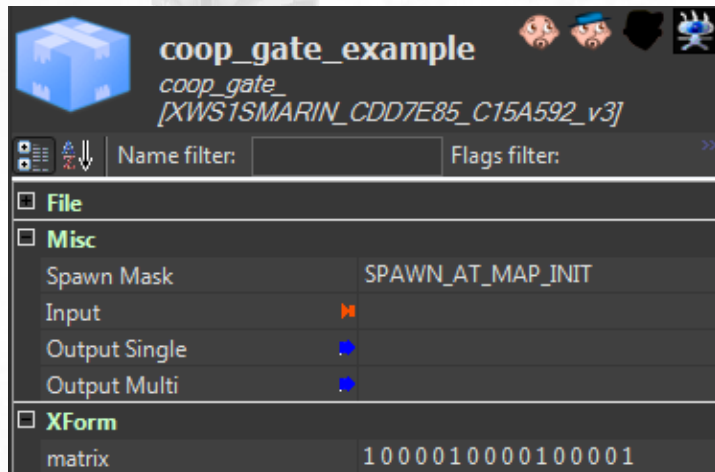
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# Basic Scripting Changes

- All core gameplay scripting is done on the **host**
- Performance forced **local** scripting for
  - Environment Culling
  - VFX
  - Lighting
  - TK interactions

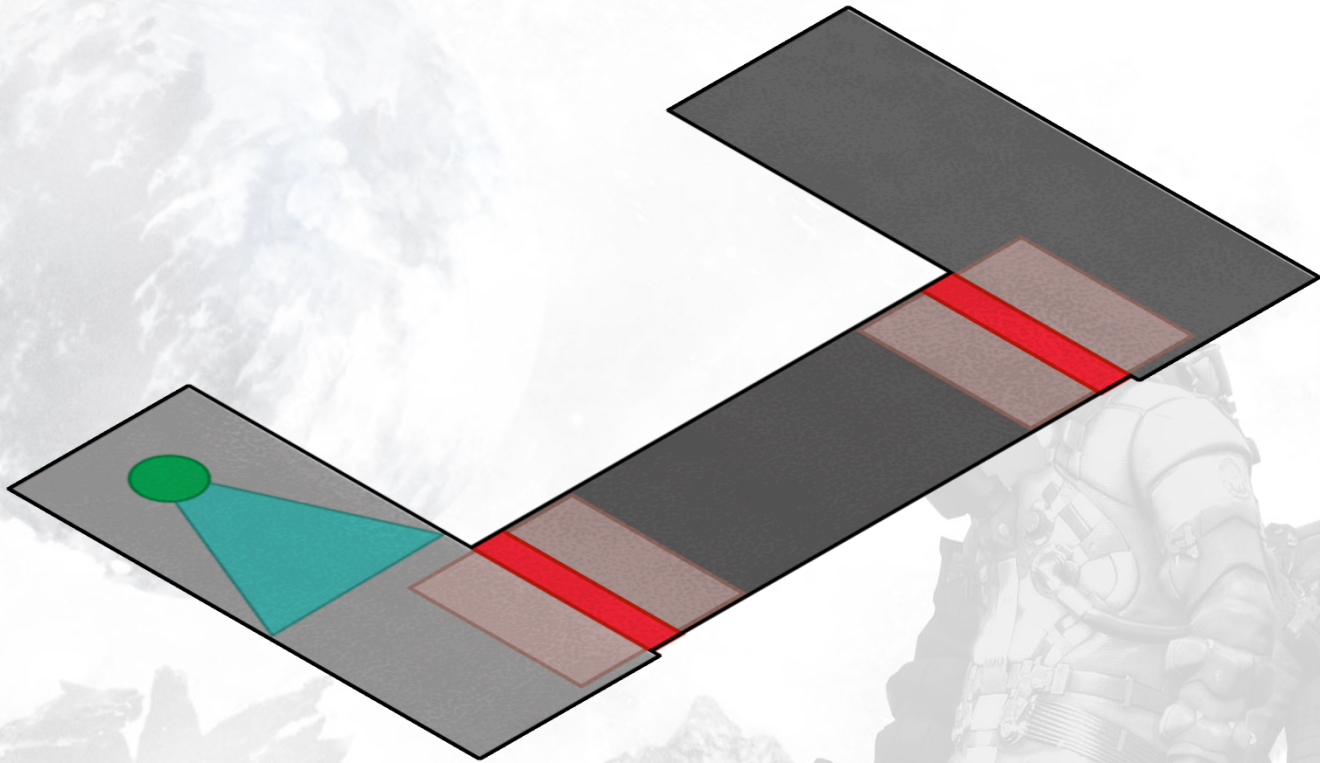
# Divergent Scripting

- Create a system for SP/COOP scripting differences
- coop\_gate



# Gating Players

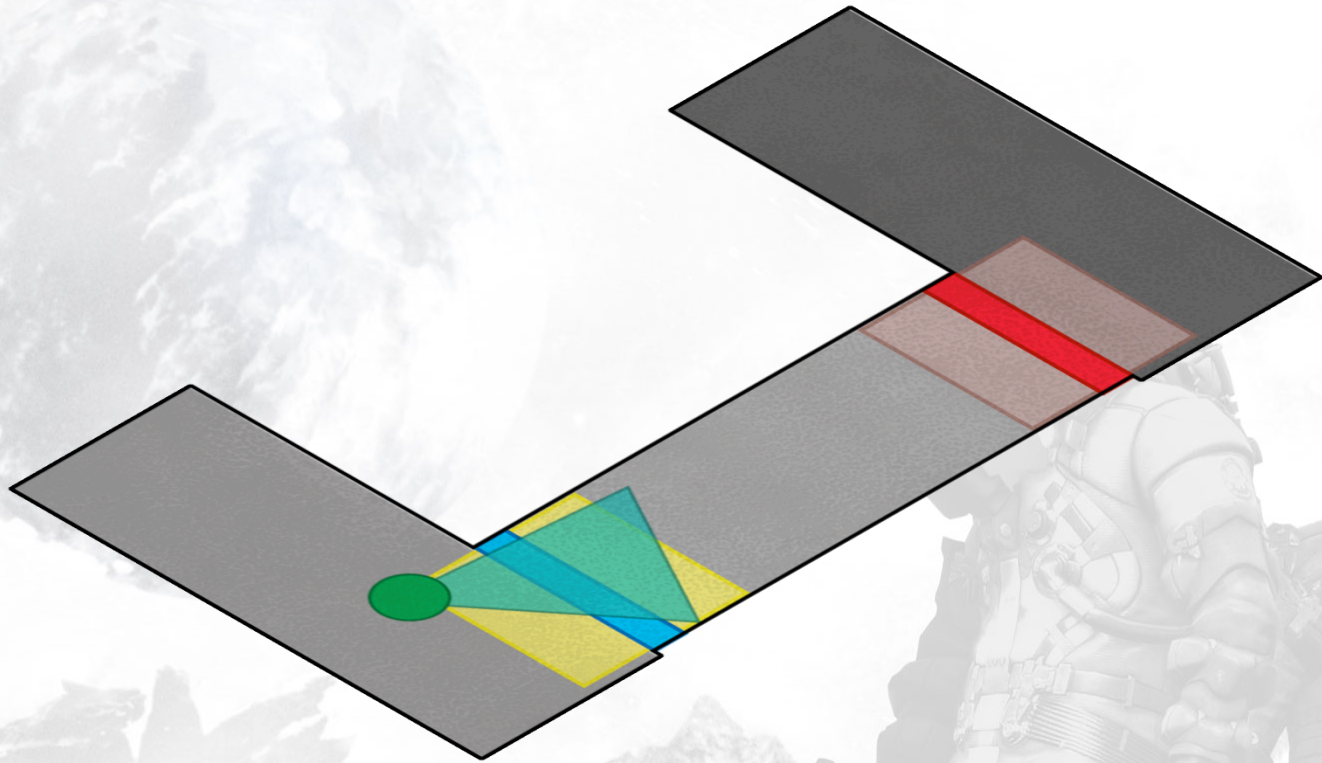
- How to keep players together?
  - Required for data streaming
  - Avoid getting lost or overwhelmed
  - Preserve player control as much as possible
    - No frozen poses while waiting for other player



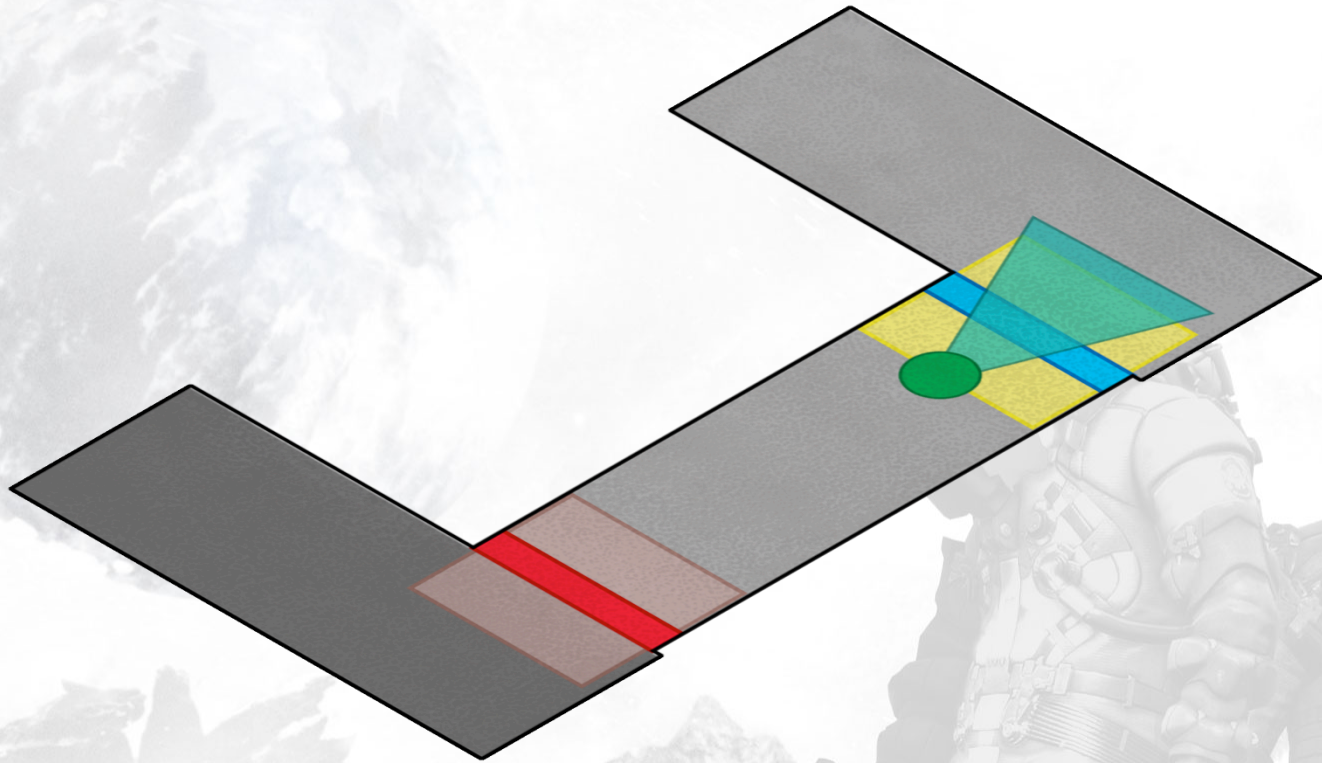
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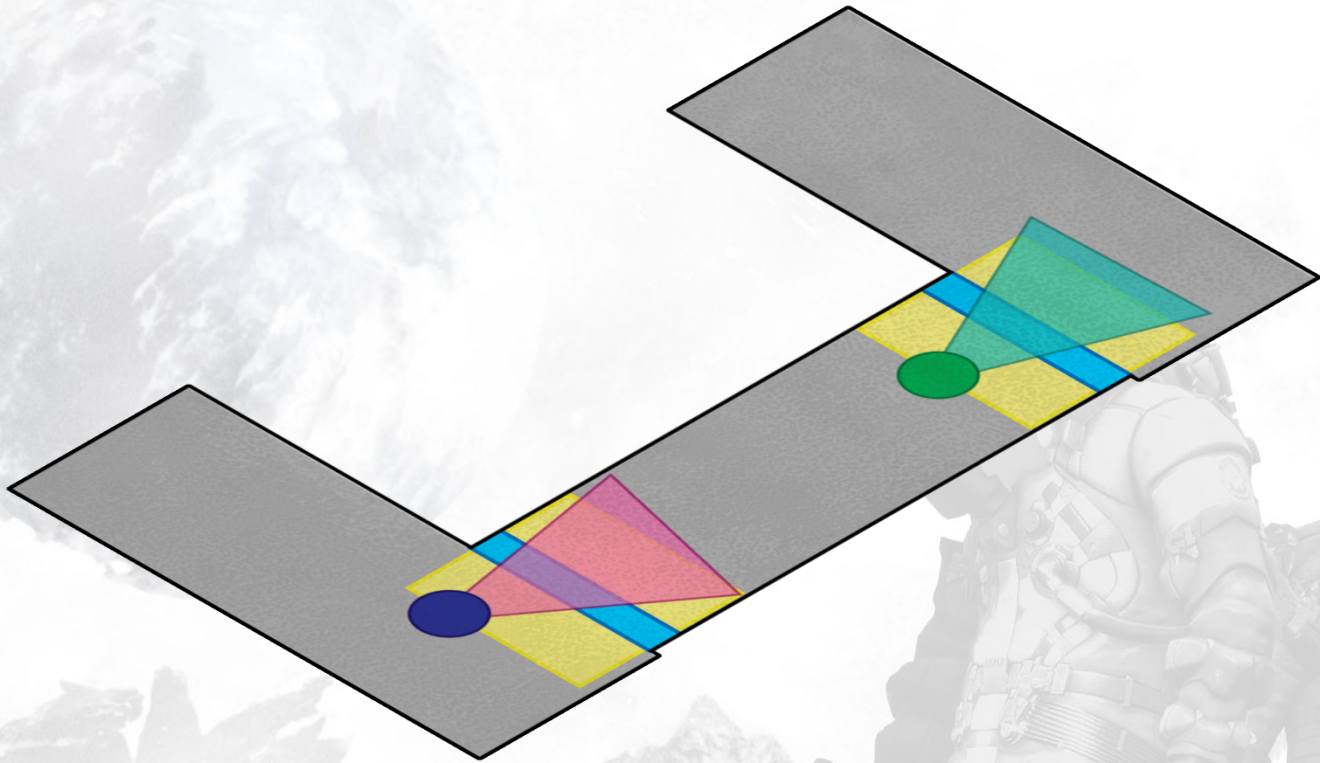


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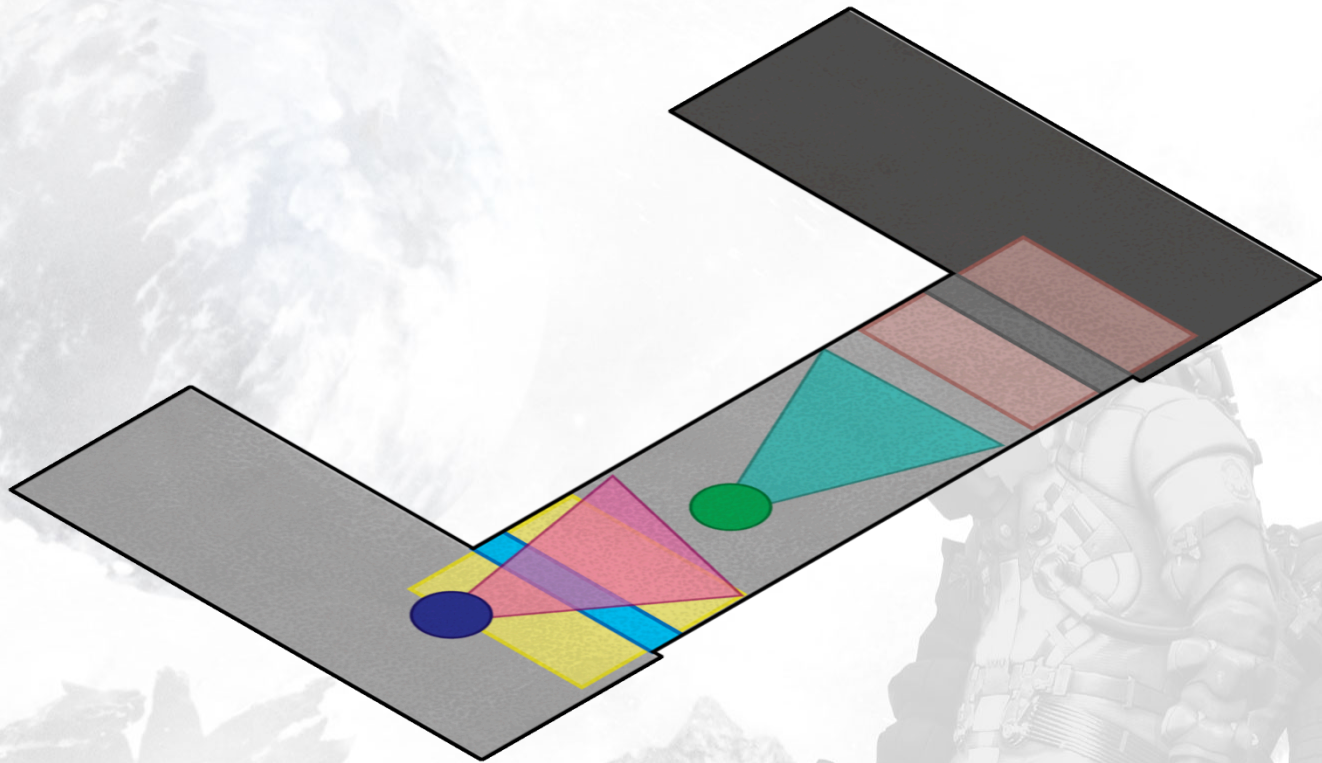




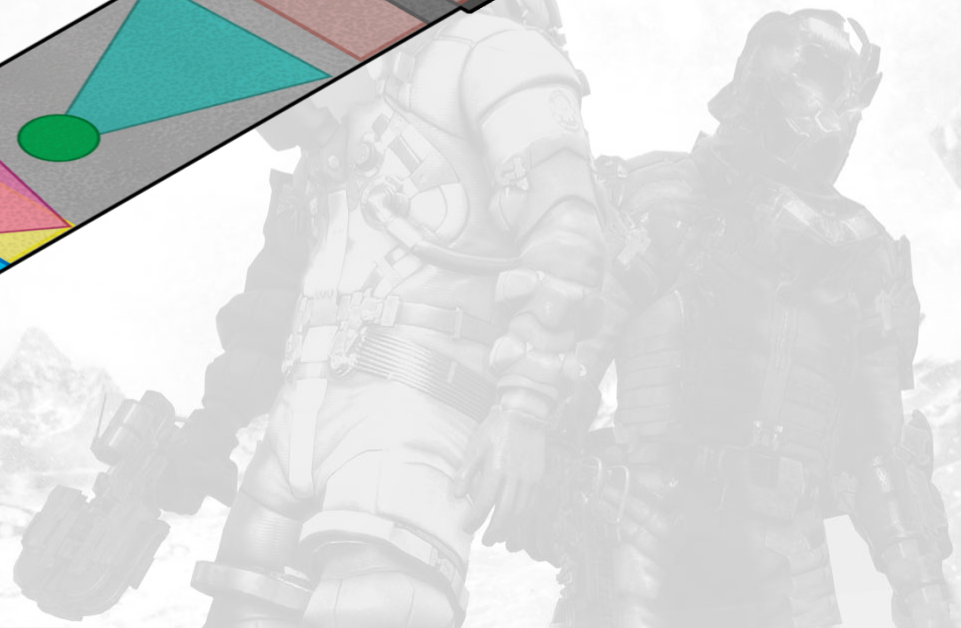
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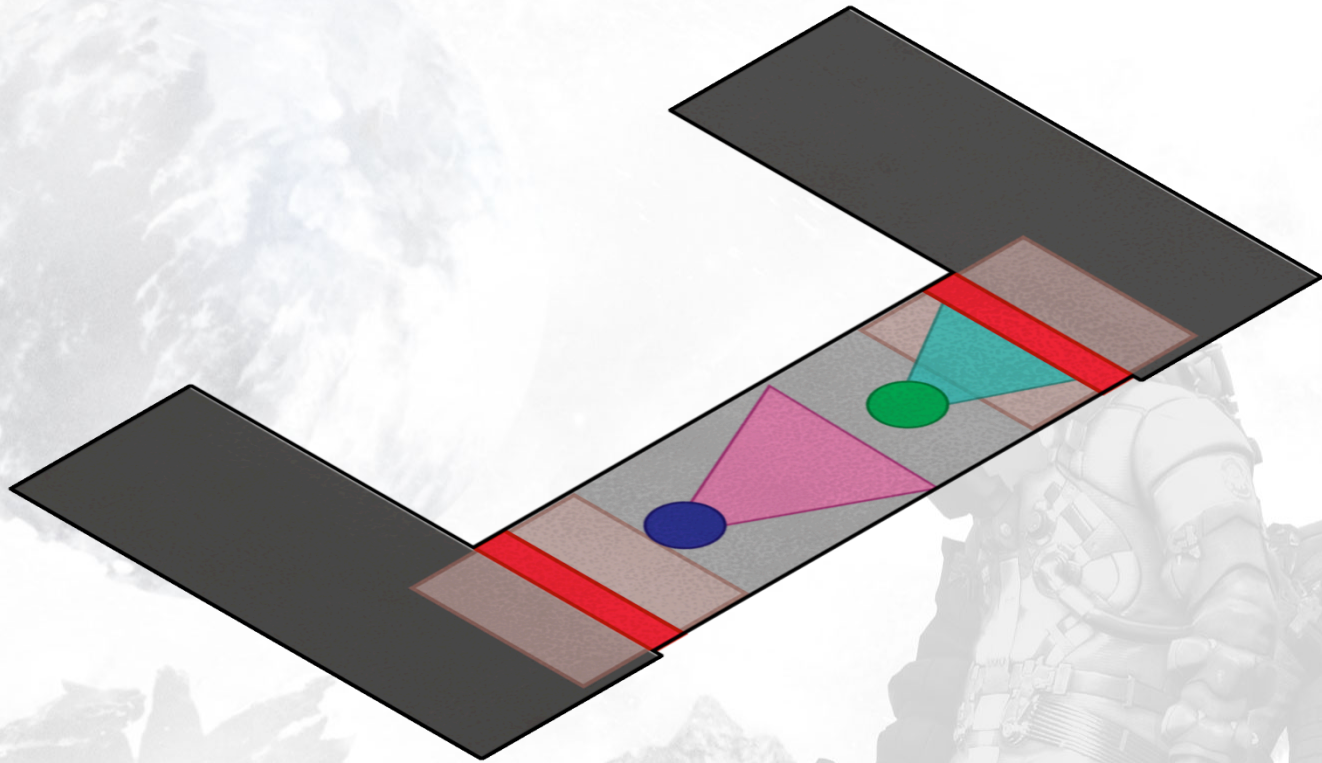
# Doors

- Only one open at once
- Remain open until both players are on the same side

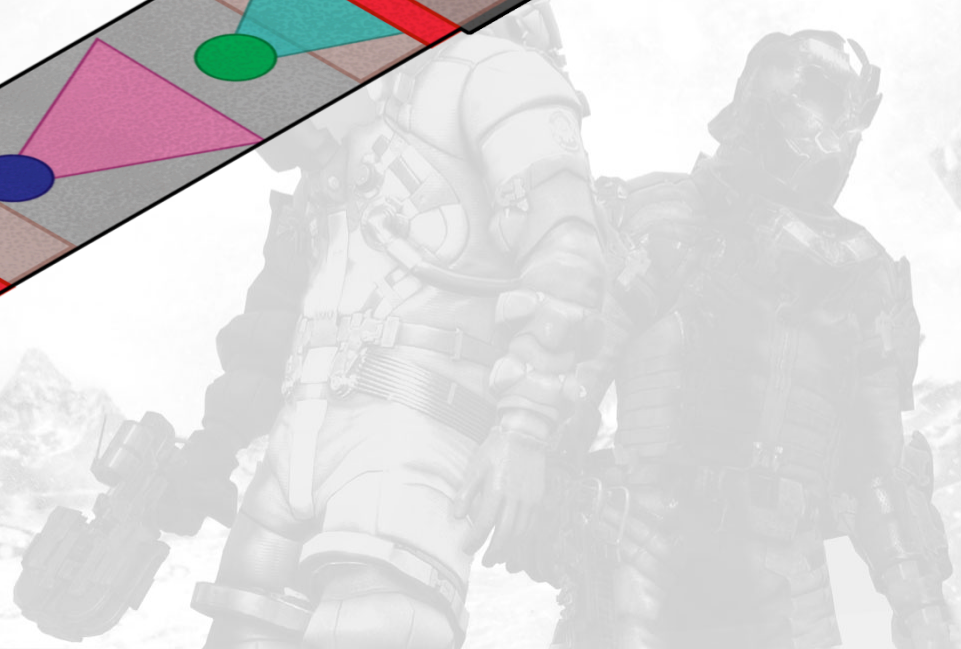


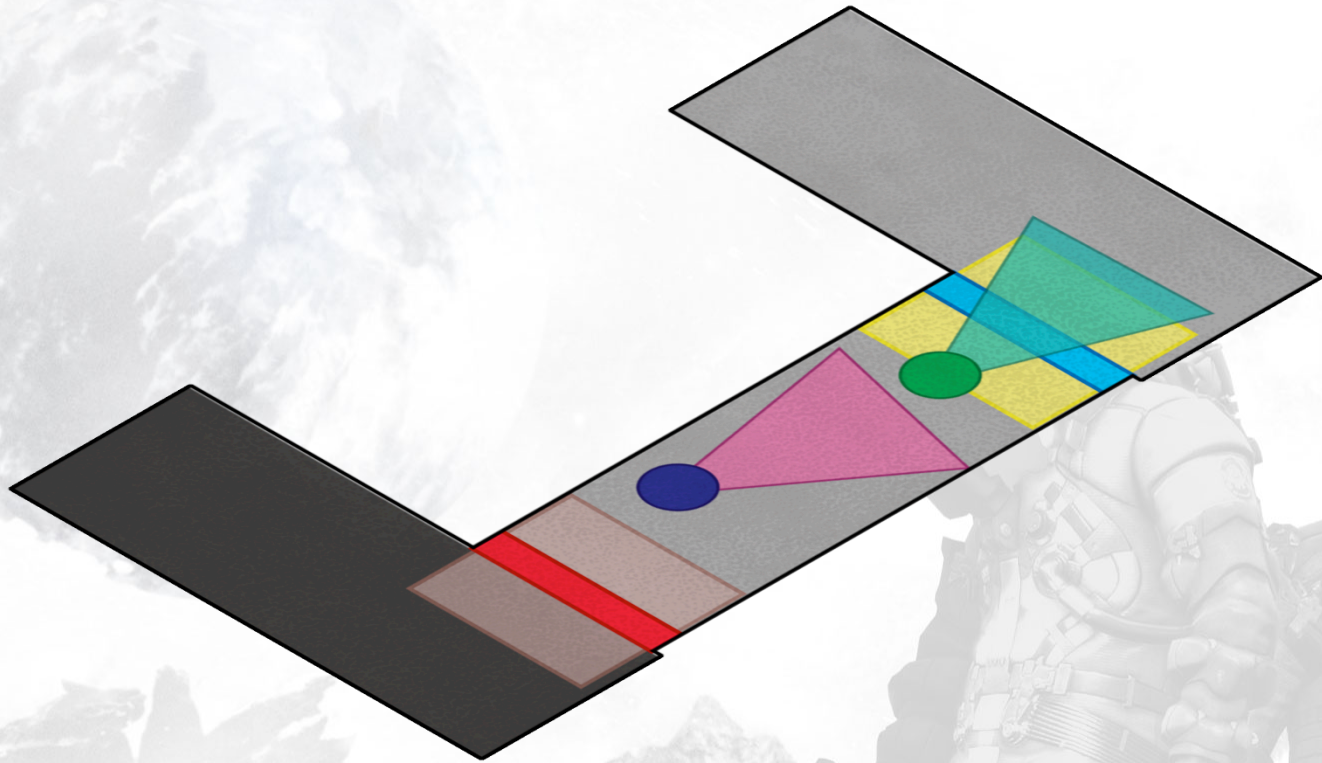
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# Gating Players

## – Elevators

- Added gates or doors to all elevators,

## – Lifts & Ladders

- Do not have external gating mechanism
- Allows for players to separate within one zone





# PHASE III

Gameplay

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# Balance

- **Difficulty**
  - Branching fights
  - CO-OP Damage Multipliers
  - Aggression



# Balance

- Economy
  - Independent Drops
  - Shared pickup of major items



# Activity Design

- Specific Goals
  - Create activities that work in SP and CO-OP
  - Make the second player feel needed



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# Two Cameras at Once

- Messaging puzzles
  - One player can hit a trigger while the other is in a totally different room





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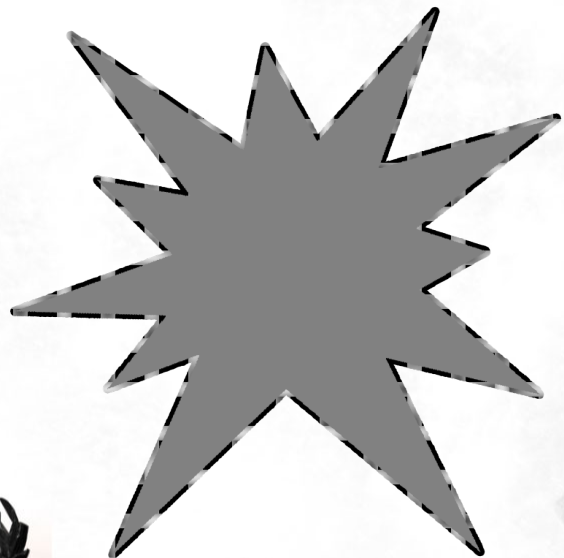


**PHASE IV**  
Experience

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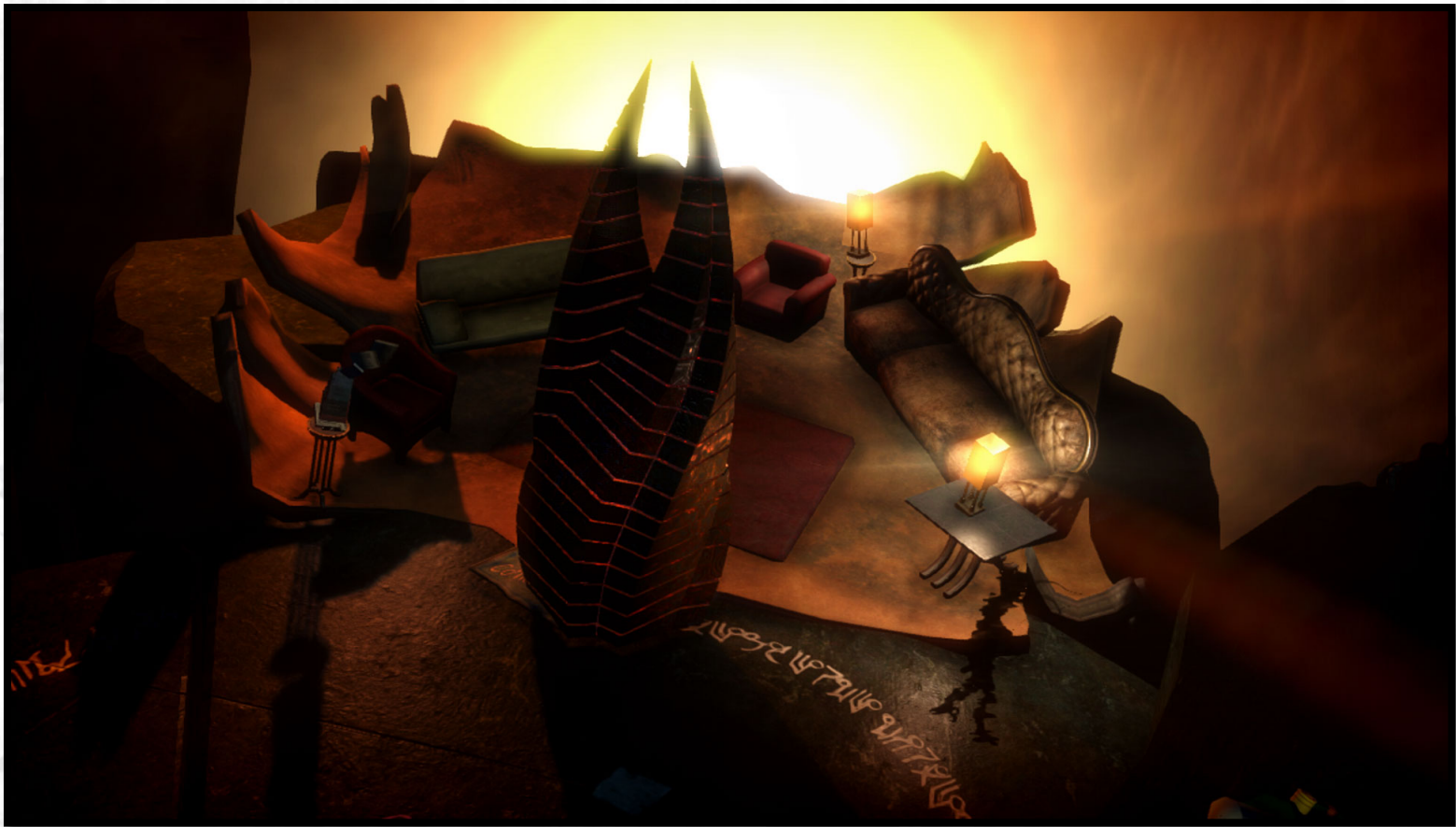
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# DEAD SPACE AWAKENED

3



# PHASE V

Full Moon

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# Phases of CO-OP Development

Concept

Technical

Gameplay

Experience



# Create Useful Patterns

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# Q&A

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