*F-ZERO* (1990, Super Nintendo), Nintendo. **GAMEPLAY MODE**

## 1. Composition


| | |
|---|---|
| **Tangible space** | In full-screen |
| **Intangible space** | Intangible visual displays are overlaid upon the tangible space |
| **Negative Space** | There is no negative space |

## 2. Ocularization

External | Zero Ergodic

## 3. Framing mechanisms

**Anchor :** Subjective | **Mobility :** Connected

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Raster | Raster | Raster |
| **Projection method** | Orthogonal | Linear | Linear |
| **Angle of projection** | Horizontal | Overview | Overview |


**Notes :**
The in-game environment (highlighted in yellow) is comprised of two distinct types of areas: the race track, which is the playable space, delimited by a full line, and the ground outside the rails, which acts as a bottomless pit (players are instantly destroyed if they land in there), outlined by a dashed line.

Also, the game highlights the Mode 7's strategy to induce an effect of depth by way of fore-shortening. Even without polygonal 3D, the real-time adjustment of sizes on two axes creates an "allegorical" Z axis that is relevant to the game's intelligibility. Hence the idiom: "2.5 D".

*Final Fantasy Tactics* (1997, PlayStation), Square. **BATTLE MODE**

## 1. Composition

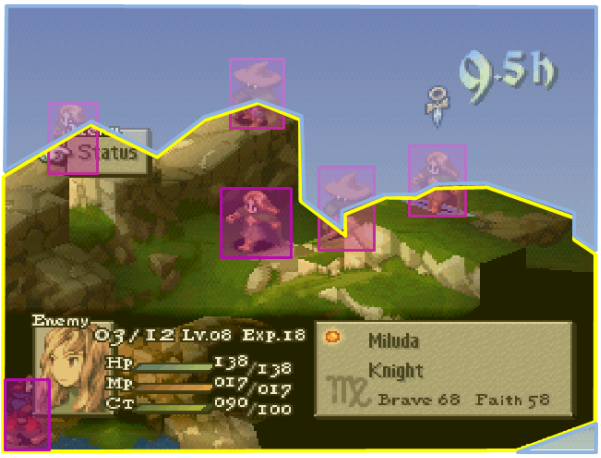

| | |
|---|---|
| **Tangible space** | In red. A « virtual chessboard » made of terrain and characters. |
| **Intangible space** | Menus can appear anywhere on the screen; some data elements are layered on tangible space. |
| **Negative space** | The backdrop behind the floating chessboard space. Dynamically adjusts according to framing. |

| 2. Ocularization | External | Zero Ergodic |
|---|---|---|

| 3. Framing mechanisms | **Anchor :** Anchorless | **Mobility :** Unrestrained |
|---|---|---|

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Raster graphics (sprites) | Real-time polygons | Static backdrop (negative space) |
| **Projection method** | Axonometric | Axonometric | - |
| **Angle of projection** | 3/4 view | 3/4 view | - |




**Notes :**
The virtual chessboard delimitates the in-game environment and tangible space. There is no off-game environment on display that would create a sense of spatial continuity between the chessboard and the backdrop.

The framing dynamically alternates between anchorless/unrestrained (when the player plans his next move) and subjective/authoritarian (when an event happens, it is automatically framed ).

The hybrid graphical materials create a jarring and “wobbly” feel to the visuals that is somewhat alleviated by the fact that both sprites and terrain share the same projection method and angle.

*Asteroids* (1979, arcade), Atari. **GAMEPLAY MODE**

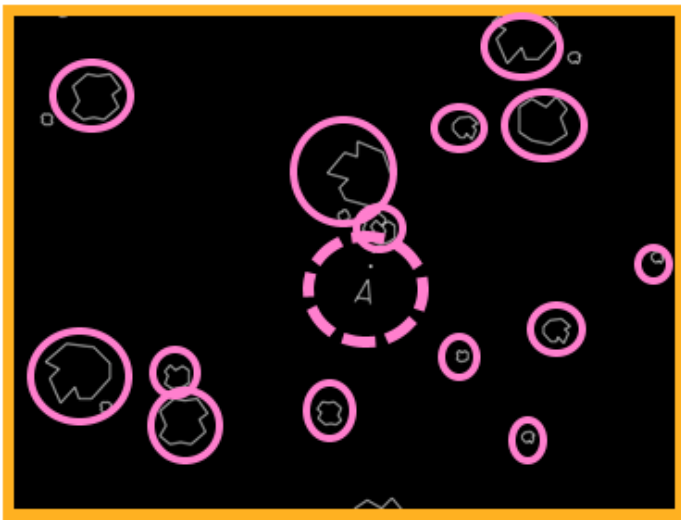
## 1. Composition

| | |
|---|---|
| **Tangible space** | Fullscreen. |
| **Intangible space** | None. |
| **Negative Space** | None. |

| | | |
|---|---|---|
| 2. Ocularization | External | Zero-Ergodic |
| 3. Framing mechanisms | **Anchor :** Objective | **Mobility :** Fixed |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Vector graphics | - | - |
| **Projection method** | Orthogonal | - | - |
| **Angle of projection** | Top-Down | - | - |



**Notes :**
A simple and flowing action game, *Asteroids* exemplifies the uniformity of early video games' visuality. The player's agent is taking a central but very small part of the space around it. This already creates a rhythm in the reading of the screen as a back and forth between the endangered agent and potential dangers. Control feels relative to a specific skillset that is already evident when looking at the screen: assess the urgency of obstacles and react accordingly from instant to instant.

*Asteroids* has nothing to show but the agents it sets in motion: pure tangibility with little to no mimetism.

*Diablo* (1996, PC), Blizzard. **GAMEPLAY – INVENTORY OPEN**

## 1. Composition


| | |
|---|---|
| **Tangible space** | In this specific configuration, tangible space occupies a little more than one third of the screen, and feels like it may extend to less tangible objects (see notes). |
| **Intangible space** | Intangible space is scattered around the screen, but clearly out of the tangible space. |
| **Negative space** | Heavily ornamented, patching every pixel that has no ergodic value. Intangible icons and menus are soaked in its mimetism. |

| | | |
|---|---|---|
| 2. Ocularization (tangible space) | External | Zero Ergodic |
| 3. Framing mechanisms | **Anchor :** Subjective | **Mobility :** Connected |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Pre-rendered 3D | Pre-rendered 3D | None (intangible space) |
| **Projection method** | Axonometric | Axonometric | None (intangible space) |
| **Angle of projection** | ¾ View | ¾ View | None (intangible space) |


**Notes:**
Interesting and more complex to describe than to play, the hack n' slash genre blends tangible fast-paced action and a quite external managerial stance. *Diablo* makes heavy use of mimetic ornaments in what seems like an attempt to inject tangibility into the game interface. Although part of the intangible space, Mana and Health update in real time and are very ostentatious before the player's attention, creating some sort of cognitive continuity from the immediate action to the more intangible menus (that are arguably more mimetic than the tangible space). The game affords an assessment of tangibility on a spectrum, instead of a binary distinction. Moreover, reinforcing the weight of intangible information, the visual space is saturated with mimetic icons. Represented items require selection to display text information, giving inventory management an almost tactile quality (unlike 1990's JRPG menus).

*Guitar Hero* (2005, PS2), Harmonix. **GAMEPLAY MODE**

## 1. Composition


| | |
|---|---|
| **Tangible space** | The projected fretboard is where player agency is deployed. The background changes according to character. |
| **Intangible space** | Meters for score and audience reaction are styled after music gear. Characters and setting in backdrop ignore player action and are intangible. |
| **Negative Space** | None; the whole screen is used. |

| | | |
|---|---|---|
| 2. Ocularization | External | Player Intangible *and* tangible |
| 3. Framing mechanisms | **Anchor :** Anchorless | **Mobility :** Fixed |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Real-time polygons | Raster graphics (texture) | Real-time polygons |
| **Projection method** | Linear projection | Linear projection | Linear projection |
| **Angle of projection** | Overview | Overview | Various |


**Notes :**
A case of interface-driven game. The characters and settings are decorative and make up the off-game environment. Gameplay occurs on the projected band that imitates a guitar fretboard. This fretboard varies for each player-character, making the in-game environment something of a constant visual signature.

The in-game environment and agents remain constant in intangible ocularization to favor gameplay, while the background graphics in the off-game plane constantly shift framings with tangible ocularization and framing mechanisms mimicking a “live music show” camera montage. This creates a dynamic spectacle that brings balance to the overall composition.

*Donkey Kong Country* (1994, Super Nintendo), Rare. **GAMEPLAY MODE**

## 1. Composition

| | |
|---|---|
| **Tangible space** | Full screen |
| **Intangible space** | Banana count is layered over tangible space |
| **Negative Space** | None |

| | | |
|---|---|---|
| 2. Ocularization | External | Zero-Ergodic |
| 3. Framing mechanisms | **Anchor :** Subjective | **Mobility :** Connected |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Pre-rendered 3D | Pre-rendered 3D | Pre-rendered 3D / Raster |
| **Projection method** | Orthogonal | Orthogonal | Orthogonal |
| **Angle of projection** | Horizontal | Horizontal | Horizontal |

**Notes:**
Although it is a decently atmospheric and colorful case for 3D polygons as the future visual direction of the industry at the time, *DKC* operates as a classic platformer.
As the player navigates in a relatively uniform and flat (both mimetically and ergodically) space, the eye tends to keep busy with the horizontal line and the range of jumping opportunities. Of course, fast scrolling parallax constructions can hide some navigable treasure troves that are a bit harder to notice (as in this picture). The counter intuitive pleasure of platformers, it seems to me, is that we desire to navigate those spaces in which we don't immediately believe or tend to expect anything from.

*Doom* (1993, PC), id Software. **GAMEPLAY MODE**

## 1. Composition


| | |
|---|---|
| **Tangible space** | Tangible space occupies the overwhelming majority of the screen. |
| **Intangible space** | Useful data is overlaid on some rock-textured ornemental negative space. |
| **Negative Space** | Occupies a band at the bottom of the screen. |

| | | |
|---|---|---|
| 2. Ocularization | Internal | Primary |
| 3. Framing mechanisms | **Anchor :** Subjective | **Mobility :** Connected |

## 4. Plane Analysis

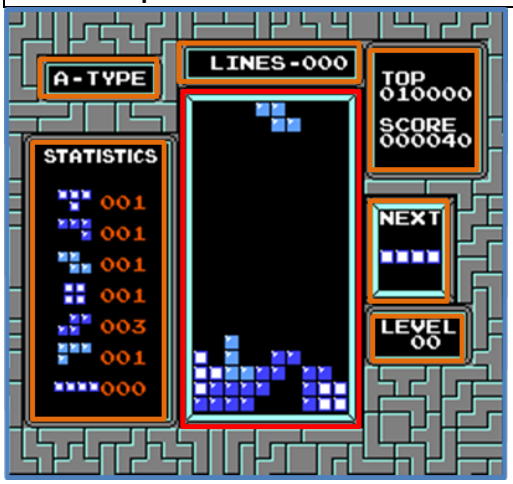
| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Raster | Real-time 3D | Real-time 3D |
| **Projection method** | Orthogonal | Linear | Linear |
| **Angle of projection** | Horizontal | First-Person | First-Person |


**Notes:**
*Doom*'s pioneering first-steps into the first-person shooter is a very impressive technical feat for the time.

*Doom* also puts forward the experience of the gaze in a strongly mimetic way, simulating the characters' steps through animation and offering a thoroughly textured environment. A connected mobility seldom had given access to such a powerful sensation of walking around in a digital environment. Of course, this has become a major standard of high production value since, but at the time it was quite a hack.

*Tetris* (1989, NES), Nintendo. **GAMEPLAY**

## 1. Composition

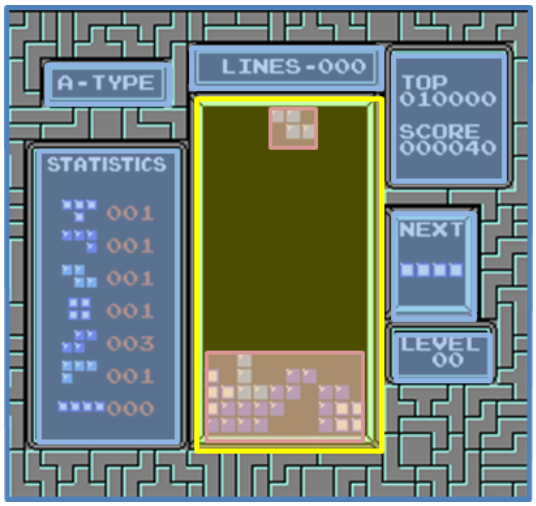



| | |
|---|---|
| **Tangible space** | An abstract rectangle of empty space which the player progressively fills. |
| **Intangible space** | Information displays. |
| **Negative Space** | Ornamental wall of gray tetriminoes . |

| | | |
|---|---|---|
| 2. Ocularization | External | Zero ergodic |
| 3. Framing mechanisms | **Anchor :** Anchorless | **Mobility :** Fixed |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Raster graphics (sprites) | Blank | Raster graphics (sprites) |
| **Projection method** | Orthogonal | - | Orthogonal |
| **Angle of projection** | Horizontal | - | Horizontal |




**Notes :**
The player controls a single tetrimino at a time, progressively filling up the in-game environment through his agency. The data bands in the intangible space can play a role in the gameplay process – mainly the « NEXT » window, which displays the upcoming piece and has strategic importance for the player to keep track of.

There is no off-game space, since the in-game space needs clear boundaries to emphasize the confined nature of the game situation. However, some other games in the genre, such as *Tetris Worlds*, have tried to instill a sense of connectedness between the in-game and off-game environment with integrated backgrounds and events.

*Heavy Rain* (2010, Playstation 3), Quantic Dreams. **GAMEPLAY**

## 1. Composition

| | |
|---|---|
| **Tangible space** | The entire surface of the screen. |
| **Intangible space** | On-screen action prompts that are regularly displayed |
| **Negative Space** | None |

| | | |
|---|---|---|
| 2. Ocularization | External | Zero Mimetic |
| 3. Framing mechanisms | **Anchor : Subjective** | **Mobility : Connected** |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Real-time polygons | Real-time polygons | Raster backdrops |
| **Projection method** | Linear projection | Linear projection | Linear projection |
| **Angle of projection** | Various | Various | Horizontal |

**Notes :**
In *Heavy Rain,* the gameplay constantly switches between moments when the player-character is walking, with the in-game camera following along, and cut-scenes, when the player must react to Quick-Time Events (QTEs) by acting according to on-screen prompts. The latter moment is typical of QTE-driven FMV games such as *Dragon's Lair*.

These two moments could be distinguished as two separate visual modes, but in pragmatic terms, the gameplay experience presents these moments as seamless transitions, so I consider them to be two facets of the same, single visual mode I call "gameplay". Ocularization remains the same across both facets; even when the player-character is walking around, instead of lapsing into zero ergodic "transparent control", there is still "camera work" going on with marked visual mediation, including spatial montage (triggering of alternate camera angles), variation in focus or depth of field, or panning.

*Resident Evil* (1996, PlayStation), Capcom. **GAMEPLAY MODE**

## 1. Composition

| | |
|---|---|
| **Tangible space** | Full screen. Menus, stats and inventory are in a completely separate view and timeframe |
| **Intangible space** | None |
| **Negative Space** | None |

| | | |
|---|---|---|
| 2. Ocularization | External | Player Tangible |
| 3. Framing mechanisms | **Anchor :** Objective | **Mobility :** Connected |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Real-time 3D polygons | Pre-rendered 3D | - |
| **Projection method** | Linear | Linear | - |
| **Angle of projection** | Various | Various | - |

**Notes :**
The cinematic aesthetic of the survival horror genre is a good, if sometimes subtle, example of a tangible player ocularization. The fixed camera with minimal predetermined pans dramatizes the absence/presence of enemies by way of visual and spatial montage. The player knows that this meta game of incomplete visual information is meant for her worried attention and is not optimal to the task at hand: explore space while avoiding danger.

A paragon of the genre, *Resident Evil* is a rare case of celebrated sub-optimal ergodic situation where handicap is a positive experience. A similar ergodic struggle awaits players of racing simulations using the "television" camera angles. The camera is connected to the player's agent, but its movements are mere "cues" to objectively show fragments of game space from arbitrary angles that are rarely if ever the best ones to accomplish navigational and neutralization tasks.

*The Legend of Zelda: Ocarina of Time* (1998, Nintendo 64), Nintendo. **GAMEPLAY**

## 1. Composition


| | |
|---|---|
| **Tangible space** | The projected world, occupying the entire screen surface. |
| **Intangible space** | Interface icons overlaid across the edges of the screen. |
| **Negative Space** | A static backdrop image of the sky and mountain range |

| | | |
|---|---|---|
| 2. Ocularization | External | Zero Ergodic* |
| 3. Framing mechanisms | **Anchor : Subjective** | **Mobility : Connected** |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Real-time polygons | Real-time polygons | Raster backdrops |
| **Projection method** | Linear | Linear | Linear |
| **Angle of projection** | Various | Overview | Horizontal |


**Notes :**
An early example of the "3D third-person" view that can be found in many games nowadays. At the time, free-range camera controls hadn't been fully standardized yet. If the player wants to see what's on his left, for instance, he needs to move Link to the left to have the camera pan automatically following the anchor and according to its connected mobility. This means the camera provides ocularization that lies somewhere in-between the internal secondary and zero ergodic categories: it is connected to Link's perception of the world, but less so than the usual internal secondary viewpoint; yet it is not a case of full camera control either, as in *Wind Waker*.

The game shifts ocularization strategies, with the camera following along as the player-character moves in the overworld and dungeons, sometimes being immobile on certain spots (such as atop the fountain in the village), and shifting into internal secondary ocularization when the player Z-targets an enemy.

*Virtua Fighter* (1993, Arcade), SEGA. **GAMEPLAY.**

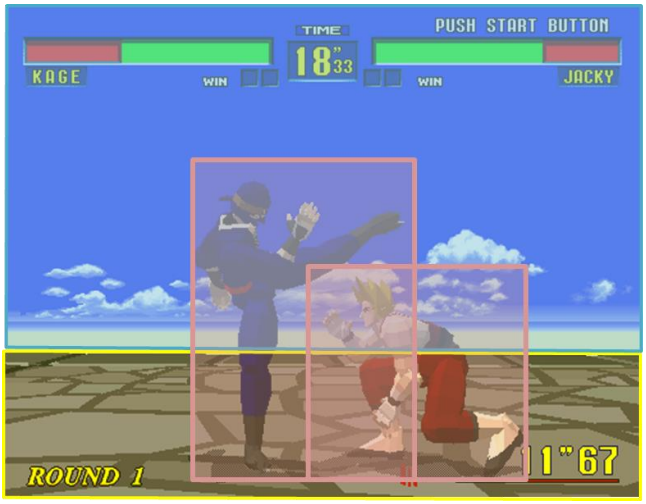
## 1. Composition


| | |
|---|---|
| **Tangible space** | The entire surface of the screen depicts an arena and background scenery. |
| **Intangible space** | Visual interface overlays. |
| **Negative Space** | None. |

| | | |
|---|---|---|
| 2. Ocularization | External | Zero ergodic |
| 3. Framing mechanisms | **Anchor : Intersubjective** | **Mobility : Connected** |

## 4. Plane Analysis

| | Agents | In-game | Off-game |
|---|---|---|---|
| **Graphical materials** | Real-time polygons | Real-time polygons | Raster backdrop |
| **Projection method** | Linear | Linear | Linear |
| **Angle of projection** | Horizontal | Overview | Horizontal |




**Notes :**

An exemple of intersubjective framing, which is common to a great number of fighting games. *Virtua Fighter* was the first high-profile fighting game to simulate the third dimension with polygonal characters. The in-game arena occupies a rather small subset of the tangible space, the bulk of which is made of an off-game static raster backdrop of the sky and horizon line.