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Doppelgangers

A *Half-Life 2: Episode 2 level*

Development time: 240 hours

Figure 1: A display showing the cloning process of a headcrab

Level summary

Doppelgangers is a single player campaign for the first person shooter game *Half-Life 2: Episode 2*. In *Doppelgangers*, the player takes the role of Barney, who is escaping a Combine facility with the help of another Resistance member, and a unique weapon known as the Cloner. The level allows Barney to create Clones of himself that he can control for a few seconds. Barney can use the time inside his clone to distract the guards, open doors that are inaccessible to his original body, or access weapons that are in risky locations. Using his clones Barney has to access locked rooms, release zombies, distract patrolling guards, and risk his life to escape the dangerous Combine facility.

Level and documentation download: http://www.jorgemontolio.com/#!doppelgangers/qehrg
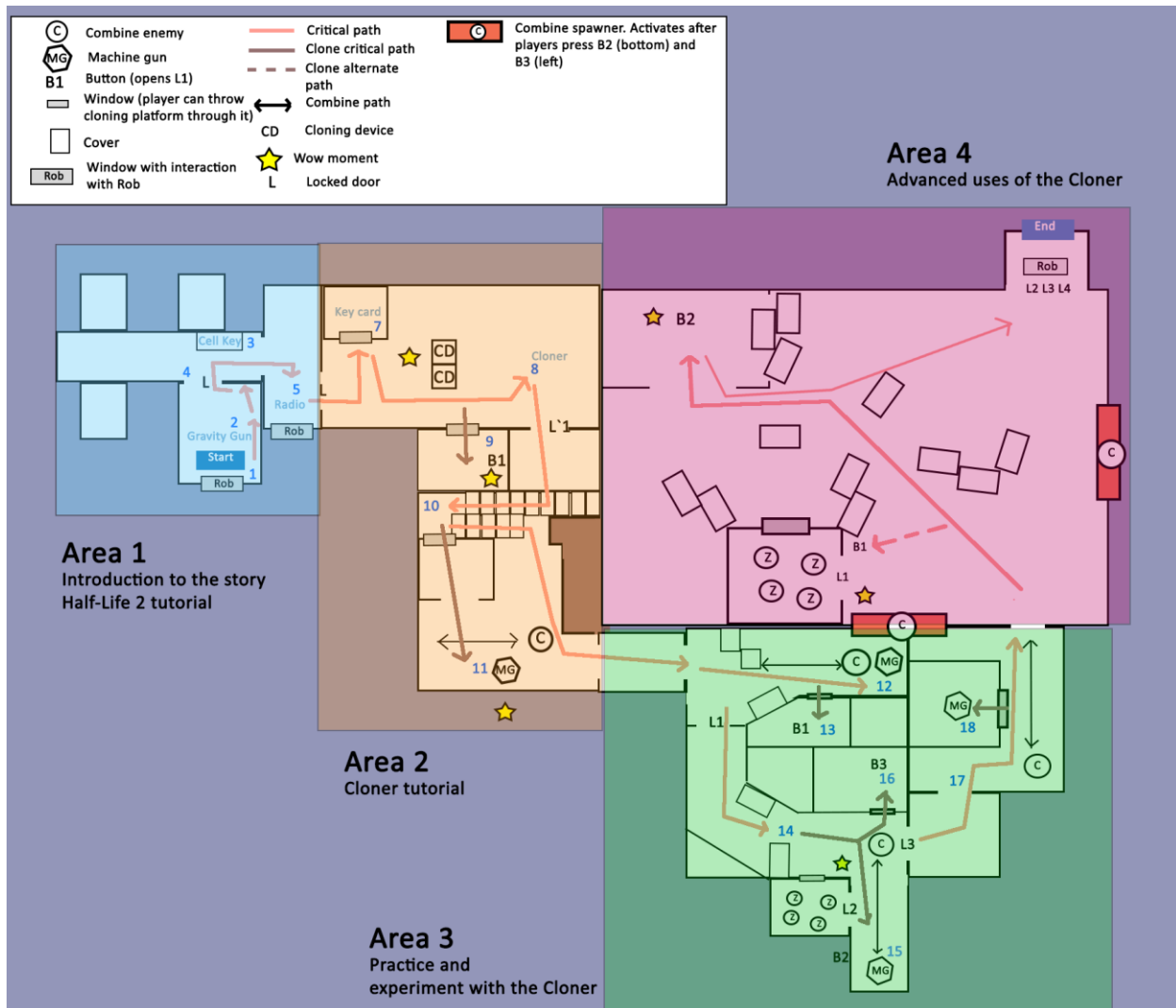
Design goals

Figure 2: Map overview with areas highlighted

- **Explore a unique cloning mechanic**. The main goal of the level was to answer the question: What is fun about Cloning? The level displays three uses of the cloning mechanic which trigger the player's creativity, forces him to experiment, and gives him freedom to find their own way to progress.

- **Creating a balanced difficulty curve**. The level aims to create an experience where the player learns a complex mechanic by playing, without going through explicit tutorials. In order to accomplish that, the design of the level includes four distinct based on the skill required to overcome them.

- **Creating a clear design language.** The level guides the player through visual communication. In the level, red lights highlight important interactive elements, from buttons to essential items. In addition, player consistently progress through the level by using buttons located in risky areas, which open doors that let the player progress.

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Captions

Visual themes

The level has three main visual themes: a prison, a laboratory, and a control area. Each one of these themes has distinctive elements that make them easily recognizable and unique. The lighting, for example, has different tones depending of the level's area that the player is in (yellow for the prison, yellow-blue for the laboratory, and red for the control rooms). The areas also share common meshes and decorations that make them look like they belong to the same facility.

Figure 3: The player starts the level in a prison

Context: the player starts the level in the prison. The prison theme includes weapon crates, tables where the guards carry their watch over duty (with radios and documents on them), and a dim yellow lighting that differentiates it from the rest of the areas.

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Figure 4: The laboratory has the most visually distinct theme of the level

Context: Light in the laboratory has a bluer tone, and machinery indicates that the Combine are carrying out experiments in the facility.

Figure 5: The level ends in the control rooms, where players face a final challenge

Context: The control room is a fusion between the laboratory and the prison. Its many displays and security cameras help the player understand that the Combine are using these rooms to monitor the facility.

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Figure 6 The beginning of the level, inside Barney's cell

Context: the level has a secondary character, Sam. Sam's mission is to guide the player, without having to add an explicit tutorial to the level. Sam gives the player the tools he needs to progress, but it is the player that one that needs to figure out how to use these tools. For instance, Sam gives the player the gravity gun when he is in a cell, at the beginning of the level. The player then needs to use the gravity gun to grab the cell's key, which is laying on a table outside of the room.

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Design challenge: Lighting to direct the player

Figure 7: Red lights let the player know which part of the level is gameplay-relevant

Figure 8: Important interactive element highlighted in red

Context: In the level, red lights draw the player's attention towards important gameplay elements. These includes buttons that open locked doors, as well as important pickup objects such as the cloner, or the key card to open the cloner's container.

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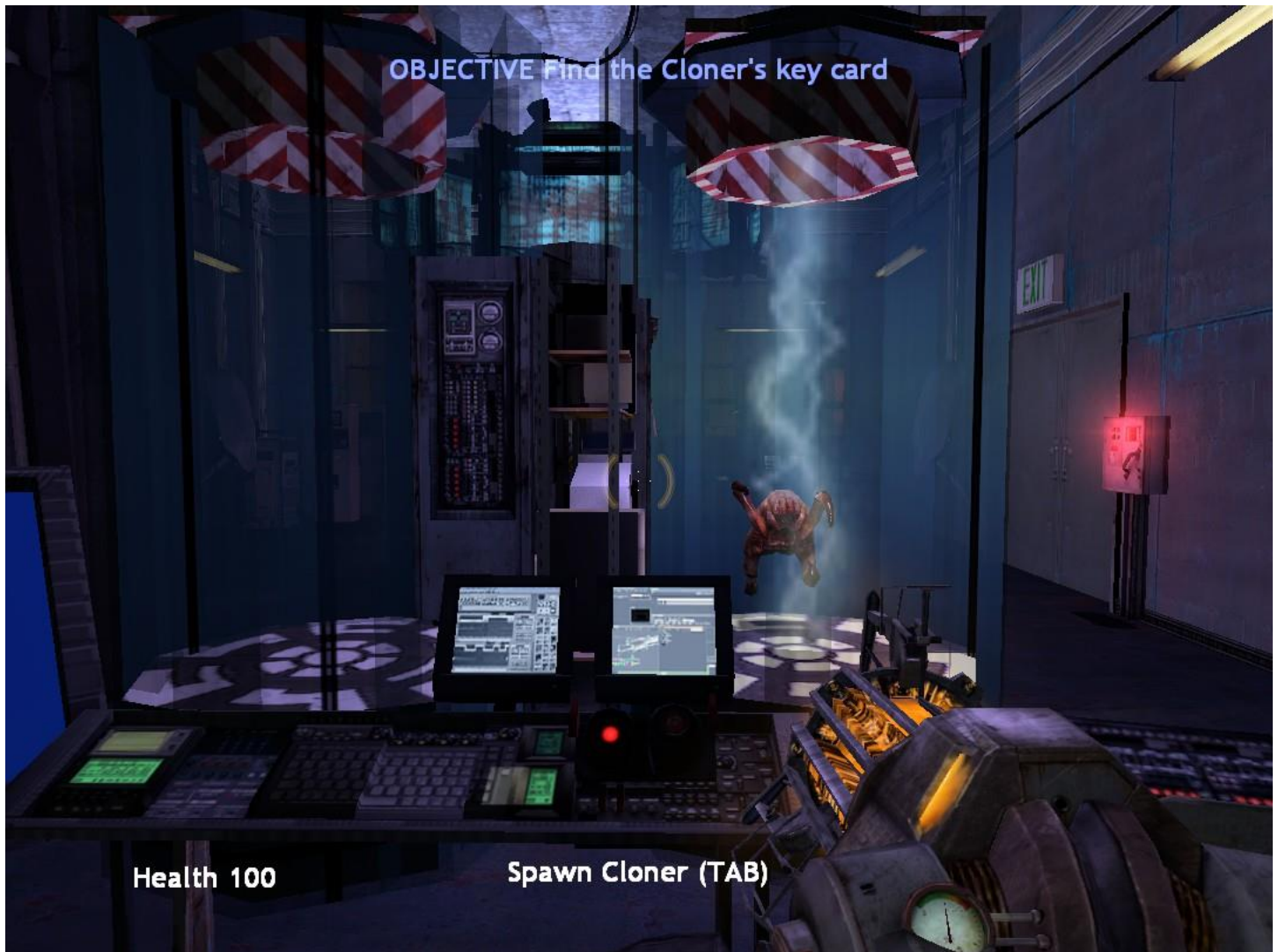# Design challenge: introducing the Cloner to the player

Figure 9: A display shows the player how the Cloner works

Context: before getting the Cloner, the player can see how the cloner works by activating a display in the laboratory. The display shows the cloning process on a headcrab. This introduces the player to the concept of the Cloner, and helps him understand how it works beforehand.

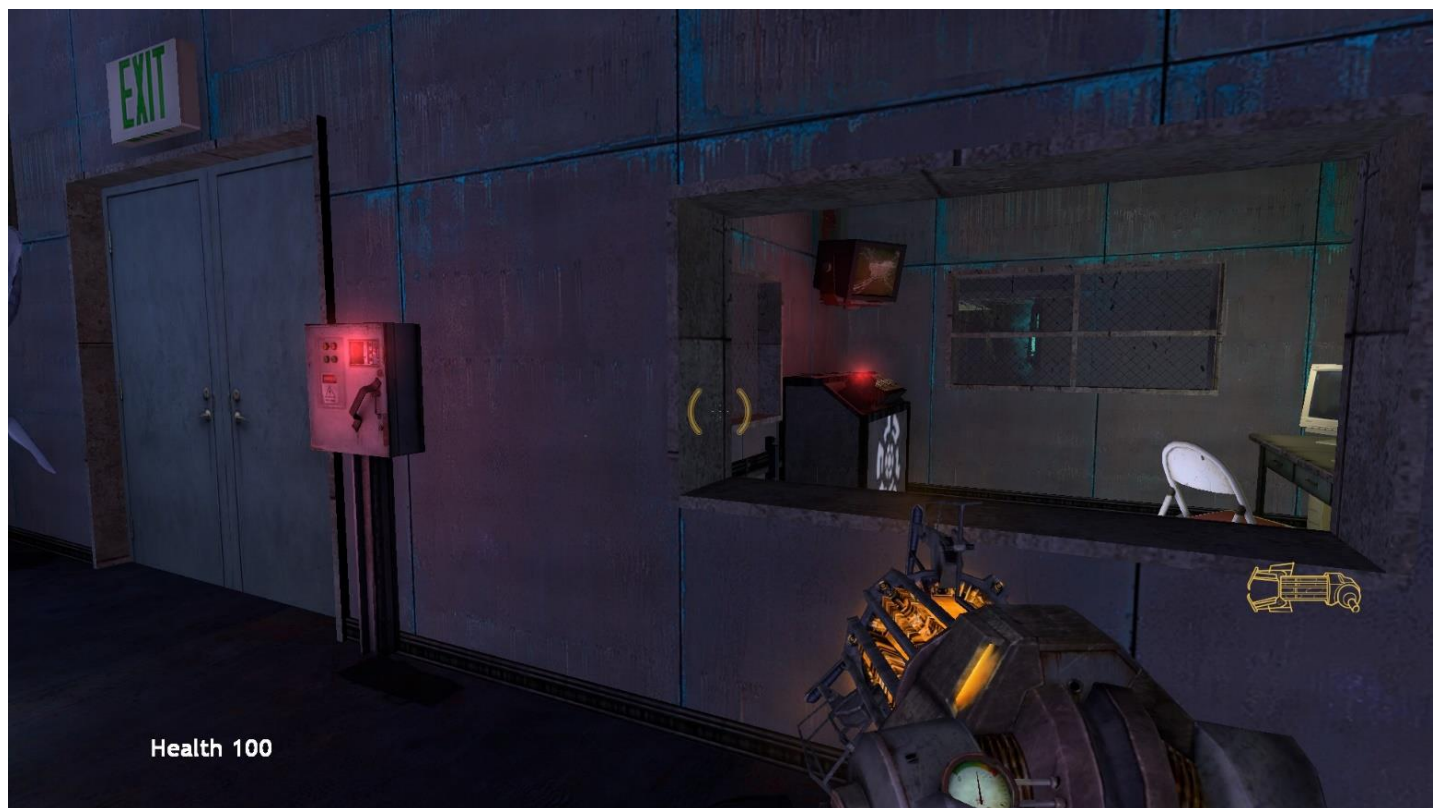*Figure 10: First puzzle where the player has to use the Cloner*

Figure 11: View from inside of the room seen in Figure 6, after pressing the button (the player is controlling a clone).

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Context: The first puzzle that the player encounters only has one solution: throw the Cloner inside the room, and press a button with your clone. Once players have learned the basic use of the Cloner, they go on to harder puzzles with multiple solutions, where they can get creative and use the Cloner in unique and different ways.

Figure 12: A player uses his clone to distract a guard

Context: the second puzzle of the level lets the player learn the applications of the cloner to combat, from an advantage point where players can plan their actions. This puzzle already has multiple solutions: players can try to reach the machine gun behind the guard, or use their clone to distract him.

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Design challenge: Conveying clone control

Figure 13: Effect when the player is inside his Clone

Context: Because the player can control two characters (the original body and the clone), conveyance is a key component of the level. When the player is inside his clone, he can see his original body. An overlay also plays on the screen, telling the player that he is inside his clone. Finally, a timer on top of the screen tells the player how much time he has left inside his clone.

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