

INTRODUCTION



Figure 1: Library Retrieval, Gears of War single player level

This document is an overview and deconstruction of one of my student projects, a *Gears of War* single player map titled *Library Retrieval*. The focus of this project was to create a short *Gears of War* level that included both scripting and environmental detailing. Combat was not required for this level, although a weapon and ammunition hidden within the level allows the player to dispatch enemies if they choose to. Exterior scripted events create an atmosphere of heightened tension and potential threat, while leaving the player relatively free to explore the level without actual threat.

This level demonstrates my passion for thematic environmental design, while also highlighting my scripting and gameplay abilities. When I concept, design and create a level, I am interested in making the player experience as immersive as possible within the context of the game world. This level was created during my fourth term of study at SMU Guildhall while I was simultaneously learning the editing tools, producing work for several other classes, and working on our second Team Game Project.

Thank you for your interest in this work!

LIBRARY RETRIEVAL, Gears of War single player level

The focus of this mission was to create a short Gears of War level that included both scripting and environmental detailing. The goal of the level was for a single player to travel through an architecturally unstable library to “retrieve” data that was stored in a far corner of the level then return with the data back to the squad. The player receives visual and audio clues to alert them to scripted events. Careful timed movements through areas that do not provide ample cover allow the player to avoid incoming sniper fire. The challenge in designing this level was to create spaces that enticed the player into exploration and discovery, without immediately punishing them with the additional exposure to enemy snipers. Deliberate cover nodes were placed along walls, bookshelves and pillars, and regularly placed narrow windows exposed the player to enemy line-of-sight, while also allowing the player to quickly move from one “safe” space to another without fear of immediate death.



Figure 2: Library Retrieval, in-game screenshot

Scripted events outside of the playable space created an atmosphere of heightened tension and potential threat, while leaving the player relatively free to explore the level without additional danger; I wanted the player to *feel* that they were in danger without *actually* being in danger. I also wanted to encourage the player to move quickly through the space, but to have sudden moments of surprise to pause their progress. The use of additional environmental design, sounds, particles and scripted events helped to describe a game experience that fit directly within the lore of the game, while also convincing the player of the immediate dangers present within the level. Lastly, several paths through the level lead to the primary mission objective, and completion of the level requires the player retrace their steps through the level, reusing the game space and optimizing design and gameplay in a small environment.

Concept

Library Retrieval is a level that relies on a variation of “stealth” gameplay. *Gears of War* is very combat oriented, and this level was an attempt to create a realistic mission without the need for direct melee combat. This is *not* a “safe” level, as enemy snipers are constantly searching for line-of-sight to the player, but the focus of the project was to create a project that could exist within the framework of the existing game with a well designed environment that could convey a similar feeling of danger without relying on mindless waves of enemies. The initial concept was rather simplistic in nature – path from point A to B with scripted obstacles at stationary enemies. The end level included lots of additional atmospheric elements, including Brumaks moving around and generating menacing sounds outside of the play space, a burning downed helicopter, and additional sniper enemies along the player path.

Additional elements that were added to the original concept for interesting player movement were a raised portion of the Library to create verticality of movement, an interior balcony area that helped separate the player from the main floor while also drawing attention to the burning helicopter. The empty shelves, half-packed boxes of books, broken or tumbled shelves, and scripted falling debris and distant sounds of the shifting building were all added to create a sense of instability in the space. The burning helicopter was placed in such a way that it implied a recent crash and additional enemy activity outside of the play space. Lastly, an unseen Brumak groaning outside of the west side of the Library was added to imply additional threat, and a brief glance of a Brumak walking on the eastern side of the Library created anticipation by foreshadowing an encounter that never actually happens by level end.



Figure 3: Google Sketch-up conceptual perspective image

Designing

Actually creating the level was straightforward and rather easy. With the addition of adding elevation to the map and an additional cluster of exterior snipers in the newly elevated area, the original design was adhered to through the creation process. During playtesting, the most common suggestion was to allow the player to better engage the enemy snipers, instead of limiting them to using stealth and avoidance to complete the level. To that end, a sniper rifle was “hidden” in an open area to the far west of the main room. Likewise, additional detailing suggestions to change lighting, add additional scripted sounds, and perhaps most dramatic to add the downed helicopter, were easily incorporated into the level for the final project.



Figure 5: Library Retrieval, in-game screenshot of scripted event of falling ceiling debris that blocks player path

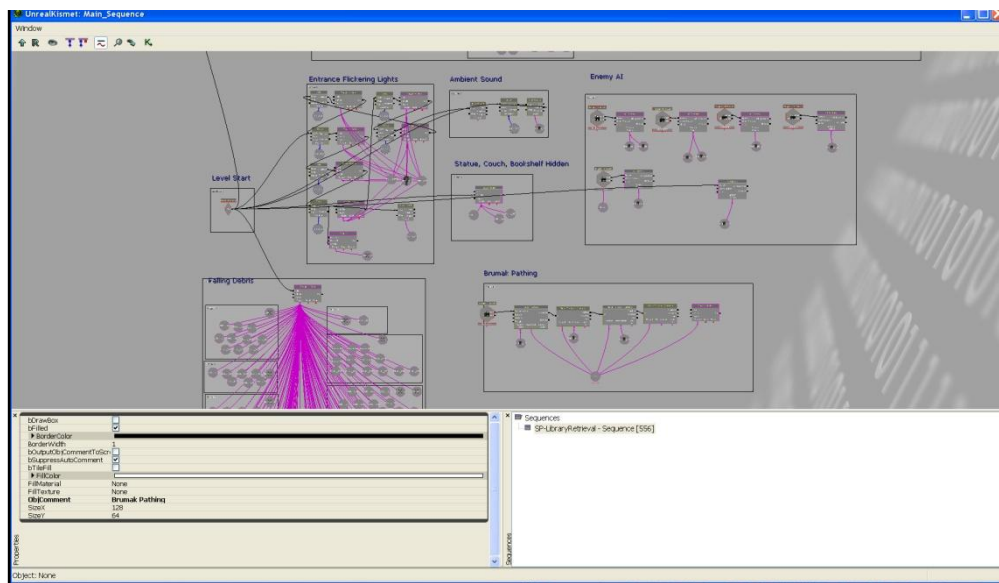


Figure 4: Kismet scripting for enemies, environmental effects, and other critical gameplay elements

Environmental Detailing

To create a truly “realistic” *Gears of War* game environment I had to recreate elements of the architecture from the existing game, while also creating a new and unique space that utilized static meshes and textures in new combinations. I studied the lighting and textures used in the levels immediately preceding and following this custom level, and attempted to create an environment that could contrast the enclosed spaced with a vaulted ceiling, but could still convey the feelings of dilapidation and neglect present within the rest of the game area. Static meshes from the original Gears level were used in the new level and combined with other Gears meshes to create a new space that was similar to, but dissimilar enough from the other Contemporary Combat Center levels to create a distinct look and feel.



Figure 6: In-Editor image from published Gears of War game demonstrating the thematic design of the Contemporary Combat Center style



Figure 7: In-game screenshot from Library Retrieval level with detail work and transitional architectural design that mimics original game style

Screenshot Gallery



Figure 8: In-Editor perspective screenshot demonstrating lighting, detailing of interior and exterior spaces, and entity placement



Figure 9: In-game overview perspective screenshot demonstrating overall level layout, lighting, detailing of interior and exterior spaces



Figure 11: Area 1 in-game screenshot detailing cover, downed helicopter, interior detailing, and interior lighting



Figure 10: Area 1 in-game screenshot detailing cover, sniper fire from across courtyard, interior detailing, and interior and exterior lighting