LEVEL DESIGN

Level design refers to the area in which the combat takes place. This includes the layout of the area, placement of objects and other gameplay elements in the area, and also which enemies are encountered. I will first explain the effects of the combat space, followed by gameplay elements, enemy placement, boss fights, and games which include ranged combat.

THE COMBAT SPACE

Most games like *DmC* have open areas in which combat takes place. Usually these areas are empty and flat with walls, or some other border, indicating the edge of the combat area. This is to allow players to make full use of the combat system without the level getting in the way or causing any problems. "For a melee based game, [...] if you are trying [...] a big combo [...] and [get interrupted as] you bump into [...] a waist-height wall, it's [...] really frustrating." (Tucker). This also sets a clear boundary for the interactions; the player knows they do not have to consider any elements of the game outside of the area until combat is over. The size of these areas is also designed to give the player enough room for combat. Games in which the player can quickly traverse large distances tend to have larger arenas to give players enough room during combat, compared to games in which the player is less mobile. Some games occasionally do have collision objects within the combat area or small height differences. These usually have very little impact on the combat in the area. *DmC*'s examples provide a good illustration of these design elements that can be commonly found in other combat-focussed titles.

Most games use guidelines to set up their combat areas, without designing them for a specific fight, to make sure the combat and animations work as intended. Newman explains that in *The Last of Us* they had "guidelines that our artists and designers [...] try to adhere to" to facilitate the combat in that area. They use a general set of rules for designing these spaces to make them work for the combat system. Sulman further adds to this that in *God of War* "we would usually roughly know where we were going to place a fight so we would try to [...] build that location to complement any fight that you end up putting in there." In general fighting areas are open spaces instead of tailor-made areas for the fight to take place in. Adding a separated space in the combat area allowed for projectile enemies. In *God of War 3* they were limited on the amount of undulation they could have in the environment because of context sensitive animations (i.e. ripping an enemy's head off). As a result they used upper and lower edges instead of slopes. This approach of using general guidelines was common among the designers that I spoke to.

In a few games combat areas do get custom adaptations, depending on the enemies present in that area. Nordlander explains that in *Dead Island 2* "one big focus was on integrating [the enemies] into the level". They did this by often placing environmental features in the level if specific enemies would be there, such as an elevated area for an enemy with a ranged attack. In *DmC* they retroactively changed some areas after it was decided which enemies appeared there. "When designing a room that is going to [be] [...] showing a specific enemy off there should be