Mitchell Dodson Dr. Mikel Petty Cs 330 – Artificial Intelligence and Game Design February 2, 2021



Essay 1 – An Analysis of AI in Far Cry 4

An enemy character is in alert state, but has not yet seen the player.

Far Cry 4 is a narrative open-world first-person shooter released by Ubisoft in 2014. Set in a fictional war-torn Himilayan country called Kyrat, Far Cry 4 immerses the player in a detailed world and gives them the freedom to experience the game in countless different ways due in large part to a wide variety of AI characters. These characters come in the form of friendly and hostile soldiers, numerous different types of animals, and vehicles including helicopters, trucks, and motorcycles.

Far Cry 4's main story is driven by a series of major events, but most of the actual gameplay involves completing side quests, which help the player gather unique resources or tools, and flesh out the rich details and background of the narrative. As the player completes missions such as defending a village, hunting, attacking an outpost, or intercepting a delivery, they are frequently challenged by enemies including aggressive animals and hostile soldiers or convoys. One of Far Cry 4's biggest strengths lies in the elaborate aesthetic the game

crafts through character dialogue, captivating scenery, and (mostly) convincing Artificial Intelligence features.

The majority of Far Cry 4's playtime (with the exception of cutscenes and economy interfaces) is spent interacting with friendly, enemy, and animal AI characters, so the entire user experience rests on their ability to create an efficacious illusion of intelligence. Passive animal characters such as boars are effectively just resources, and have very simple individual and group algorithms dictating their movements and animation states. Passive animals don't carry the narrative, serve a very simple in-game purpose, and don't require a wide variety of behaviors such as dialogue, emotion, or posture. Thus, the player's perceptual window of these animals should be very small, and the simplicity of the animal's AI doesn't endanger the illusion of intelligence. As the player's perceptual windows of characters grows from boar, to tiger, villager, enemy soldier, and up to the central characters' size, the sophistication of the characters' AI increases appropriately. As the number of ways a character would rationally be expected to interact with the player increases, so does the number of behaviors the AIs come equipped with, and the complexity of its decision-making algorithm; the developers of Far Cry 4 did not commit the complexity fallacy.

One critique of Far Cry 4's character AIs is that behavior changes for more complicated characters such as main characters, citizens, and military commanders are often rapid and repetitive. For example, when the player is in the presence a significant character but doesn't engage in dialogue, the character will randomly repeat a relatively short list of phrases, animated behaviors, and small movements. When an event such as the player approaching or being seen by a character, the discovery of a body, or a tiger attack takes place, the character's set of behaviors and phrases instantly changes. These rapid shifts in behavior can sometimes be unconvincing, especially if the reason why the behavior took place isn't clear.

Far Cry 4's exciting world design, engaging narrative, and – perhaps most importantly – well-designed AI features give the game a compelling aesthetic, and make it one of my

favorites. Although some important characters' AIs disturb the illusion of intelligence, most of the user's experience is governed by the clever design of many types of AI characters, which make the game into the immersive world that it is.

## Works Cited

clockner. "Far Cry 4 - stealth Outpost Liberations". Oct. 2016, www.youtube.com/watch? v=4DS24ei1LWc.