

Lifesigns:

Successful Storytelling in Open-World Games

A Thesis
Presented to
The Honors Tutorial College
Ohio University

In Partial Fulfillment
of the Requirements for Graduation
from the Honors Tutorial College
with the degree of
Bachelor of Science in Media Arts and Studies

By Kyle Eric Perkins

November 2010

TABLE OF CONTENTS

SUCCESSFUL STORYTELLING IN OPEN-WORLD GAMES	4
Introduction	4
Pixelated Prose: A Brief History of Games with Stories	4
Characters with Character	5
Playing in the Sandbox: Nonlinear Games	7
Long Story Short: What Makes an Effective Story?	9
Balancing Immersion	12
<i>LIFESIGNS: GAME OVERVIEW</i>	14
Essence Statement	14
Core Concept	14
CHARACTERS AND STORY	15
Character Design	15
Dichotomy of Values	15
Factions	16
Player Character Backgrounds	21
Non-Player Characters	23
Story	27
Personal Story vs. Ambient Story	27
Narrative Arcs	28
Sampling of Speech/Script	39
THE UNIVERSE OF <i>LIFESIGNS</i>	47
The Physical World	47
Overview	47
Player Atlas	52
Location Development Paths	52
Travel	58
Passage of Time	59
Overview	59
Accelerated Time Effects	59
CONCLUSION	60

This thesis has been approved by

The Honors Tutorial College and the School of Media Arts and Studies

Beth Novak

Professor, Media Arts and Studies

Thesis Advisor

Dr. Arthur Cromwell

Honors Tutorial College Director of Studies

Media Arts and Studies

Jeremy Webster

Dean, Honors Tutorial College

Successful Storytelling in Open-World Games

Introduction

Traditionally, narrative is presented as an unalterable experience. A story, in most forms of media, is a one-way exchange, metered out in controlled doses by a storyteller. Though this can allow for an engrossing experience, it does not promote a particularly personal one. Games, from pen-and-paper role-playing games to digital sports simulations, open up a second lane, allowing the audience to alter the experience with which they are presented. Since their earliest roots, digital games have offered a unique outlet for entertainment, both eliminating the need for the material requirements of some non-digital games and providing opportunity for previously impossible types of play.

Pixelated Prose: A Brief History of Games with Stories

Tennis for Two is widely considered the first digital game. Developed in 1958 for visitors of the Brookhaven National Laboratory, it allowed two people to compete in a 2-dimensional ‘tennis’ match, without the need for rackets, a court, and fair weather. Four years later, a group of programmers at MIT created *Spacewar!* (1962), a top-down shooter that became popular at multiple universities (DeMaria, and Wilson 12-13). *Spacewar!* contained everything necessary to experience a science fiction battle, complete with spacecraft, torpedoes, hyperspace, and the danger of crashing into the sun – all that was needed was a 1,200-pound, \$120,000 DEC PDP-1. Games continued to grow in complexity and scope, and 1975 saw the release of *Colossal Cave Adventure*, one of the first text-based adventure games (“Adventurer”). *Zork*, a text adventure game

published in 1980, displayed a hint of true potential for interactive narrative in games. The gameplay and story of games in this era, however, remained simple, offering mostly linear play.

Originally self-publishing his games and selling them in plastic bags, Richard Garriott released *Ultima* in 1981, the first of a series of role-playing games that would become the progenitor of the RPG genre. The game's plot revolved around traveling through time to destroy a gem before it can make the evil antagonist immortal, and fans praised the journey from swords to laser pistols. Though the story was simple, it set the stage for many sequels, each one selling more than the last. *Ultima III* (1983) is "often hailed as one of the most influential games ever made, both on American and Japanese RPG development" (Barton). The third *Ultima* installment featured a separate combat screen, control of a party of adventurers (as opposed to one singular hero), and non-random dungeons. This model was refined even further in 1985, with the release of *Ultima IV: Quest of the Avatar*.

Characters with Character

Though visually similar to previous *Ultima* games, *Quest of the Avatar* did not focus on defeating a singular evil as a condition for completing the game. Instead the player was required to attain heroic status by becoming the personification of eight ethical virtues: honesty, valor, compassion, justice, honor, spirituality, humility, and sacrifice. Although the virtues seem straightforward, attaining high levels of each is not always black and white. For instance, the player may choose to pay a blind shopkeeper more than what she asks for, gaining compassion but losing honesty. With such a nebulous main task, the game is naturally a nonlinear experience. In nonlinear gameplay,

there is no set order in which events can occur. Indeed, in *Quest of the Avatar* the player can choose to increase virtues in the order of his choosing. Why the departure from the standard, and successful, *Ultima* model? In an interview with Garriott, he elaborated on his decision:

I'd learned to write a good program, and now I wanted to become a good storyteller. I wanted to make sure the story had content. *Ultima IV* was the first one that had ethical overtones in it, and it also was just a better told story. The first three were "Go kill the evil bad guy" stories. Ninety percent of the other adventure games out there [were] in this format. You know, "Go kill the evil wizard. You're this great hero...Why? Cause you're told so in the documentation. Ever see the bad guy take advantage of people in the world? No. What do you do while you're there? You take advantage of everyone you meet and hoard lots of treasure so that you can kill the bad guy who never did anything to you! (Garriott).

Garriott's groundbreaking series had far reaching effects on the gaming world. It inspired the *Final Fantasy* series of games, now a household name in the role-playing game genre. In a story of evolution similar to *Ultima's*, *Final Fantasy* games grew from simple good versus evil themes into epics containing some of the most beloved narratives in the history of gaming. However, the stories presented in the series are usually linear, partly because of the series' tendency to include party members with distinct personalities.

Indeed, many games frequently listed as having the best stories contain characters with either predetermined personalities or permanently blank personalities. Gordon

Freeman, the main character of the *Half-Life* (1998) franchise, is an example of the latter type. He never says a word – quite a feat in a game series encompassing over 40 hours of gameplay. Link, the main character in numerous *Legend of Zelda* games, rarely says anything, save for cries of excitement or pain. How is it possible for games with silent protagonists to contain engaging stories? The nature of how players view their avatars might have something to do with it. Often, the level of interaction in a game can make the player feel like he *is* the avatar. In this situation, the avatar is a vessel upon which the player can manifest himself. Alternatively, the player can view the avatar as something he is controlling, directly influencing its actions but not necessarily melding himself with the digital character. No matter how players view their avatars, they are all in some way controlling the digital character. Some games allow players to not only control the actions and in-game decisions of the avatar, but also customize the history and skill set of their digital representation. It stands to reason that if one of the key features of games is player control, then games with open, interaction-heavy worlds and customizable characters could attract an incredibly large audience.

Playing in the Sandbox: Nonlinear Games

As with any game, open-world or “sandbox,” games establish a set of boundaries that limit story and environment interaction. However, within those boundaries, little to no restrictions are placed on what, and the order in which, a player can accomplish goals. Goals can be set by developers, or by the players themselves. A player could even choose to accomplish nothing, though simply by moving around the world the player would technically accomplish exploration. *Elite*, a 1984 space simulation with 3D vector graphics, is the first true sandbox game (Computers and Video Games.com). The game

puts the player in control of Commander Jameson, and opens on a station with the player owning spacecraft and a small sum of money. The player is free to forge his own story, using a universe of eight galaxies (each with 256 planets) as a backdrop. *Elite* was not a linear, rigid construct of gameplay and story – it was a nonlinear, open universe. The goal of the game is to become ‘elite,’ the top rank of space fighter. Though humanity is at war with an alien race, the conflict isn’t a main feature of the game; the alien attackers do little more than harass the player on the quest to become elite. Despite its groundbreaking gameplay, the story of *Elite* is still simple. The game came with a novella to explain the history of Jameson, but overall the player was free to become a pirate, trader, or anything in between. The game wasn’t just a pioneer; it was a hit, and frequently makes lists of most influential games of all time (Moran). *Elite* is still affecting game development today, as a lesson can be learned from the inclusion of multiple paths that can be taken to achieve a simple, meaningful goal.

Due to their unique capability to be altered by those experiencing them, games have the potential to tell a more immersive story and evoke a stronger emotional response than traditional entertainment media. Moreover, it is in the nature of open world games to facilitate the most personal and immersive gameplay and narrative experience. Modern sandbox games have improved immensely since *Elite*, but their stories are usually weakened by the sandbox style of play, not strengthened by it. Some games advertise themselves as having open worlds, but their gameplay is too limited to be considered sandbox. Admittedly, sacrifices have to be made on both sides in order for the best match of gameplay and narrative to be found. By studying the shortcomings of other sandbox games, and carefully balancing modular developer controlled content with

player freedom, or at least the appearance of player freedom, this potential can be attained.

Long Story Short: What Makes an Effective Story?

Storytelling has been a part of the human condition since before language as we know it existed. This historical desire to entertain and inspire has been visually expressed in both the Paleolithic caves of France and the galleries of the Louvre, captured in written word in both the Bible and *Lord of the Rings*. But what constitutes a good story? There are certain paradigms that have served as the building blocks of all good stories from the time of the ancient Greeks and before, and the loose structure of an open-world game seems to be at odds with the model.

The pacing and structure of a story can be just as important as the content, and examining theater can reveal something about what goes into a well-structured story. Unlike a novel, a play can't be enjoyed at a leisurely pace. It is created to be enjoyed in one sitting, and as such it must be structured to keep the audience captivated. It was the Greek playwright Sophocles that condensed the traditional Greek episodic play into one installment, quickening the action to keep his audience interested. Many plays are divided into acts, with three acts being common (though many Shakespearean plays have five). Acts serve as vessels for the natural rising and falling action of drama, with the climax of the storm falling in the third act of a three-act story, but organizing a story into acts or structures does not inherently make it flow. Keeping the audience forever in a state of suspense dulls the emotion, rendering it ineffective. Similarly, a climax that occurs far too slowly is ruined when the story finally reaches it.

Many games are also divided into acts, sometimes overtly. The action in *Half-Life* and its sequels takes place in named chapters, with each chapter usually comprising a complete cycle of rising action, climax, and falling action. In a linear game like *Half-Life*, where the action is crafted and controlled by the developers, these acts are experienced in order. It makes it easy for the developers to control the overall experience presented by the combined acts and segments of the game. Acts in open-world games are less concrete. It is virtually impossible to determine where, both in the world and in the plot, a player will be at any given time. Open-world games often have key points in their stories that serve as rough delineating markers of acts, but these key points arrive at the leisure of the player. In *Mass Effect* (2007), a science fiction role playing game, there are three missions that the player must complete to advance the story towards its conclusion. Each mission takes place on a planet whose coordinates are given to the player early in the game, and if the player chooses they can skip the majority of the game's content and complete the assignments on these mission-critical planets. There is no recommended order in which to complete these tasks. In this example, the pace of the game's story is out of the control of the developers, and as such a good story is that much harder to convey.

Even a story with perfect pacing is frivolous without meaning. Entertainment value aside, humans like to read stories to which they can relate. Perhaps that relationship stems from an event in one's past. Maybe a story presents an ideology with which one identifies. An individual can build connections between real life and the characters, events, and places in a work of fiction, but if those story elements are flat and uninteresting, they will simply be taken at face value. Symbolism has been used

throughout history to add meaning beyond an element's surface, and though every civilization has used its own symbols, many themes remain the same. Without a deeper meaning, connections can't be made between chapter and reader, canvas and critic, or level and gamer.

However, allegories and symbols alone do not make a believable character. A symbol, by nature, is static. It is something that reduces a concept into a single thought or element – fully capable of expressing the complete idea, but not particularly dynamic. People are complex, tumultuous beings that fail to understand even themselves. They change and adapt, and Joseph Campbell's *The Hero with a Thousand Faces* describes a model for this growth within a narrative. Popularly referred to as the hero's journey, the model describes how a hero is given a task or quest, sets out to accomplish that goal, and uses the personal growth she has experienced to benefit herself and her culture. Though it can be seen in both ancient myths and modern blockbusters, the hero's journey proves particularly useful in digital games. Just as they themselves gradually become better at playing the game, players expect their protagonists to grow. All facets of a character should develop on the journey from introduction to climax to resolution (Howard 5-7).

In most games, the main characters, at the very least, become more powerful. Their physical ability increases with every level gained, their fighting prowess becomes more impressive with every move unlocked, and their combat ability improves with every new weapon found. In some games, character growth is about more than just their arsenal. Characters develop their personal relationships with others, change their opinions on the world around them, and even slip into or emerge from the depths of insanity. The extent to which a player controls these changes depends on the game. Most

action and adventure games follow a more closely tailored path of character evolution, with the pace of both new abilities and personality changes controlled by the developer. Many RPGs allow for the player to choose the areas in which to advance their character, whether through menu screens or in-game decisions. Personal growth is not just about the metamorphosis of a character, but also about the individual experience that occurs with every playthrough of a game, and this is an area where open-world games can excel more than any other.

Though these principles have been under a process of refinement for centuries, they did not evolve on their own. It is because of the mediation of a storyteller that these conventions of drama exist. Good stories don't always spring forth from life. Indeed, as Lee Sheldon writes in *Character Development and Storytelling*, "drama begets real life drama. [It] is built on the reflection human beings bring to the incidents and conflict of real life that is then communicated to other human beings." Though they are a new and unique method of doing so, digital games are still a means of communication of ideas. They are not immune to the structure of good storytelling. Ignoring hundreds of years of storytelling conventions is unwise, but expanding on the foundation they create is the key to telling a good story within the framework of a digital game (Sheldon 10-11).

Balancing Immersion

Just as a reader can become engrossed in a book and spend hours lost in its pages, a player can become immersed in a game. For some games, addicting and fun gameplay is enough to keep a player interested, but a game with immersive gameplay will not necessarily tell a strong story. Many puzzle games fall into this category. On the opposite end of the spectrum falls the visual novel, a type of game that presents itself as a

digital choose your own adventure book with images to help purvey the story. A visual novel is perfectly capable of expressing a strong narrative, but gameplay is a simple, non-immersive matter of clicking buttons to advance text and choose options presented on the screen. It is important to note that neither of these types of games has an open, explorable world.

In open-world games, the physical world in which the game is set is perhaps the most important factor in creating immersion. The player will spend hours – quite possibly hundreds of hours – navigating the landscapes and starscapes of *Lifesigns*, the game described in the design document that follows. It is not uncommon for an open world game, such as *Fallout 3*, to require one hundred or more hours to finish all main and side-quest content (Brudvig). Even if a player sticks to the main story of *Fallout*, ignoring all side quests, it will take roughly twenty hours to complete. If the environment is homogenous and predictable, it will break the player's sense of place. The environments in *Lifesigns* are designed to make players feel like they are exploring a real, undiluted world. Ultimately, the goal of *Lifesigns* is to balance immersive gameplay, immersive story, and immersive environments. It is impossible to create a world with the incomprehensible complexities of reality, but it is possible to blend those three elements – gameplay, story, and environment – into a controlled variety of experiences.

Lifesigns: Game Overview

Essence Statement

Lifesigns is a first person, open-world role playing game with a science fiction aesthetic. Replayability due to volume of content is a prominent advantage of open-world games, and *Lifesigns* will exemplify the multitude of personal experiences offered by this type of game, while simultaneously telling a powerful, epic story.

Core Concept

When a cold war between two alien civilizations turns hot, a coalition group of scientists discovers that a hidden evil has been manipulating the war. Too late to save their own existence, they modify an unmanned scout craft to make a long distance hyperspace jump and fill its computer banks with everything they know about the threat. Their facility's self-destruct sequence engaged, they launch the ship towards a system with a promising chance of developing intelligent life. Hundreds of years later, on humanity's first mission to the moons of Saturn, a strange object is discovered, and life on Earth is changed forever.

The narrative of *Lifesigns* tells the story of an ancient conflict and the peril it brings the human race after they discover the secret to interstellar travel. Humanity discovers a crashed alien spacecraft and reverse engineers its engines, condensing hundreds of years of scientific advancement to just a decade. The player will assume the role of a member of a salvage team, tasked with recovering a massive graveyard of alien

ships – the remnants of an epic battle. Exploratory probes, upon traveling to the locations in the wrecked craft’s database, discovered the graveyard of derelict ships, as well as the home planets of the alien civilizations. Curiously, no remains of any kind were found, making the salvage operations that much easier, but raising many questions. The player will combat enemies, interact with NPCs, and solve puzzles using gathered information to further the story and grow as a person and hero. A portion of the game will take place in a zero gravity environment, so the player will use inventive techniques to navigate this unfamiliar setting. The player must forge a new life from the skeletons of a civilization whose path has ended. Will the same fate that eradicated two alien empires likewise destroy humanity?

Characters and Story

Character Design

Dichotomy of Values

Decisions affecting the outcome of a story arc in *Lifesigns* can be defined as selfish or selfless. The nature of a decision isn’t always black and white, as the morality of actions in the real world cannot be split into discrete opposites. Instead, important mission choices in *Lifesigns* will be designed to fall on a sliding scale between selfish or selfless. That isn’t to say that choices will be visibly one or the other to players. If choices are obviously biased towards one side they reduce the illusion of free will. The game becomes less of a free, open world, and more of a choice between two well defined paths.

Selfish

There is nothing wrong with looking out for number one. In fact, the future presented in *Lifesigns* is one in which it is advantageous to think of nothing but oneself. You'll advance faster in your faction, accrue more wealth, and probably live longer. But are the followers of a path of self-benefit still heroic?

Absolutely. What does it matter if a corrupt, totalitarian government captain saves humanity? Even selfish people realize that humans need to be alive in order to be manipulated.

Selfless

However, a price must be paid for every selfish action. Selfish individuals make no friends, and accumulate enemies on a daily basis. If the loneliness of caring only for oneself doesn't have an effect, then the multiple daggers aimed for one's back will. Selflessly fighting for others – for their freedom, their happiness, and their lives - that is the way to earn their hearts.

Selfless captains might have an easier time finding friends and companions, but their lives are far from carefree. It is often difficult to find a fair solution to a problem that makes everyone happy. Instead of negotiating, it may be simpler to put a bullet in someone. But the mark of a selfless individual is doing what is right, not what is easy.

Factions

Throughout *Lifesigns*, various factions will vie for the player's attention and play a role in sculpting the game's story. No faction is entirely right or wrong; like characters, factions also have selfless and selfish sides. The player's actions during the game will tip

the faction that she joins in one of these directions, and ultimately establish that faction as a dominant power in colonized space. Being part of a faction prevents enlistment with other factions, but during the course of the game the player can change their allegiance. Every faction has its own cast of characters, agenda to effect, and secrets to discover. As such, the chosen group will determine the faction quests in which the player participates, shaping the personal story of the main character.

The three different player character backgrounds, and subsequently the three different factions, in *Lifesigns* are designed to appeal to specific personal attributes. Those emotions will drive players as they complete the personal stories associated with a faction or character background. Depending on what attributes players possess, they will act selflessly or selfishly, and this will choose an outcome for the personal stories. *Lifesigns* is an open world game, but there still must be a driving force behind the player's actions for the game to be meaningful, and the character decisions are driven by three characteristics.

The first is a sense of independence, and that attribute ties to the Orphan background and the Private Crew faction. Player characters with the Orphan background will have the hardest time becoming accepted. Life in foster homes is not glamorous, and doesn't set one up for success as in the other backgrounds. That said, the upbringing of someone with the Orphan background would not be as strict as the others, and as such there is a greater freedom to choose one's own life path. When a player chooses the Private Crew faction, they are beginning a rocky journey where nothing is certain and nothing is gifted, but in that respect they are choosing a life of freedom. The captain of a

private ship need only follow the desires of his or her heart. As an independent force, the private crew is free to act as selflessly or selfishly as they can get away with.

The second attribute influencing character design is ambition, which influenced the Nobility player character background and the Corporate faction. Characters that grew up as nobility wanted for nothing, and found that opportunities for success were served on a silver platter. They lived in the best sectors of space, attended the best academies, and had the best friends money could buy. However, when the time comes to choose a life path, it would be unthinkable for individuals that grew up as nobles to throw their status away and choose to leave the company. Their path in life is chosen for them, with deviation punishable by disownment. Players who are either born into or choose the life of corporate nobility will find that there are codes and conventions to follow. But with a lack of freedom comes the chance for immense power. If they are ambitious enough, players that fit well within the Corporate faction can work, fight, seduce, and backstab their way up the corporate ladder – and the view from the top is intoxicating.

The last attribute was influential in developing the Government faction and the Army Brat background: a sense of duty. Duty to king and country is often romanticized, but Arthurian legend and high fantasy aside, a sense of duty is something very real, something which has motivated historical heroes and tyrants alike. It may manifest as a desire to protect others, or simply a duty to keep the status quo of one's regime. It is crucial to realize that either of those situations can be construed as both good and evil. Someone experiencing the life of the Army Brat would have heard stories of war from a young age, and those stories would have demonstrated the use of force as a valuable tool to accomplish one's duty. A player in the Government faction has a duty to protect the

establishment and the citizens thereof, but isn't it easier to use force to accomplish that duty? Isn't it possible that, in order to protect society, one needs to destroy all deviations from it and instill strict rules to prevent those threats from ever establishing themselves again? A balance between democrat and dictator – that is the challenge of walking the Government path in *Lifesigns*.

Corporations

Corporations are massive conglomerates reaching across the entirety of known space. They all manufacture a wide range of everyday products, owning many household licenses, but where they differ from each other is space exploration technology.

Corporations function as virtually separate kingdoms. They have their own science divisions, they have their own royalty, and they even have their own armies. A high-ranking position in a corporation is akin to nobility.

- 1. Selfless:** Corporations perform research to further humanitarian sciences – medicine, farming, and other things necessary to survive the environmental hazards of space. Able to subvert bureaucratic red tape, they can supply backwater colonies and stations with precious supplies faster than the government. Furthermore, the military branches of the corporations serve to augment government forces in times of need, as well as provide a balance of power against the government.
- 2. Selfish:** “Humanitarian sciences” is a common buzzword in corporate propaganda. In reality, corporations perform inhumane testing on backwater colonies, capturing subjects for experimentation when they make monthly supply drops. Corporations are elite, ruthless clubs with private armies and too much

power. Not even the government could withstand an attack if the corporations ever band together - a fact known well by both groups.

Government

After India and Pakistan's exchange of nuclear weapons in 2012, Earth rallied together to form a new world governing organization. Though some nations refused to join the confederation, humanity had, for the first time, joined together as a whole. Individual nations kept their governments and customs, but humans saw themselves as a species. At the same time, the new confederation formed a global space organization, dedicated to the exploration of the solar system and eventual colonization.

- 1. Selfless:** A lot has changed since 2012, but the government still remains dedicated to protecting the peace. In 200 years neither war nor an exchange of atomic weapons has occurred on a national scale. Government spacecraft, both exploratory and peacekeeping, are a regular sight.
- 2. Selfish:** On the flip side, the government has grown into an oppressive, corrupt behemoth, with tendrils wrapped around nearly everything. In order to compete with ambitious corporations, the government has adopted many questionable policies in manufacturing, scientific advancement, and policing methods. Government ships are stereotypically considered deathtraps as they are often pushed into service too soon, and remain active for too long.

Private Crews

Spacers, pioneers, scoundrels, smugglers, privateers...they are known by many names. Privately owned spacecraft lack the bureaucracy and structure of government

crews, and the ruthless, elitism of the corporate sector. Many privately owned vessels lack the influence and resources to tackle high-value salvage operations, but the systemnet is full of tales of heavily-modified ships and the daring crew that lead them to rare finds and lucrative salvage hauls.

1. **Selfless:** Like Robin Hood and his Merry Men, many privately owned vessels are homes for scoundrels with hearts of gold. On the less romantic side, many members of a private crew are just hard-working people trying to make a living in space. Either way, what they lack in organization they make up for in character.
2. **Selfish:** Without rules, and without consequences, private crews often turn to piracy in the worst sense of the word. With no regard for life or property, many privately owned vessels engage in piracy, slaving, and all-around terror.

Player Character Backgrounds

Players will have the choice of three backgrounds for the character they create. Backgrounds will have a large effect on the personal story experienced, but affect the ambient story only insofar as the methods in which the player accomplishes the story's goals. For more information on the types of stories, see the Story section.

Each background leads to one of three different paths, depending on decisions made during the game. Within each path, the actions of the player determine an outcome – altruistic and egotistical actions will lead the player towards either a selfless or self-centered personal finale.

Orphan

Your parents were smugglers. You grew up in space, on various ships and stations. When you were 10, your parents were killed by a government ship while trying to smuggle stolen medical supplies to an isolated colony. Since their death, you were raised in various foster homes until you were old enough to legally live on your own. Space is your home, and you've made a lot of friends in the remote areas where you grew up, especially among the spacers and smugglers.

Nobility

Your mother and father are COO and CEO, respectively, of a large corporation. Corporations in *Lifesigns* are so powerful that high-ranking members are practically nobility. Even low ranking members have slightly elevated status. Your mother and father operate as business professionals, not loving spouses or parents. As soon as you were old enough, you decided to get away for a while and see what the world is like outside the bubble of wealth in which you were raised. It might be difficult to escape, considering the status your name carries.

Army Brat

Your mother was an ace fighter pilot, and she only quit flying after being promoted to General and given the task of overseeing a top-secret military spacecraft testing facility. Your father is a brilliant scientist working at the facility. You spent your childhood and adolescent years in and around military posts. When you finally came of age, you rebelled against your parents and set out to make your own path. Despite your

desire to find your own way, the military is in your blood, and the call to duty is hard to resist.

Non-Player Characters

Party Members

The player will have the choice to bring NPCs into their party. These characters will explore and fight with the player, and some will be potential romantic interests or rivals. Some NPCs are only available if the player joins a particular faction, while others are non-faction dependent. A player character's background will influence whether or not a character will join the party. Regardless of how the character joins the party, every NPC has a set of ideals that must correspond with the player's actions to a certain degree in order for that character to stay in the party.

Many NPCs have the potential to join the player's group, and the three below represent one example from each faction.

1. Private Salvage Crew

Sophie Carlisle

Sophie is best described as a self-taught scholar, though it might be more accurate to call her a naïve bookworm. Always quick to offer facts related to the situation at hand, regardless of whether or not it they were requested, Sophie is surprisingly capable in a fight. Though she errs on the clumsy side, a childhood spent in some of the harshest sectors of space left her no choice but to learn to defend herself. Initially a crewmember on a privately-owned search and rescue vessel captained by her older brother, she can be recruited into the player's crew

after pirates destroy her ship. Though deeply hurt by the loss of her brother, Sophie manages to stay optimistic, and the tragedy serves to harden the young woman into a determined, caring heroine. She fills the role of a foil, friend, and even romantic interest for the player.

“Oh! So this is a mugging. How exciting! What happens now? Oh, right! I get hurt—oh...right...”

Sophie’s growth arc as a character is one of personal maturity. She is a naïve bookworm when she first joins the player’s crew, but as the player grows, so does she. Her fighting prowess will improve, experiences with the player will boost her faith in her ability to handle real-world situations, and she will evolve into a caring scholar – a true asset to the player’s party.

However, if the player follows a path that is fundamentally opposite of Sophie’s virtuous beliefs, she will mature in a slightly different manner. Deeply disturbed by the selfish path of the player, she will turn her disapproval of her former captain into a keen sense of leadership. A terrifying champion of justice, she will earn her own crew and eventually lead a ship into battle against the player.

2. Corporation Salvage Crew

Claire Liu

When her parents were murdered in her early teens, Claire refused to be placed in foster care, instead forging new birth records and finding her own way. Her new birth records listed her parents as low-ranking members of a corporation, and she used this lie to join a corporate crew. She is a self-sufficient, ambitious, sarcastic femme fatale with few friends – a perfect fit for the life she leads. With

a past that equally disturbs and empowers her, Claire rarely opens up to anyone, but in an environment where fortunes are made on buried pasts, the truth is bound to be discovered. She won't hesitate to stab a few backs to get ahead in the company, but if you earn her trust she is a loyal friend and ally, and a possible romantic partner. Just don't give her access to your work computer...

“Let's go to the club, I'll buy you a drink. Trust me, you're going to need it after you hear what I just found out about your department.”

Essentially a free agent, Claire will accept and follow whatever path the player chooses to walk within the Corporate personal storyline. As a closed person, she may not open up to the player at all, but she will follow him as long as he continues to advance within the ranks of the corporation. However, unless the player can connect with Claire on a personal level, she will inevitably attempt to backstab him or her. The player will, at that point, have no choice but to kill their former crewmember.

If the player chooses the Orphan background, they will have the opportunity to glimpse into Claire's shell, and learn more about what makes her so defensive and ambitious. If the player chooses to continue pursuing a relationship with Claire, she becomes a romantic interest or friend, and will no longer betray the player.

3. Government Salvage Crew

Dorian Avery

Dorian was the captain of a military ship, but his career ended years ago when his vessel was assigned to guard a particularly lucrative salvage target.

When pressured by a vessel operated by an opposing government, Dorian refused to leave, and the other ship opened fire. Despite the preemptive strike, the attacker was destroyed, but Dorian's ship was heavily damaged. The surviving crew waited hours, then days...but no rescue came. When a rescue ship finally arrived, only Dorian was left alive. He believes the government purposely delayed rescue so that any survivors would die, taking the events of the battle with them. Both governments covered up the incident to prevent a war. Dorian was demoted to commander of a salvage vessel, as they couldn't execute him once they found him alive.

“Making me captain of this ship was the only form of execution the cowards could stomach. They can't turn me loose because of what I know. They can't give me my position and rank back because of what the public was told to think of me. I would have preferred to die with my crew.”

The player's decisions in the game can either redeem Dorian or drive him to rebel against his faction. A selfless government captain will connect with the man's sense of duty, rekindling his fire to lead and protect the helpless. Dorian will learn to let go of the past.

In all of the selfish personal story paths, Dorian's desire for vengeance will grow until it boils over. The player's abuse of power and disregard for the lives of those he commands will be intolerable to Dorian, and the man will leave the player's party. He will return soon after with a crew of his own, a combat-worthy ship, and a craving for retribution.

Story

Personal Story vs. Ambient Story

Two types of stories exist in *Lifesigns*, and together they will form a single, intimate experience. The most obvious is the “ambient story.” The ambient story is the main plot, affecting every aspect of and everyone in the game world. The ambient story can be furthered with many different methods – after all, that is one of the hallmarks of open-world gameplay – but despite the path taken by the player, there is only one outcome.

As the player progresses the ambient story, they will also craft a “personal story.” Decisions made by the player as to which faction to join, which party member to embrace, and the degree of selflessness or selfishness applied to actions all determine the personal story of a playthrough of *Lifesigns*. Unless the exact same decisions are made, a fresh personal story will emerge every time a new character is created and played. The personal story of a character develops as the player explores the entire game world and interacts with NPCs, whereas the ambient story can only be furthered by completing objectives in certain game areas.

Most games place the player in the role of a single character. *Half-Life* forces the player to assume the role of Gordon Freeman, *God of War* (2005) does this with Kratos, and *Halo* (2001) with Master Chief. Some games allow the player to choose from a small cast of characters – this is the case with Mario and Luigi in *Super Mario Brothers*, or any of the characters in *Final Fantasy VIII* – but even then, these characters are not malleable. They have a distinct personality, and a distinct story. If a player can’t identify

with the personality and ideals of a character, then that player will feel a weaker connection with the game's story. Many developers limit the personality of their game's main character, designing him or her to purposely not feel strongly about anything. This will avoid alienation of players, but this is not the right solution.

Lifesigns only has one playable character, but that one character is, effectively, eighteen people. There are eighteen personal story arcs in *Lifesigns*, with nine considered selfless and nine considered selfish. Additionally, each storyline stems from three different backgrounds, with the option of choosing three different factions. If a player doesn't identify with one of the character archetypes presented, then they have seventeen more chances to find something that feels right. The power of choice is part of what makes *Lifesigns* an effective open-world game. Players are not limited to one character. They are not given a bland personality, with the hope that it will be vague enough to appeal to everyone. Players will have the chance to build a distinct personality as they explore the universe, and change it to suit them.

Narrative Arcs

Personal Story

The personal story experienced is influenced by two choices. The first is the player's chosen background. This decision sets the personal story in motion, establishing the player character's history, motives, and personality traits. Every background has one of three arcs, with the factor that determines the arc being the faction that the player joins.

1. Orphan Background

- a. **Private Crew:** You follow in your parents' footsteps and join a crew of smugglers. Soon you find yourself in command of your own ship, and your own crew.
 - i. **Selfless:** Much like Robin Hood, you use your influence in the private sector to form a talented crew and rob from the rich to give to the poor. You become recognized as a hero of the common person, ushering in an era where status isn't a prerequisite for success.
 - ii. **Selfish:** You use your influence with the black market and others who live outside the law for more nefarious purposes. Out for nothing but personal wealth, you unite two warring mafia syndicates and position yourself to become the most powerful system-wide crime boss.
- b. **Corporation Crew:** In a true example of rags-to-riches, you decide to join a corporation crew. Even though you're looked down upon because of your past, your skills gain you recognition.
 - i. **Selfless:** This recognition soon grants you the trust of high-ranking corporation officials. You become accepted as one of the elite, but you don't let it go to your head. In fact, you use your newfound status to bring equality and tolerance to the corporations and are hailed as a philanthropist and humanitarian.
 - ii. **Selfish:** This recognition soon grants you the trust of high-ranking corporation officials. You are indoctrinated into the elite circle of leadership, and you promptly use this status to bring down the

company through subversion and corporate espionage. Their first mistake was to shun you and your kind, and their last mistake was to trust you.

- c. **Government Crew:** You decide to follow in your parents' helpful footsteps, but in a more legal way, and join a government salvage crew. You are convinced you can make a difference, but you are still haunted by the murder of your parents at the hands of a government captain.
 - i. **Selfless:** Though your upbringing causes some distrust, you prove yourself time and time again and are given command of your own ship. Your vessel is placed under the command of a decorated, inflexibly lawful General. You soon realize that he is the man who killed your parents, but with a new perspective on the life of a government captain you forgive his past transgressions.
 - ii. **Selfish:** Upon finding that your new commander is the man who killed your parents, you follow his vessel into an off-the-charts salvage zone and obliterate it. The tyrant showed your kind no mercy, and he isn't worthy of yours.

2. Nobility Background

- a. **Private Crew:** Fed up with the corporate, ruthlessly ambitious lifestyle, you join a small private crew, and for the first time in your life put in an honest day's work.
 - i. **Selfless:** After forming your own crew, you use your knowledge of corporate secrets and policies to beat the corporation at their own

game. You manage to score lucrative salvages before they can get their money-grubbing hands on them, and amass enough wealth to form a protective union of freelance salvagers.

ii. Selfish: You take it one step further than beating the corporation at their own game. Forming a group of ruthless pirates, you raid corporation salvage ships with no regard for life or property.

b. Corporation Crew: After a short while, you find the corporate lifestyle and the promise of inheritance too tempting. Leaving the private sector behind, you return home, and your parents await you with open bank accounts. Your status as their child guarantees you a job, and your talent allows you to advance in the company.

i. Selfless: You discover a plot of your ambitious mother's to overthrow your father. Mortified, you take out your father's would-be assassins and help lead the company to new heights. Your mother and her cohorts engendered many of the company's unethical policies, and with your leadership the notion of benevolent profit becomes a reality.

ii. Selfish: You recognize your ambitious mother's plot to overthrow your father as an opportunity for personal gain, and you help her to kill your old man. The company enters a new era of prosperity – and questionable ethics – all thanks to you.

c. Government Crew: It doesn't take long for the government to find you. They know you are disillusioned with your parents and their aristocratic

lifestyle, and offer you a job as a field researcher. You quickly accept, and sell the secrets of the elite to the government.

- i. Selfless:** With government backing, you give the corporations a taste of their own medicine. You beat them to every major salvage discovery, and tell your parents you won't back down until they adopt safer and more humanitarian policies. No longer will the corporations push the limits of law.
- ii. Selfish:** Using your knowledge of corporate policies and secrets, you lead government salvage crews to every high-profile salvage site. When stealth isn't possible, you destroy corporate salvage interests outright, hiding the altercations behind conspiracies and cover-ups. Unable to compete, many corporations go bankrupt or merge with each other to stay afloat. The government emerges as the ultimate power in the system.

3. Army Brat Background

- a. Private Crew:** Fed up with the structured military lifestyle, you use your natural charismatic leadership abilities to form your own band of followers. It seems like anyone will gladly follow the child of a war hero.
 - i. Selfless:** You lead these followers in overthrowing the corrupt forces in the system – corporation, government, or otherwise.
 - ii. Selfish:** You become a regular warlord, leading your private army into battle and conquering whatever you see fit.

- b. Corporation Crew:** As soon as word gets out that a child of both military brass and military intelligence has gone AWOL, every large corporation starts making offers. You pick the most lucrative offer and don't look back.

 - i. Selfless:** You share what you know with the corporation, ensuring that valuable information learned from salvaged technology doesn't get locked away in a secret base. This technology will instead be available to the people...at a price.
 - ii. Selfish:** You share what you know with the corporation, reminding the government that they can't control what isn't secret. Using this knowledge, the corporation emerges as the prominent force in the system – even more powerful than the government.
- c. Government Crew:** Before too long, duty indeed calls. You step into a recruiter's office and the instant your background check is performed you are recognized. The recruiter lets you join without hassle and without informing your parents, but before long they seek you out. They are proud that you found your way back. They ask you to come back to the base – this time, as an officer.

 - i. Selfless:** You decide to return to the base, your old home. You are assigned to the same research division as your father. You gain a reputation for honor and mercy and become a leader of the best kind - a true servant of the people.
 - ii. Selfish:** After returning home, you are assigned to the same research division as your father. You gain a reputation for ruthless

experimentation, and your inexorable practices propel you through the ranks. You gain access to government secrets and learn of vast networks of conspiracies, and soon start developing some of your own.

Ambient Story

Chapter 1: Zero-G Blues

The initial chapter of the story will be a comparatively more structured experience, allowing the game world to be introduced at a pace that doesn't overwhelm and confuse the player. In the same way that being blindfolded and taken to the center of a large, foreign city would be bewildering, open-world RPGs can have a large learning curve if the player is not slowly introduced into the game world. The player's first experience with the game, after selecting the appearance and personal background of their character, is a day in the life of a rookie on a salvage operation. Various salvage-related objectives will be presented, with the strategy for completing the objectives left up to the player to decide. The open-endedness of this first mission will replace the traditional RPG trope of a character attribute selection screen, as well as serve as a tutorial for the game's controls and interface, particularly the basics of movement in zero-gravity.

Though it is common for a salvager to work for an established team – corporation, government, and privately-ran groups abound – it is also common to see pools of freelance salvagers-for-hire. Especially prevalent in newly discovered, lesser-known, or less ostensibly lucrative sectors of derelict space, freelance salvagers are the equivalent of interns in the business world. The player initially takes the role of one of these disposable, poorly-paid freelancers, working for several salvage teams on a variety of

missions. Many of the contracts taken by freelancers are incredibly dangerous, as work in less civilized graveyards is in high demand and low supply. Often, salvage contracts are kept open until the job is completed, resulting in a large number of teams scrambling to be the first to complete the assignment. Virtually no police presence, combined with the ruthless nature of freelance work, guarantees that every mission affords hostile resistance.

Eventually, the narrow channel funneling the player into freelance work will expand. The player's growing influence and recognition will open doors to numerous objectives, each leading to a new area to explore. However, some of the most interesting and lucrative areas in the game are only accessible by taking advantage of the influence of factions, and objectives that lead to the player signing up with a faction-controlled crew further the ambient story.

Chapter 2: Planetfall

If they choose to continue with the ambient story, players will keep working as a salvager, though their ever-increasing renown will grant them passage from the slummier salvage areas to one of the home worlds of the alien races. Many groups will vie for the player's attention, each with a different story to offer. Numerous corporations, governments, and private organizations have an interest in the fortunes that can be found in the ship graveyards. It will be up to the player to choose which faction provides the ticket out.

Upon reaching the alien home world, a multitude of quests and objectives are available to the player. Many of them come from the chosen faction, but many others are simply a product of the environment and will become available with exploration.

While exploring an ancient military installation, previously untouched by salvagers, the player learns of the cause of the ancient war, from the point of view of one of the societies. The documents detail one side of the feud that caused the Shards to leave in the first place, as well as the ensuing war. Only the ostensible reasons for the war are discovered – Havoc remained unknown to the alien government, and it will remain unknown to the player for a while longer.

During the player's stay on the planet, an unknown force suddenly attacks a few human settlements, decimating them and leaving no trace of the dead behind. The player, if at one of the invasion sites at the time of the attack, will face a tough fight but narrowly escape. Word rapidly spreads throughout human-occupied space. Rumors fly – some think it's a powerful new pirate faction, some think it's an act of terrorism, and some even think the attack was an alien assault.

Chapter 3: Awakening

After the initial attacks, the mysterious invaders seem to disappear, leaving no trace of their origins. Life returns to normal, and the player, whether propelled by orders from their chosen faction or their own sense of curiosity and wanderlust, makes his way to the other alien planet discovered by humanity.

This planet proves to be just as resource rich as the first. Its architectural and aesthetic style is different, yet displays similar elements of functionality and technological development. An abundance of storylines, problems, and secrets can be found on this planet, with the resolution of each leading the player towards a greater understanding of the culture of both alien societies, and of the conflict that brought about their collective end.

Meanwhile, reports of random attacks begin to surface again. A second wave of unknown marauders has appeared, and their attacks are more widespread. The player begins to fight groups of the raiders, clad in strange armor that immolates all evidence into ashes when they are killed. Nonetheless, exploration of the planet continues, and the player uncovers the society's view on the impetus for the ancient war. Also uncovered are traces of the coalition of scientists that sent the scout ship to our solar system – they are referred to as enemy sympathizers in old alien documents. Enough information is found to piece together the rough location of a large derelict freighter operated by these sympathizers, alone in an otherwise barren void.

The player travels to the sector of space where the freighter was reported to have been, and locates it using its weak power signature. The ship is in remarkable condition, and after a cursory investigation of its decks it is obvious that the cargo vessel was repurposed into a small cryogenic arc.

Chapter 4: Unmasked

As soon as the player enters the central pod control room, the device that led the player from the alien planet to the derelict ship activates the thawing process. Presented with an incredible opportunity to interact with an alien race, the boarding party prepares for diplomatic first contact, but must instead prepare for a grim fight.

The cryo pods have been tampered with, and the sabotage of the cryogenic freezing process causes rapid and grotesque mutations when the pod's inhabitants are revived. Nearly one hundred lives have been reduced to biological time bombs, but one pod results in a successful revival.

The inhabitant is mortified but calm about the fate of her comrades, and once communication is established, she reveals that she is an Originator. She tells the boarding party about Havoc, and about two ancient superweapons – one belonging to each society. Meanwhile, the rest of the player's team has found a single pod that remained closed, and they begin the reconstitution process. It is a Shard, and the original saboteur of the colony ship. The assassin, without missing a beat, starts killing members of the salvage team in an attempt to complete his ancient mission. The Originator reveals that she locked the Shard saboteur into a cryo pod before climbing into her own, and, horrified that the murderer has been released again, joins the player in battle. Tragically, the Originator is killed along with the Shard, and the opportunity to learn from another civilization dies with them.

All out war has now broken out between humans and Havoc, and through the turmoil speeds the player and his crew. Though she was unable to share much as the last ambassador of her race, the Originator did reveal the locations of the superweapons of each society. The final task of the player is to escort the weapons to the Havoc home world, and unleash their destructive power. The entire system is destroyed, eradicating yet another species, but a closing cutscene ignites a light of hope. Two massive, undamaged colony ships – one Originator and one Shard – float silently in space. In a choreographed dance of lights and steam, their systems spark to life, and the revival of two cultures begins.

Sampling of Speech/Script

Introduction

The following is an example of a mission segment, written in narrative form. Based on a standard encounter aboard a derelict, it follows a private crew as they board an ancient medical vessel and encounter a group of dangerous raiders. The gameplay for this particular encounter would fall under the Private Crew faction. The player has recently earned a ship and crew, but hasn't yet traveled to the first alien home world. The antagonists in the sample are each built around a different character archetype, representing a balanced party in a playthrough of *Lifesigns*. Their names are chosen at random from a pool of potential titles.

A Short Story in the Lifesigns Universe

Bas fumbled with the stock of the old kinetic rifle, sliding the adjustable shoulder pad back and forth until the worn catch finally found its notch. "Shit, what am I doing with this thing? It's not even caseless."

He brought the weapon up to sight and pulled it tight against his shoulder. Typical scrounger trash, the rifle was bottom tier tech, even when it was new. Chances were uncomfortably high that the gun would blow up in his face, but Bas knew that even death by metal shards and gunpowder burns would be preferable to the fate that would befall him if he were caught. He feared for Zhong and Kylie, but he kept his imagination in check by telling himself that the former could handle a fight, and the latter was safe aboard the Kukri.

Satisfied enough with the rifle's ergonomics, Bas leaned it against the landing strut of the old shuttle and began pulling harvested magazines out of his satchel. The last one, strangely wet, slipped out of his hands, and bile rose in his throat as he noticed the blood and hair that coated the faded plastic. He grabbed a rag from the bag and hastily wrapped it around the magazine. As quickly as his shaking hands could manage, Bas extracted the magazine's precious fruit.

Zhong was having a very bad day. On his list of bad days, this one would certainly make the top fourteen. The worst part was that he couldn't even curse about it. If it weren't for the oily muck that covered his body up to his nostrils, he might have been tempted to mutter a few choice Chinese phrases, so perhaps it was lucky that the man had chosen a flooded crawltrench in which to lie low. Had they known that their quarry lie helpless in a foot of coolant just inches below their feet, the raiders might have stomped their boots a little harder on the metal grate of the comms room.

"I swear he was just here! What is this guy, sumkinda ninja?"

"Shutup Dawkins, don't be prejudiced," Silas snapped as he ducked down to look under a control station. "Not all squint-eyes can cling to ceilings and kill with their bare hands." The station's viewscreen oozed just enough green light to reveal the raider's hawk-like features.

"Haha, that's just what I'm gonna do to him when we find him. You know how much I love makin' eyeballs pop like grapes."

"Eyeballs don't pop from strangulation." This last man spoke like he knew. He did.

“Thank you for that, Zee.” Satisfied that no ninjas were hiding below the station, Silas continued to weave through the comms room. “Come to think of it, do you even know what grapes look like, Dawk?”

When Kylie felt nervous, her fingernails suffered for it, and today marked one of the worst cuticle cataclysms her slender hands had ever known. Left hand tapping and sliding on the controls with the grace and fervor of a jazz pianist, she methodically nibbled each finger of her right hand until it bled.

“How the fuck did those scumbags score a prowler? There has to be a record of something that valuable being ganked...”

Kylie hadn’t detected the raider ship until it was too late to bring back Zhong and Bas. The last she heard of them was Bas shouting over comms to get the Kukri to safety. The possibility that she would never see them again sat heavy on her mind, but its weight served to drive her search.

“Ah? ...haha, yes!” She suddenly jumped out of her chair and stopped maiming her right hand to bring all ten digits to bear against the console. A third of a second later, the listing in the database of missing vessels stared her in the face, displaying a Stiletto class Fleet prowler and the location where it fell off the grid. The rest of the listing was blacked out, keeping Kylie’s question mostly unanswered.

“A Fleet vessel, huh? That has to be it.” Homefleet prowlers were equipped with some of the best detection equipment available, but Kylie doubted the slime knew how to use the Stiletto’s equipment any better than their typical raider gear. And there wasn’t a pilot in the private sector that had eluded more raiders than Kylie Petrova.

Having condensed his scavenged ammunition supplies down to three full magazines, Bas slid one into the breech and pulled back the charging handle. It seemed like every moving part on the weapon was loose, but the old rifle chambered a round on the first try. Bas flipped the fire selector to semi automatic and steeled himself for the fight that undoubtedly waited for him in the halls of the derelict. With a deep breath, he quietly left the shuttle hangar and began to move towards the bridge.

It was supposed to be a quick scouting and marking trip, with the crew of the Kukri simply prepping the ancient medical vessel for salvage by a larger team, but the arrival of the raider ship turned a quick run into a guerilla engagement. Normally, Bas and Zhong would have boarded the derelict lightly armed, but medical vessels had personal weapon detection systems that could sense and neutralize any energy based weapons. The ancient security systems on salvage targets were sometimes deteriorated to the point of inoperability, but today's prize was in particularly remarkable condition. The ship was a fortunate find, but unfortunately the raiders had found it, too.

Rounding a corner, Bas was taken aback as he found himself peering into an unexpectedly inky void. He had activated the ship's emergency lighting when the team first boarded, but the hallway ahead had not received the wakeup call, long overdue as it was. Trying to keep his breathing steady and quiet, Bas extended an arm into the nothingness and began to pace forward. The blackness stretched on and on, but he found confidence with each step, and his gait soon quickened. *I must be passing through one of the med wings. Strange that the emergency systems would fail here, of all places. Was there damage, maybe a fire?*

Bas, still one-handing the rifle, began to softly drag his fingertips along the wall. The surface was glass smooth, belying the ship's age, yet there was an unnatural friction acting on his gloves. It was at odd times like this that the gravity of being aboard a centuries-old alien spacecraft slapped a salvager in the face.

Drawn from his reverie by an abrupt lack of wall, Bas stopped and squinted fruitlessly into the abyss. The door to the medical room was open.

Guess this is my stop.

Like a determined dinosaur struggling to free itself from a prehistoric tar pit, a dark humanoid figure rose from the crawltrench and collapsed onto the floor of the comms room. His neck aching from keeping his nostrils just above the foul, black liquid, Zhong looked himself over. His hair and clothes were soaked through with coolant, and his skin was stained a solid, unnatural shade of black. The man sighed, and as he wiped the sludge away from his eyes he muttered a pent up string of curses that would make a ganger either applaud or blush.

He had waited as long as he could manage once the vibrations caused by the raiders walking above had ceased, but he was well aware of the fact that he no longer knew their whereabouts. Fortunately, he was also well aware of the location of the ship's armory. He had passed it as he sprinted away from the airlock where the raiders boarded the ship, and it was only a short walk from the comms room. Boots squelching with every step, Zhong began to move.

“...you there!”

He froze, wishing the coolant that covered his body would shield him, or hide him, or at least kill him before the raider could.

“This is Kylie, are you there? Are you there! Anyone...?”

Zhong whirled around to look for his pilot and friend, but saw no one. *The comms station!*

He ran clumsily back into the room, slapping the door controls as he passed the threshold, and slid to a halt in front of a glowing station. He wiped his hands as best he could on the underside of the console, and touched the gel of the viewscreen. Kylie’s face, wracked with worry and leaning in close to her own screen back on the Kukri, appeared on the panel.

“Kylie! How did you find me? How did you patch through to—”

Kylie screamed, and fell backwards out of her chair. Zhong’s face changed from concern to amusement as he pondered what he must look like.

“Hey relax, it’s me, Zhong. I had to hide in a vat of coolant to avoid capture. Kylie?”

After a moment she reappeared on screen, frowning. “You could have killed me! What were you thinking, surprising me like that?”

“It’s nice to see you, too.”

“You know damn well I’m happy to see you,” she breathed. “I...I thought I lost you guys.” She coughed, and gave a smile before her face returned to business. “Have you heard from Bas?”

Zhong simply shook his head. Kylie’s shoulders slumped a little and her eyes darted away from the screen. He quickly changed the subject. “Hey, how did you patch

in to the ship's communications systems? I know you're good, but I didn't think you were *this* good."

Raising her eyes to look at him, Kylie shrugged. "It wasn't me. Thanks for the compliment, but I don't think anyone could have remotely activated this ship's comms. They're intact, but they were locked down tight from within. One of the raiders reactivated communications, and they tried to contact their ship. I only caught the tail end of the message, but I think they locked themselves out. Dumb bastards."

"Locked out of their own ship?" Zhong looked incredulous. He knew raiders were poorly trained, and drug abuse turned many of their minds to mush, but it was unlike them to carelessly shut themselves out of their ship, their lifeblood.

"Yeah, looks that way. I searched the database of ganked ships and found a Fleet prowler that had been stolen recently. That's how they managed to sneak up on us."

"So they're piloting Homefleet tech...that's not good."

"Relax." Kylie grinned. "I have a plan."

"Silas?" Dawkins whispered with the tact of a chainsaw as he stumbled in the darkness. "Zee?" He had been separated from his comrades for half an hour, and the raider hated being alone only slightly more than he hated the dark. Silas had told them to keep their lights off, but Dawkins was getting impatient. Making up his mind, he reached a ham-like fist into a pouch on his vest and pulled out a small flashlight. Eyes darting left and right, as if Silas would somehow pop out of the darkness to catch him, Dawk switched on the light.

The hall around the burly raider now glowing comfortably, he pulled out a roll of adhesive wire and began to affix the light to the foregrip of his rifle. Dawkins had long ago lost his bearings, and ahead of him stretched a hallway so long that the end was still shrouded in darkness. Doors were spaced regularly down the length of the hall, opening directly across from each other, with the majority of them being closed. He finished wrapping his light in adhesive, but before he could press the hardening actuator on the roll, a metallic crash in the room to his left pulled his attention away, and with it the barrel of his rifle.

“You’re mine now. No more hiding!” Dawk shouted and started to fire his weapon wildly into the room, sweeping the assault rifle to cover the entire area.

Gotcha!

Bas exploded out of the room behind Dawk’s back and cracked the raider in the base of the skull with the butt of his rifle. He had thrown a sample canister into the other room, and the raider took the bait. The big man reeled from the blow, and sunk to one knee, but he didn’t collapse. Instead, he swiveled his gun around behind his back and, with a mad-eyed stare, pulled the trigger.

Bas moved quickly, sidestepping the revealing beam of the flashlight and charging forward as the raider’s gun belched flame and lead. His shoulder connecting solidly with Dawk’s side, the two men went tumbling into the med room, but the raider’s grasp on his rifle held fast. The blow did knock the light partially free of the uncured adhesive wire, and it swung erratically as Dawk struggled to get to his feet. Bas found his footing first, and, maneuvering behind his foe, wrapped his arm around the raider’s neck in a sleeper hold.

Dawk managed a gravelly, constricted scream and simply fell backwards on top of Bas, using his weight to his advantage.

“Ugh...you...smell!” The wind had been knocked out of Bas and he was pinned beneath the behemoth, but his hands were free. The swinging light created a dance of crazy shadows as the raider tried to point the rifle behind his head, but Bas grabbed it and pulled it straight down, slamming the weapon into Dawk’s face. It caught the raider off guard, and he released his hold on the gun, allowing Bas to smash it into Dawk’s face twice more.

His nose broken and incisors knocked out, Dawk began to choke on his own blood. He sluggishly rolled off Bas and tried to prop himself upright with a shaky arm, but his hand slipped in blood.

Now sitting upright, Bas pointed the rifle at Dawkins. Still a little stunned, he just stared as the raider slowly reached towards his side where a holster was clipped, holding a pistol. Bas squeezed the trigger, and the gun barked in full auto staccato.

“I should have just shot you in the first place.”

The Universe of *Lifesigns*

The Physical World

Overview

Explorable locations in *Lifesigns* will be numerous and varied, but also malleable. The unfolding ambient story will affect game areas in ways beyond the player’s control. For instance, the Havoc invasion will bring about severe changes to game areas, eventually

throwing the system into an all out war. Additionally, the player will also affect the game world, with decisions made in personal story paths contributing to the evolution of the environment of *Lifesigns*.

The dichotomous nature of the factions in *Lifesigns* creates the potential for vastly different game locations. The variety of scenery will increase the chances of a player finding an area in which they can immerse themselves, as well as ensure that there are ample alternatives when they have exhausted the area's activities. There will be three central locations, one for each faction, and each of those locations will exemplify a contrasting aesthetic style and story genre. Additionally, numerous non-central locations will exist, ranging from desolate, eerie labyrinths of decaying metal, to frontier colonies that draw parallels to the American Wild West, to secret high-tech underground facilities.

Smuggler City

Inspired by the seedy underbelly of numerous cities, fictional and non-fictional alike, Smuggler City is a melting pot of architecture. It has been cobbled together from original alien structures, crashed alien and human ships, and old cargo containers. It is tempting to describe the area as a slum, but the sheer volume of trade that takes place in the city necessitates a different moniker; the city is a marketplace, for both black and gray transactions.

Most of the activity in Smuggler City happens beyond the reach of the law, but it is for many reasons that a traveler would visit. Selfish desires can certainly be sated within the city's walls, with the sale of illegal weapons, vehicles, and drugs being commonplace. The city's leaders ostensibly oppose slavery, but even this most vile of transactions flies in under the radar of the city watch. However, in the building next to a

black market slave house one might find an underground pharmaceutical wholesaler, providing life-saving medicine to a colony that is otherwise unable to afford it, or a market dedicated to selling construction equipment, stolen from corrupt corporation-owned cargo vessels. Some inhabitants of Smuggler City steal from the rich and sell to the poor, while others have no regard for the status of their victims. Freedom to help and to hurt – that is life in the private sector.

Players fascinated by the human condition will likely find much of interest in Smuggler City. Richard Bartle describes one of the types of players as a “socialiser,” and, as he explains, “socialisers are interested in people, and what they have to say. The game is merely a backdrop, a common ground where things happen to players” (Bartle). Those who enjoy socialization will find the largest variety of people here, spending hours simply roaming the streets and learning about the day to day struggles of those who live on the fringes of the law.

Corporate City

A shining testament to the hybridization of human-alien architecture, Corporate City is a mirrored labyrinth. Sharp-dressed business executives are the cogs in this model of elegant efficiency, with everything organized into a strict hierarchy, running on a strict schedule, and presided over by a strict system of judgment. The many corporations that have their headquarters in Corporate City put forth an external front of pomp and commerce, displaying lavish reception areas complete with royally dressed guards and attentive receptionists. As one travels up the lifts, ascending through the layers of the towering skyscraper, hundreds of office workers carry on as expected. Only when the top floor is breached is the true face of Corporate City seen. Behind the closed doors of the

boardroom, deals are struck that decide the fate of hundreds of thousands. The upper echelon of corporate society sit in their gilded towers, wielding the power of monarchs.

Players attracted to that power will be drawn to Corporate City like moths to a flame. Power alone is not evil; it is what is done with power that defines the wielder's intentions, and the player will have numerous opportunities to exercise their intentions in this city. Players could find themselves in charge of a private army, acting as the sword of their monarchy, or as head of intelligence, spying on other corporations and organizations in the system. Ultimately, players will find themselves making decisions that affect the future of the company, and this is where their selfish or selfless values will affect the game world. Under the player's charge, the company could authorize secret slaving runs, and perform experimental pharmaceutical testing on backwater colonies. It could also just as easily sell medical supplies to those colonies, providing a lifesaving boon that the government would take years to authorize. Corporations have the power to act when others are powerless or too cumbersome, but they never act for free.

Government Spacecraft Testing Base and Nearby City

On the surface, this main game area seems hardly fitting of the name. The city's residential district, arranged in blocks, is mostly comprised of a large quantity of identical multi-story gray buildings, with lifeless courtyards in between that barely break the monotony. The town is arranged more like a campus, with the residential district being distinct from uptown. There are a few commercial skyscrapers in the town's center, a shopping plaza, and a modest spaceport – certainly not backwater, but only a fraction of the size of Corporate City and even Smuggler City. Past the borders of the inhabited area, through a desolate plain of scrub grass and the occasional rusting alien tombstone,

one can find a shining metal wall. Behind that wall, and past its armed guards and intrusion countermeasures, lies a subterranean mausoleum of secrets.

The military complex is immense, stretching for hundreds of stories under the planet's surface. The underground base was an alien research facility before being discovered by the human government, and though much of the alien databanks were purged and the facility's original purpose lost, it was an incredible discovery. Parts of the complex are simply storage facilities, where alien discoveries and other curiosities are tagged, sealed, and placed into cold storage. Much of the facility is reserved for the design, creation, and testing of new spacecraft – in fact, that is the facility's main purpose within the general circles of the government. Still, other areas in the subterranean complex remain hidden to all but those with the most secure clearance. Clandestine experimentation, a popular topic of discussion among conspiracy theorists, is no theory at Government Base. It is a cold reality. War criminals, investigators that cross the line from reporter to rebel, and innocents that angered or annoyed someone of power find themselves cellmates in this prison of the damned.

Players with an interest in conquering through force will find much to their advantage in this area of the game environment. Those interested in killing and combat will undoubtedly be drawn to Government Base and its surroundings, as the facility truly exists to advance the art of warfare. This knowledge can be the catalyst that ignites a selfless player into a blinding flame of justice, or a selfish player into a black hole that absorbs all barring his path. As Bartle describes in his analysis of types of players, “killers get their kicks from imposing themselves on others. This may be “nice”, ie.

busybody do-gooding, but few people practice such an approach because the rewards aren't very substantial.” Either way, weapons from Government Base *will* draw blood.

Player Atlas

The player will construct an atlas as the game progresses, viewable at any time from the game menu. Crucial for travel and mission completion, this atlas will contain information about the game universe, exploration and mission destinations, derelict locations, and, eventually, information about the ever-encroaching Havoc forces.

Location Development Paths

Cities/Facilities

- **Smuggler City**
 - Formed out of a rare partnership of several crime lords, Smuggler City is a bustling metropolis of shady deals, lucrative opportunities, and high-risk business. Most of the affairs that take place in the city are less than legal, though city leaders ostensibly oppose slavery and other blatantly evil operations – a fact that precariously preserves the status quo between the smugglers and the government.
 - Pre-Havoc
 - This is a large, primary area in which the player can interact with NPCs, gain quests, trade, and essentially make a home.
 - Smuggler City will let just about anyone through its airlocks. Many organizations, legitimate or otherwise, have a pocket of influence here. Players belonging to any faction will find themselves welcome here,

though rank and faction will change the attitude of many of the city's inhabitants. High-ranking government officials may find themselves the target of assassination attempts. Corporate nobility may be the target of kidnappers, as the ransom their kingdoms will pay is worth the risk. The player's chosen faction will also affect whether or not certain quests will be available.

- Post-Havoc
 - This city is large enough that Havoc won't attack it during the course of the game. It's also large enough that rumors of the invasion won't cause mass panic. However, due to the cagey nature of the city's populace, the rumors are more likely to be believed.
- **Corporate City**
 - Despite the segmented nature of the corporations, they have their headquarters in one location, mostly out of a desire for pompous displays of wealth. Around these corporate towers formed a sleek, gilded city of commerce and white-collar intrigue – externally beautiful, but internally rotten.
 - Pre-Havoc
 - Another primary area for NPC interaction, quest collection, and trade.
 - The city's inhabitants will favor those belonging to the corporation, rolling out the red carpet for high-ranking corporate officials. Those belonging to other factions will be more limited, though they will be able to trade and complete some quests in Corporate City. In fact, some quests may only be available to non-corporation aligned players

– quests to subvert corporate interests, for example. However, players with a high position in the government will be met with great suspicion, and those with high notoriety in the private sector will be treated with disdain.

- Post-Havoc
 - Again, like Smuggler City, no serious changes occur in Corporate City. Rumors abound, but are less likely to be taken seriously.
- Orphan to Corporation, Selfish
 - When the player brings down the corporation he or she joins, its assets are taken over by others and it ceases to exist. Thousands of corporate nobility find themselves out of a job. This is a special occurrence that only takes place when a player with an orphan background joins the corporate faction and follows the selfish personal story.
- **Government Spacecraft Testing Base and Nearby City**
 - Much like Area 51 and the surrounding cities on 20th century Earth, the government operates a spacecraft testing facility in a remote region of one of the home worlds. No cities exist within visible range of the facility, and cities where base personnel live are under strict policies of secrecy – indeed most of their residents are on the government payroll.
 - Pre-Havoc
 - Prior to the invasion, the base is off limits to all but those in the government track (with the Army Brat gaining access much earlier). The city is a source of quests, serving as a large but not primary

municipal area.

- Post-Havoc
 - The base goes on full alert, having expected something like this for years (due to secrets discovered in the past). The base is hit by a Havoc patrol, but manages to repel it with heavy casualties.
- **Vanguard Colonies**
 - Initially, efforts to colonize the alien home worlds were cooperative out of necessity. The creature-filled ruins were dangerous places, and heading out alone or in small groups was suicidal. However, as human presence increased, it became necessary to expand. Factions wanted to colonize new areas, and it became common practice to send vanguards to find areas appropriate for habitation.
 - Pre-Havoc
 - Several vanguard colonies exist and are explorable the player. Quests in these areas will be appropriate to the pioneering, isolated atmosphere of these colonies.
 - Post-Havoc
 - The vanguard colonies suffer mostly unfortunate fates. Many are targeted in the initial Havoc incursion. Since these colonies are backwater, it adds to the confusion and uncertainty of the initial wave of Havoc. Colonies that are devoured are obviously deserted ghost towns with environmental storytelling galore.
 - Colonies that are untouched by Havoc are understandably in a state of

panic. With their inhabitants full of paranoia, some quests will become unavailable, but others may present themselves.

Planets/Sectors of Space

- **Originator Home**
 - Beautiful, sleek, high science fiction.
- **Shard Home**
 - Stately, function over form, vaguely WWII-inspired.
- **Abandoned Moon and Asteroid Mining Operations**
 - Resource gathering facilities on various moons and asteroids in the Originator and Shard systems. Some have been reactivated as mining operations, while many others serve as handy bases for pirates, slavers, and other under-the-radar flyers.
 - Pre-Havoc
 - Many of these areas will serve as places to discover, places in which the player can fight, and places for the player to hide – essentially areas only useful in certain situations. Pirates will find them useful, and peacekeepers will find them great places in which to practice their combat skills.
 - Post-Havoc
 - Once the invasion hits, the fate of these isolated areas is a mixed bag. Some are devoured, while many are ignored or go undiscovered.
 - Army Brat to Private Crew, Selfish
 - The player emerges as a warlord, and uses one or several of these areas

as a base of operations. Most of the other areas in this sector are either crushed or united with the player's forces. This only happens when a player with the army brat background follows the selfish private faction personal story.

- **Backwater Salvage Sectors**

- Many of these areas are battle sites that contain mostly fighters, frigates, and other small craft. Useful, but not groundbreaking.
- The Starting Salvage Area (where the player begins the game) is in one of these sectors.

- **Scrap Salvage Sectors**

- Areas from which all but raw metal and materials have been harvested. Ghostly boneyards.

- **High-Profile Public Salvage Sectors**

- Areas with carriers, dreadnoughts, valuable support vessels, or large amounts of uncommon derelicts. Highly competitive, highly sought after, but not necessarily cordoned off or kept secret by its discoverer.

- **Faction-Controlled Salvage Sectors**

- Areas of such value that the faction, upon discovering it, took active steps to keep it secret or make it inaccessible. Flagships, intelligence vessels, and other rare salvage items could spark a faction to go to such lengths.

Travel

On Foot

Travel on the surface of planets and other areas with gravity close to Earth's will be accomplished on foot. Much of the surface of the alien home worlds is covered in rusting metal scrap, or overgrown with hazardous plants. Though it would be safer to raze the surface, creating paths for walking and space for building, the technological secrets that could be destroyed in the process are too important to risk. Therefore, salvage scouting parties almost always travel on foot. Protective suits for hazardous environments are available for particularly harmful situations.

Movement within derelicts, spacecraft, orbiting stations, and other areas with artificial gravity will also consist of walking and running. The player can acquire adhesive or magnetic boots that will cling to certain surfaces, allowing for easier travel and interesting tactical options for combat in zero-gravity environments. Additionally, ships and stations may have lifts, trams, or other internal travel systems.

Spacecraft

The player will eventually earn command of his or her own ship, and, consequently, control travel destinations. Spaceflight will be accomplished by selecting a destination on a map of the solar system, or a larger macro map of all known systems. Travel will be virtually instant, with the player viewing a short cutscene of their ship.

Destination Beacons

As players discover new places of interest, a destination beacon will be automatically added to the appropriate map in their atlas. Players can also place their

own custom beacons to aid in remembering zones of personal importance. These beacons will appear as destinations for ship travel, allowing the player to instantly jump to the locations they mark.

Passage of Time

Overview

Every second spent playing *Lifesigns* as a particular character will be tallied, so that the player may view the total time played. Time will also pass within the game universe, affecting the environment, the story, and even characters.

Accelerated Time Effects

Night and Day

Within the game, time will pass at an accelerated rate, allowing the player to experience several “days” in a few hours. As this accelerated time passes, the game environment will change to reflect the cycle of night and day. In certain areas, gameplay will change depending on the time of day, adding increased difficulty or additional variety of experiences and missions.

Time-Sensitive Objectives

Certain missions will call for expediency, and the mission will fail if objectives are not completed within the allotted time. Completion of missions is vital to player advancement in *Lifesigns*.

Conclusion

The game presented above is only one example of an open-world RPG that has been designed by paying heed to the balance between linearity and liberty of story. The science fiction backdrop was not integral to the plan; the basic principles are the same regardless of the environment and time period. Many different stories were plotted out, but the importance is not in the stories themselves. The crucial point is that the game includes variety, yet not so much that meaning is sacrificed and the individual stories in the game become weak. Furthermore, it is critical that the developer has a clearly defined, concrete set of themes in mind during the design process. If a decision must be made regarding whether or not to keep a particular game element, then that element's relevance to core essence of the game should be the chief deciding factor.

In *Lifesigns*, three core attributes affected all design decisions. The player backgrounds – army brat, corporate nobility, and orphan rogue – were designed to appeal, respectively, to a player's sense of duty, ambition, and independence. The same holds true with the three salvaging factions – Government, Corporations, and Private Crews – and the capital cities of each of those groups. If the universe presented in *Lifesigns* was real, there would be innumerable amounts of individuals with their own stories, but including a realistic representation of life itself is impossible. Storage space limits game length and environment size, and players, much as they might try, cannot spend every waking moment in the game world.

The key to designing an open-world RPG is balancing immersive gameplay, immersive story, and immersive environments. The challenge therein is developing a world that avoids the complexities of reality, without creating a bland, diluted existence

of linear action and meaningless choices. Michael Nitsche states that “plot resides in the fictional plane and, although it is evoked by the game experience, its formation is subject to personal taste, physical condition, personal interest, social sphere—in short, to any element shaping the player’s personality in the real world” (Nitsche 51). *Lifesigns* focuses on three of those elements – independence, ambition, and duty – and those elements were always involved in the design process. With a firm foundation that appeals to the varied personalities of players, and careful balance between player freedom and developer control, the potential of open-world games as a powerful storytelling device can be realized.

Bibliography

- "A bit of history." *The Adventurer*. ThinkQuest, 1998. Web. 15 Feb 2010.
<<http://library.thinkquest.org/19837/english/introduc.html>>.
- Bartle, Richard A. "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDS." N.p.,
Apr 1996. Web. 29 Dec 2009. <<http://www.mud.co.uk/richard/hclds.htm>>.
- Barton, Matt. "The History of Computer Role-Playing Games Part 1: The Early Years
(1980-1983)." *Gamasutra*. CMP Media, Inc., 2007. Web. 10 Dec 2009.
<http://www.gamasutra.com/features/20070223a/barton_01.shtml>.
- Brudvig, Erik. "Fallout 3 Review." *IGN.com*. IGN Entertainment, Inc., 28 Oct 2008.
Web. 15 Sep 2010. <<http://pc.ign.com/articles/924/924346p1.html>>.
- DeMaria, Rusel, and Johnny L. Wilson. *High Score!: The Illustrated History of
Electronic Games*. 2nd ed. Emeryville, CA: McGraw Hill/Osborne, 2004. 12-13.
Print.
- Garriott, Richard. Interview by David Taylor. 23 Apr 1992. Web. 22 Nov 2009.
<<http://www.uo.com/archive/ftp/text/intrview/richgar.txt>>.
- Howard, Jeff. *Quests*. Wellesley, MA: A K Peters, Ltd., 2008. 5-7. Print.
- Moran, Michael. "The ten most influential video games ever." *Sunday Times Online* 20
Sep 2007. Web. 19 Apr 2010.
<[http://technology.timesonline.co.uk/tol/news/tech_and_web/gadgets_and_gamin
g/article2455080.ece](http://technology.timesonline.co.uk/tol/news/tech_and_web/gadgets_and_gaming/article2455080.ece)>.
- Nitsche, Michael. *Video Game Spaces*. Cambridge, MA: The MIT Press, 2009. 51. Print.
- Sheldon, Lee. *Character Development and Storytelling for Games*. Boston, MA:
Thomson Course Technology PTR, 2004. 10-11. Print.

"The complete history of open-world games." Computers and Video Games.com. Future Publishing Limited, 24 May 2008. Web. 03 Jan 2010.

<<http://www.computerandvideogames.com/article.php?id=189591>>.