TRANSLATING THE HORIZ-ON EXPERIENCE INTO MERCHANDISE











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Master thesis
Translating the Horizon Zero Dawn experience into merchandise

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^{*}This graduation project is a personal project, despite it being a collaboration between myself and Guerrilla. It was proposed by myself, Omar Pasha, and does not reflect the developments at Guerrilla. The outcome of this project is merely a proposal for Guerrilla and therefore a promotional release of any of the project's outcomes is not guaranteed.

Executive Summary

This thesis, done in collaboration with Guerrilla, a subsidiary of Sony Interactive Entertainment, will explore new merchandise possibilities for Guerrilla's hit game Horizon Zero Dawn, which is an open world action/adventure videogame set in a post-post-apocalyptic world, where nature has reclaimed the Earth and terraforming machines have turned violent against humans.

Guerrilla releases a new videogame every few years, meaning there is a period of silence of multiple years between every game release. To keep the Horizon Zero Dawn title still alive and relevant, the experience of the game will be translated into a physical product. Horizon Zero Dawn's current merchandise is quite safe and standard and does not translate the experience of the game well, and therefore a product expansion is advised.

Based on the strengths of Horizon Zero Dawn and the opportunities derived from a trend analysis, multiple search areas were explored, of which eventually a combination of two was chosen. One of the chosen search areas focusses on interactive objects, such as radio-controlled vehicles and modelling kits, while the other one focusses on creating environmental or cultural awareness.

Within the two chosen search areas many ideas were explored. This eventually led to the direction of self-sufficient enclosed ecosystems. Over time, the plants inside the ecosystem will grow bigger, and "Mother Earth will slowly reclaim what has always been hers". This perfectly fitting direction for Horizon Zero Dawn led to three different concepts.

One of the concepts, the main focus of this project, is a limited art "toy" aimed at the "hardcore" fans of Horizon Zero Dawn, while the other two concepts are subtilized versions of the same idea.

The subtilized concepts are both jarred ecosystems with a collectible figure inside of it. The two concepts vary in size and price, while only the more expensive ecosystem also includes an internal light.

The concept for the "hardcore" fanbase also includes a self-sufficient ecosystem, but this one is placed inside a massive (250x250x225 mm) scale model of a Shell Walker. Furthermore, the concept works interactive with Horizon Zero Dawn by reflecting the in-game's events with (coloured) light effects. When not playing the game, the product can still be used as a wakeup light.

All concepts keep the user interacting with the product once in a while, as they need to water or trim the plants. The concepts also add a touch of real nature inside a gamer's house, and thereby adding environmental awareness.

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Glossary

[1]	Action RPG	An RPG ^[16] type of game which emphasizes real time combat over turn-based or menu-based combat.	[12]	Old Ones	The humans of the old world, specifically humanity up to 2066.
[2]	Blaze	Some form of fuel in Horizon Zero Dawn. It is a common resource and a primary crafting	[13]	Open World	A video game in which a player can roam freely, opposed to a game with a linear gameplay.
		ingredient for Fire ammunition types.	[14]	Override	Turn machines into powerful allies.
[3]	Cauldron	Ancient manufacturing plants where new machines are fabricated.	[15]	Project Zero Dawn	The code name for a massive terraforming system designed to restore life on Earth after the Faro Plague ^[7] .
[4]	Chillwater	A common resource and a primary crafting ingredient in Horizon Zero Dawn for Freeze ammunition types.	[16]	RPG	Role Playing Game – a video game in which the player controls the actions of a character, immersed in a well-
[5]	Derangement	A term used by the tribes to refer to the changed, more hostile, behaviour of the machines.	[17]	Seeker	defined world. Nora tribe member who is
[6]	DLC	Downloadable content – additional content created for a released video game, distributed through the Internet			granted immunity from the taboos against exploring ancient ruins and is allowed to leave Nora land.
[7]	Faro Plague	by the game's official publisher. A rogue swarm of war machines that caused the extinction of life	[18]	Shooter	A video game which focusses on the playable character using some sort of weapon, mostly long range (such as a gun).
[8]	First person	on Earth in the mid 21st century. A video game that is rendered from the perspective of the player's character.	[19]	Third person	A video game in which the player's character is visible on screen.
[9]	High Matriarch	Every Nora great-grandmother with at least three living generations of progeny.	[20]	Vanguard	Oseram military unit which works closely with the Carja Sun-Court and provides security to the Sun-King.
[10]	Matriarch	Every Nora grandmother with at least two living generations of progeny.	[21]	Werak	The Banuk's main political unit.
[11]	Meridian	Carja Sundom's capital and the largest city in Horizon Zero Dawn.			







Introduction

Dear reader.

In the thesis you are about to read I will explore the merchandise possibilities of one of 2017's best and most beautiful looking videogames: Horizon Zero Dawn.

As a huge fan of pop culture and collectibles, this project has been a dream come true. Guerrilla, a AAA (triple-A) game studio, having faith in me and allowing me to do this project makes me feel blessed and honored, knowing that not many other people will get a similar opportunity. I feel like I am in a unique position taht I have to utilize in its full potential.

In this thesis the traditional methods, taught at the Faculty of Industrial Design Engineering at the Delft University of Technology, will be used to come up with a solution for a topic that is guite uncommon for the faculty. It shows the wide potential of the Industrial Design Engineering bachelor and the Design for Interaction master programme (or any of the other master programmes).

The project quickly evolved in my personal favourite project with an outcome that makes me feel proud and satisfied. The positive reactions and show of interest from passersby at the faculty, as well as the positive reactions internally from Guerrilla have been overwhelming.

In the upcoming pages I will give you an introduction to Horizon Zero Dawn and Guerrilla, I will showcase Horizon Zero Dawn's current merchandise, and I will explore the possibilities within merchandising, all working towards the big reveal of the final concepts.

Not only will I show what I have learned in my (little over) six years as a student at the Delft University of Technology, I will also show what I have learned from my six months as a concept art intern at Guerrilla. You will encounter a variety of Delft's notorious methodologies combined with Guerrilla's beautiful visuals.

Setting up, planning, and executing a full-time project of this caliber on my own has been a fun and informative experience, and I hope you will enjoy reading this thesis as much as I had fun making it.

Omar Pasha

About Merchandise

Toys are a powerful tool of imagination for kids, but many toys appeal to adults as well. Leon (2018) explains that licensed toys are the result of an inherently human impulse. An impulse that seeks to turn abstract ideas into something tangible. In case of Horizon Zero Dawn these abstract ideas revolve around a gorgeous post-post apocalyptic world, populated by larger than life characters and machines. This impulse dates all the way back to the start of religion, where tangible products were made in the form of a cross or a chain of beads.

As published by Grimes LLC (n.d.), modern merchandising really began in the 1870's, when Adolphus Busch allowed manufacturers to produce and sell wine keys with the name 'Busch' on it.

A couple of decades later, in 1926, the Winnie the Pooh character was created by A.A. Milne, a character that to this date is still popular. Slesinger purchased its U.S. and Canadian merchandising rights in 1930, turning Winnie the Pooh into a 50 million USD business within a year (Grimes LLC, n.d.).

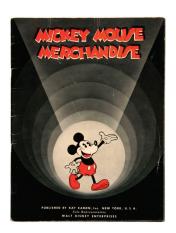
Disney also did not shy away from merchandising. In 1932 Kay Kamen, dubbed 'Father of Modern Licensing', joined the Walt Disney Company and promised a Disney product in every home in the United States. In 1935 he oversaw a licensing program that produced over a thousand different kinds of Mickey Mouse products - one of them being a one million USD deal to place the famous character on a cereal box (Grimes LLC, n.d.). Today, Mickey Mouse still holds strong as a character, making appearances on furniture and representing a clock on the Apple Watch.

It is, however, not just popular characters who get immortalized with merchandising; in 1955, just two years after the popular magazine's first publication, cufflinks were licensed by Playboy. Grimes LLC (n.d.) claims that Playboy derives about 10% of its total revenues from its licensing division. Playboy's famous Playboy Bunny logo has appeared on various apparel, underwear and lingerie, cigars, jewellery, fragrances and many other products.

Musicians and bands also produce their fair amounts of merchandise. Examples are the various Elvis Presley themed products, countless band



















tees, and there is even a whole "The Beatles" line from fashion house COMME des GRAÇONS.

The same goes for sport teams, with big sport teams having their own stores full of merchandise: baseball cards, football scarfs, NFL bobbleheads, and many more sport related products are flooding the market.

Even popular toys have their fair share of merchandise. Transformers, Barbie, and LEGO; all of them have expanded beyond toys, ranging from T-shirts, all the way to feature-length movies, with LEGO even having its own theme park.

The biggest player in merchandise, however, is Disney. Star Wars (part of Disney) licensed toys have earned twice the franchise's box office earnings (Leon, 2018). Quickly after releasing the first line of Star Wars toys in 1977, Star Wars became the biggest name in the toy industry, surpassing G.I. Joe and Barbie (Lussier, 2015).

But it is not just movies that generate a lot of profit with merchandise, it also plays a big role in the game industry. Rovio's total revenue for instance (best known for Angry Birds), was 152.6 million Euros in the first half of 2017, with the brand licensing business being accountable for almost a quarter: 34.6 million (Rovio, 2017).

Now, in 2018, merchandising is hard to avoid. Every store seems to have its fair share of licensed products, ranging from fashion stores to electronics shops even to pharmacies.

Almost all companies and foundations produce or outsource merchandise: movies, TV shows, videogames, books, theme parks, universities, fast food chains, clothing brands, charities, etcetera. The list seems endless.











About Guerrilla

Guerrilla was founded in 2000 when three smaller Dutch game studios decided to merge (Hutton, 2016). These game studios were Orange Games, Digital Infinity, and Formula (Sprout, n.d.). Orange Games, founded by Arjen Brussee (2018), is mainly known for the development of Jazz Jackrabbit (Jazz2Online, n.d.), while Digital Infinity, founded by Arnoud van der Kamp (n.d.), was in the midst of developing Knights, a game that never released (Monokoma, 2017).

The merge of the three game studios happens by Lost Boys (currently known as LBi International), which named the merged studio 'Lost Boys Games'. Formula keeps its name and continues as Lost Boys' handheld division (Monokoma, 2015).

Over the coming three years Lost Boys Games releases games for PC, including Big Brother: The Game (which is basically a re-skinned Pac-Man game) and multiple boat racing games (Moby Games, n.d.). During that same time Formula releases multiple games for Nintendo's Game Boy Color and Game Boy Advance (GameFAQs, n.d. a).

In 2003 Media Republic buys the gaming unit of Lost Boys and changes the name to Guerrilla (Sprout, n.d.). A year later, in 2004, Shellshock: Nam '67 releases as the first game under the Guerrilla name, published by Eidos (GameFAQs, n.d. b). It is a third person shooter set in the Vietnam war. The game releases on PC, PlayStation 2 and Xbox.

In that same year Guerrilla releases Killzone, a first person shooter set in the 24th century, exclusively on PlayStation 2. It is the start of a successful an popular franchise which places Guerrilla on the global map. Killzone sparkles the interest of Sony Interactive Entertainment, which announces Guerrilla's acquisition in 2005 (Sinclair, 2005). From now on all of Guerrilla's games will be PlayStation exclusives.

In the six years after, Guerrilla releases three more Killzone games: Killzone: Liberation on PlayStation Portable in 2006, Killzone 2 on PlayStation 3 in 2009, and Killzone 3 also on PlayStation 3 in 2011.

In 2012 Sony restructures their studio in Cambridge (SCE Cambridge) as a subsidiary of Guerrilla. The name of this studio changes to Guerrilla Cambridge and will mainly focus on handheld Killzone games and VR (Pearson, 2012). In the same year, Guerrilla re-releases the original Killzone in HD on PlayStation 3. Also in 2012, Colonel Radec, one of Killzone's antagonists, appears as one of the playable characters in the fighting game PlayStation All-



Stars Battle Royale on PlayStation 3 (IGN, 2013).

A year later Guerrilla Cambridge releases the first game under their new name, Killzone: Mercenary on PlayStation Vita (GamesFAQs, n.d. c). In the same year Guerrilla's main studio releases Killzone Shadow Fall on PlayStation 4, which receives extra playable content with the Intercept DLC pack (downloadable content).

In 2016 Guerrilla Cambridge releases RIGS: Mechanized Combat League on PlayStation VR. It is their final game as Sony decides to shut the company down a year later due to commercial struggles (Kelion, 2017). This, however, does not affect Guerrilla's main studio, which releases their biggest game to date in the same year: Horizon Zero Dawn on PlayStation 4. This open world third person action role playing game, set in a postpost apocalyptic world, has been in development for over six years. The brightly coloured game marks a turning point for Guerrilla, which has been developing grimly coloured first person shooters for over a decade. A big risk (Loveridge, 2018) which ended up being one of the best selling games of 2017 (Kain, 2017).

The release of Horizon Zero Dawn in February was followed by The Frozen Wilds DLC pack in November, which will be the only DLC pack (Oosterloo, 2017). With (as of now) no online possibilities, this marks the end of the first game in the new franchise.

To keep the Horizon Zero Dawn title relevant in 2018, Aloy, the main protagonist of Horizon Zero Dawn, made an appearance in Monster Hunter: World, exclusively on the PlayStation 4 version (the game also released on PC and Xbox without the Aloy DLC) (Monster Hunter World, 2018).

Furthermore, the Killzone franchise seems to be of lesser relevancy after Guerrilla announces that the online services of Killzone 2 and 3 will be decommissioned starting march 29th, 2018 (Guerrilla, 2017). This indicates that the Killzone franchise is at the end of its lifespan, and that any future development will probably revolve around Horizon Zero Dawn or a possible new game (which has yet to be revealed).

Currently, with over 200 employees, Guerrilla is one of Europe's leading videogame studios, located in Amsterdam on the Herengracht (Guerrilla, n.d.).



Guerrilla Timeline

1993

Orange Games is founded by Arjen Brussee.



Jazz Jackrabbit, developed by Orange Games, releases on PC.



Digital Infinity is founded by Arnout van der Kamp.

1996

Formula is founded and releases The Lost Ride (Cd-i) and Dodgem Arena (PS).



Jazz Jackrabbit 2 and Battery Check, both developed by Orange Game, release on PC.

1999

Lost Boys merges Formula with Orange Games and Digital Infinity and changes the studio's name to Lost Boys Games. Formula continues as the handheld division of Lost Boys.



Lost Boys releases Big Brother: The Game and Grachten Racer, both on PC.

Lost Boys releases Speedboat Raser Europa on PC



Formula releases Tiny Toon Adventures: Dizzy's Candy Quest on GBC.

Lost Boys releases Miami Speedboat Racer on PC.



Formula releases Rhino Rumble on GBC and both Black Belt Challenge and Invader on GBA.



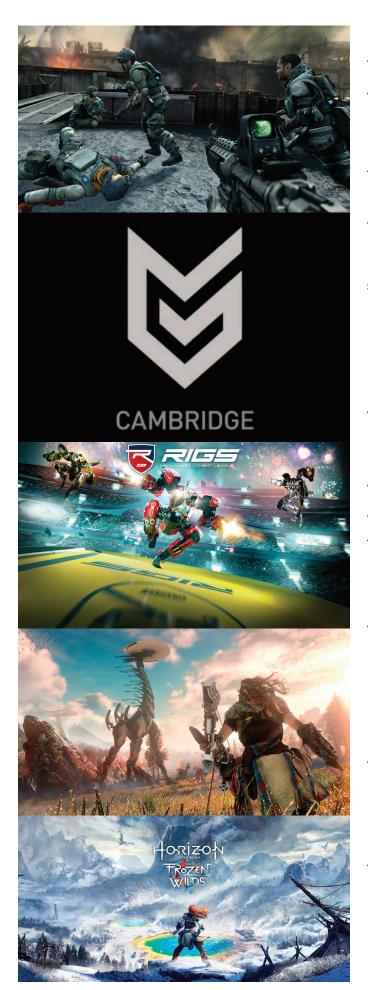
Media Republic buys Lost Boys' gaming unit and changes the name to Guerrilla.

Shellshock: Nam '67 is the first game to release under the Guerrilla name. It releases on PC, PS2 and Xbox.



Killzone releases exclusively on PS2.





Sony Interactive Entertainment acquires Guerrilla.

Killzone: Liberation releases on PSP.

2007 2008

Killzone 2 releases on PS3

2009 2010

2011

Killzone 3 releases on PS3

Sony Interactive Entertainment restructures their Cambridge studio (SCE Cambridge) as a subsidiary of Guerrilla and renames it Guerrilla Cambridge.

Killzone HD, a high-definition rendition of the original Killzone from 2004, releases on PS3.

> Colonel Radec makes an appearance in PlayStation All-Stars Battle Royale.

Killzone: Mercenary (PS Vita) is the first game to release by Guerrilla Cambridge.

Killzone Shadow Fall releases on PS4.

A DLC pack for Killzone Shadow Fall releases: Intercept.

2015

Guerrilla Cambridge releases RIGS: Mechanized Combat League, a VR game on PS4.

Guerrilla Cambridge closes its doors (Kelion,

Horizon Zero Dawn releases on PS4.

A DLC pack for Horizon Zero Dawn Releases: The Frozen Wilds.



Aloy, Horizon's main protagonist, makes an appearance in Monster Hunter: World.

> Online servers of Killzone 2 and 3 decommisioned.



Cd-i Compact disc interactive

DLC Downloadable content

GBA Game Boy Advance

GBC Game Boy Color

PC Personal Computer PS PlayStation

PS2 PlayStation 2

PS3 PlayStation 3

PS4 PlayStation 4

PSP PlayStation Portable

PS Vita PlayStation Vita VR Virtual Reality

About Sony Interactive Entertainment

Sony Interactive Entertainment, formerly known as Sony Computer Entertainment, was founded in Tokyo, Japan on November 16, 1993 (SIE, n.d. a). The company is responsible for research, development and sales of PlayStation hardware, software, content and network services.

In December 1994, Sony Interactive Entertainment launched the first PlayStation in Japan, with a launch in North America and Europe a year later in September 1995 (SIE, n.d. b). In December 1996, 10 million PlayStation consoles had shipped worldwide, adding an extra 10 million in august 1997, and ending 1998 with 50 million PlayStations shipped worldwide (SIE, n.d. b). The console primarily competed with the Nintendo 64 and the Sega Saturn.

In 1999 the PocketStation was launched in Japan (SIE, n.d. b). This device was a memory card peripheral for the PlayStation, categorized as a combination of a memory card and a miniature personal digital assistant. It was extremely popular in Japan but, because of various manufacturing and supply-and-demand problems, the plans to release the device in other countries were scrapped.

In March 2000, Sony Interactive Entertainment launched the PlayStation 2 in Japan, followed by a North American and European release at the end of the same year. It mainly competed with the SEGA Dreamcast, Microsoft Xbox, and Nintendo GameCube. Besides games, the PlayStation 2 is also able to play DVDs.

Also in 2000 (July), the PS one releases, which is similar to the original PlayStation, but approximately 1/3rd its size. The design makes it easier for users to carry the device to anywhere they go, highlighted by the release of an LCD monitor peripheral in November 2001 (SIE, n.d. b). In May 2004, the PlayStation (together with the PS one) became the first computer entertainment system to ship 100 million units (SIE, n.d. c). At that time, 70 million PlayStation 2 systems had been shipped worldwide.

In November 2004 a slimmed down version of the PlayStation 2 is launched, with its internal volume reduced by 75%, its overall weight halved, and its thickness trimmed down to just 2.8 cm. Two months later, in December, Sony Interactive Entertainment

































launched the PSP (PlayStation Portable), a handheld with a high-resolution widescreen, and competitor of the Nintendo DS.

In December 2005, Sony Interactive Entertainment acquires Guerrilla. At this time, 100 million PlayStation 2 and 10 million PSP systems have been shipped.

A year later, in November 2006, the PlayStation 3 launches in Japan, followed by other countries in the months after. The system receives an initial retail price in Europe of €499 and €599 respectively for the 20GB and 60GB version (SIE, n.d. c). The PlayStation 3 was considerably more expensive than its main competitor, the Xbox 360, which had two versions retailing for €299 and €399 (Surette, 2005). The PlayStation's 3 high retail price was mainly caused by its groundbreaking specs, but in the beginning years a lot of game developers were unable to develop for the console's full potential. This also made it a tough selling console at the beginning, although Sony still manages to ship 80 million units over a period of 10 years.

New models for the PSP were introduced in 2007 and 2008. The first one was slimmer and lighter, and the latter one added an enhanced LCD screen. PlayStation Home released at the end of the same year, which was a virtual 3D social gaming platform (SIE, n.d. c).

In 2009 the PlayStation 3 also received a slimmed down version, and became much more affordable, with a European retail price of €299. In the same year the PSP also received a slimmed down version, named the PSP go. Besides being smaller and lighter, the handheld device featured a sliding display panel.

In 2010, Sony Interactive Entertainment launches torne in Japan, which is a terrestrial digital recorder for the PlayStation 3. More notably, however, is the launch of PlayStation Move, which is a controller that adds similar functionalities as the Nintendo Wii to the PlayStation 3.

In 2011 Sony Interactive Entertainment announces that they have sold 150 million PlayStation 2 systems, 50 million PlayStation 3 systems, and 70 million PSPs (SIE, n.d. c). Later in the year, the

company releases a 3D display and 3D glasses in Japan. More notably this years is the successor of the PSP: the PlayStation Vita. The handheld device comes with a front touchscreen and rear touch pad, adding new interactions.

In 2012 the company releases multiple services and devices: Music Unlimited (a cloud-based music subscription service), nasne (a network recorder & media storage device), and PlaySation Mobile. Furthermore, the PlayStation receives another trim, with the volume and weight of the device reduced by more than half compared to the very first model, and by approximately a quarter compared to the previous PlayStation 3.

A year later, in 2013, the PlayStation Vita received a slimmed down version with stronger battery duration. In the same year, PlayStation Vita TV also launches, which lets users enjoy various video services and allows them access to a variety of network services for PlayStation Vita. It is a busy year, as Sony Interactive Entertainment also launches the PlayStation 4 for €399 (SIE, n.d. d).

Over the coming vears. Sony Interactive services. Entertainment launches various PlayStation Now, a streaming game service that leverages cloud-based technology, launches in 2014 (also PlayStation's 20th anniversary), followed by three more services in 2015: PlayStation Network, a premium entertainment service brand that encompasses the company's network service offerings, PlayStation Vue, a cloud-based TV service, and PlayStation Music, which offers a music experience. In 2015 the PlayStation 4 also receives a new model that is reduced 10% in weight. Two other versions follow in 2016: a slimmer version, and the PlayStation 4 Pro, which is a highend model which allows games to deliver more detailes graphics. In the same year, PlayStation VR launches, which is a virtual reality system that can be used in combination with the PlayStation 4.

As of now, 73.6 million PlayStation 4 and 2 million PlayStation VR systems have been sold (SIE, n.d. d).











About Horizon Zero Dawn

At the end of Killzone 3, after seven years of developing Killzone games, everybody at Guerrilla was allowed to make a pitch about the new game that Guerrilla should make (IJzermans, 2017). One of these ideas was Horizon, a game that seemed too ambitious, but one that everyone gravitated to.

Whilst making Killzone 4 (Shadow Fall), a small team of key figures split off and started testing Horizon to test its viability (IJzermans, 2017). The tests turned out positive and, after six years of development, Horizon Zero Dawn released on February 28th 2017 in North America, followed by an European release the day after (PlayStation Store, 2017a).

Horizon Zero Dawn is an open world, third person, action/adventure RPG set in a post-post apocalyptic Earth (31st century) in which machines have taken over. In the game the player plays as Aloy, a strong female protagonist who sets off to find out why machines across the land are becoming corrupted.

Horizon Zero Dawn was received positive, with a Metascore of 89/100 (based on 115 critics) and a User Score of 8.3/10 (based on 5997 ratings) (Metacritic, 2017), making it the 31st best game on PlayStation 4 ever (Metacritc, 2018a). Critics mainly praised Horizon Zero Dawn's open world exploration

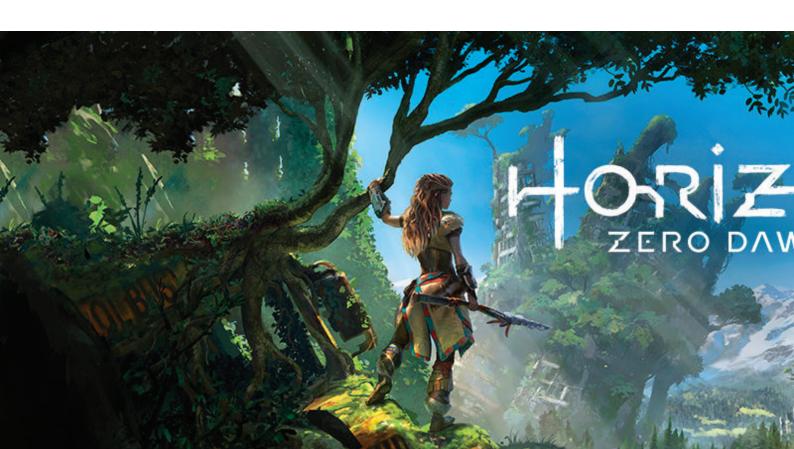
possibilities, its story, the visual aesthetics of the game, its compelling combat, the character development of Aloy and its voice actress, Ashley Burch.

7.5/10 (GOOD) Destructoid (Carter, 2017)

- + Ashley Burch as Aloy
- The many creative possible ways of killing machines, very open combat system
- + Machines are formidable
- + Many exploring possibilities
- + Visually stunning game
- Most of the cast falters
- Human opponents aren't as interesting as the machines
- Platforming systeem is too safe

9.3/10 *(AMAZING)* IGN (O'Brian, 2017)

- + Wonderfully flexible combat
- + Voice acting by Ashley Burch
- + Beautiful post-post apocalyptic landscapes
- Side quests fall into regular fetch-quest patterns



9/10 *(SUPERB)* GameSpot (2017)

- + Complex and thrilling combat
- + Imaginative enemy designs open combat system
- + Expertly blends natural and technological elements
- + Impactful character development
- Visually stunning game
- + One of the best open world games of this generation
- Inefficient user interface
- Barebones melee mechanics

Giant Bomb (Gerstmann, 2017)

- + Near perfect story
- + Aloy is well voiced
- Fantastic visual design
- + Solid soundtrack
- Hints to a sequel (the story is complete as it is)
- Some of the options you get to handle enemies can be a little game-breaking
- A lot of the lip-syncing in cutscenes is remarkably off

8.75/10 (GI Rating) 8.5/10 (User Rating) Gameinformer (Marchiafava, 2017)

- + Gorgerous environments
- + Strong story
- Clings closely to the established and increasingly tedious formula of open world games

GamesRadar (Delahunty-Light, 2017)

- + Stunning open world imploring you to explore
- + Hunt however you choose
- + Intricate fights with robot animals
- Jumping and melee attacks are a tad slow

Kotaku (Hernandez, 2017)

- Diversity in characters
- + Combat is thrilling and tactical
- + Good sci-fi story
- + Awesome protagonist
- + Beautiful aesthetics
- Fighting humans is boring and unwelcome
- Poor facial animations
- Lack of interactive diversity in the world

4.33/5 (1733 votes) GameFAQs (n.d. d)

9.5/10 Polygon (Kollar, 2017)

- + Fighting machines is a thrilling experience
- + Beautiful world
- During lengthy dialogue sequences, characters are static and unnerving
- Fighting agains humans happens a little too often during the main quest and is not as interesting



Next to the positive reviews, Horizon Zero Dawn has been nominated for numerous awards (almost hitting 90), of which they have won 23 (Appendix A). These wins include a BAFTA for Best Original Property, and a Gouden Kalf (Golden Calf, the Dutch equivalent of the Oscars) for Best Interactive, making it the first game ever to have won a Gouden Kalf. Most of Horizon's nominations and wins were aimed at its story, its visual design and Ashley Burch's performance as Alov. The game was also nominated multiple times for "Game of the Year", but lost most of these awards to The Legend of Zelda: Breath of the Wild, another visually stunning third person open world action/adventure game, developed by Nintendo exclusively for Nintendo devices, which released just three days after Horizon Zero Dawn.

On November 7th an expansion pack for Horizon Zero Dawn released under the name The Frozen Wilds. The added downloadable content (DLC) adds a new snowy environment to the main game and adds new customization options. A new addition is also added to the photo mode, in which Aloy now can make a snow angel. It, however, is not a standalone expansion. It is aimed at players who have already finished the main game and a roughly level 30 (high level).

Similar to the main game, The Frozen Wilds was well received by critics. It received a Metascore of 83/100 (70 critics) and a User Score of 8.0/10 (359 ratings) (Metacritic, 2017b).

On the 6th of December, Horizon Zero Dawn and its expansion pack released as bundle under the name

Horizon Zero Dawn: Complete Edition (PlayStation Store, 2017b).

Horizon Zero Dawn sold extremely well. Up until December, Horizon Zero Dawn closed off the top 10 list of best selling videogames of 2017 (Kain, 2017). They unfortunately lost that spot a month later (Kain, 2018).





On Horizon Zero Dawn's one year anniversary, Guerrilla announced that the they had sold 7.6 million copies of the game worldwide, making it the best selling new first-party franchise on PlayStation 4 (Guerrilla, 2018). On top of that, it is the beste selling Dutch game ever. Horizon Zero Dawn more than doubled the sales of the previous recordist, which was Killzone Shadow Fall with 3 million sold copies (RTL Nieuws, 2018).

Horizon Zero Dawn is set in a post-post apocalyptic North America, approximately one thousand years from now. Nature has reclaimed the land, with plants growing over destructed cities and landmarks. On the ground machines appear, which look like mechanical animals, such as birds, deers, crocodiles, and long extinct dinosaurs. The machines act like real animals, they hunt, they graze, they watch, but nobody knows why. This is the main mystery of Horizon Zero Dawn.

The world of Horizon Zero Dawn is populated by several tribes, which all have different lifestyles and believes. The story of the game revolves around Aloy, born as an outcast of the Nora tribe, raised by Rost, another outcast of the same tribe.

As a baby, Aloy was found by the High Matriarchs (leaders of the Nora tribe) in a room that only they have access to. Nobody knows who or where her mother is. Mothers are of high importance to the Nora tribe, not having a mother is seen as something unnatural and taboo. Since Aloy is found as a motherless child, the High Matriarchs decide not to bless her, making her an outcast. Members of the Nora Tribe are not allowed to interact with outcasts

in any way or form. This gives Aloy motivation to enter The Proving, a way to reenter the Nora tribe and return to its good grace.

In this first part of the game, the player plays as young Aloy. She will find a Focus, which is a high-tech device which gives holographic-like information and helps the player (and Aloy) in proceeding the game.

Preparing for The Proving requires years of training, so after Rost agrees on training Aloy the game cuts to 18 year-old Aloy.

After entering the Proving, which Aloy wins, the village falls under attack. Aloy realizes that all of the attackers also have Focuses, providing the game with another mystery. She gets ahold of one of these Focuses, which she examines. She finds out that the attackers are targeting a woman that looks exactly like her.

Aloy shares everything she know with the High Matriarchs, which give her the blessing of Seeker. A Seeker has the right to go absolutely anywhere, including forbidden lands, in order to save a greater purpose.

This is where Aloy's true journey and the unraveling of mysteries begins. Who are the attackers? Why are they targeting a woman that looks like Aloy? Who is this woman? What started the Derangement? Who is behind this all?



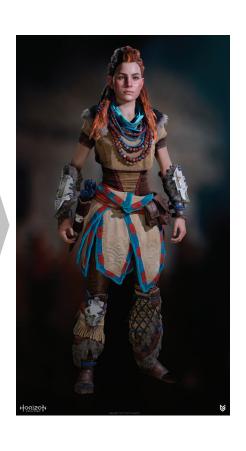
Key Characters

Aloy

Aloy is the protagonist of Horizon Zero Dawn and the sole playable character throughout the game. She is born as an outcast by the Nora tribe, raised by Rost, who also trains her for The Proving.

Aloy gets involved in the conflict against the Eclipse and HADES. She sets of as a Seeker to learn about the circumstances of the Derangement (a term used by the tribes to refer to the changed, more hostile, behaviour of the machines) and the disappearance of the Old Ones (the humans of the old world, specifically humanity up to 2066). On her journey Aloy will discover the nature of her origins and her critical role in saving the world.

Aloy is voiced by Ashley Burch and modeled after the Dutch actress Hannah Hoekstra.





Rost

Just like Aloy, Rost is an outcast of the Nora. Aloy is entrusted to him by order of the tribe. He raises her and later trains her to be a hunter and prepares her for The Proving.

Teersa

One of the High Matriarchs of the Nora and one the few who has always shown kindness to Aloy, regardless of her being a outcast. The main role of the Matriarchs is to lead the tribe and make decisions in times of crisis. Teersa is the one who promotes Aloy to a Seeker.





Avad

Avad is the 14th "Sun-King" of the Carja tribe. He killed his father after becoming appalled by his father's brutal reign, who used to massacre the other tribes. Avad seeks to reform the Carja and rules his kingdom with a fair and kinder hand.

Erend

Erend is a Vanguard of the Oseram tribe. A Vanguard is an Oseram military unit, which works closely with the Carja Sun-Court and provides security to the Sun-King.



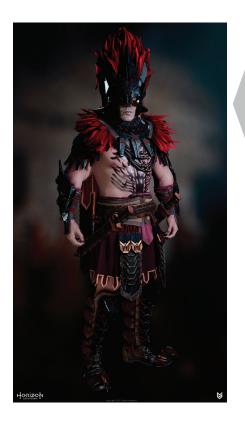


Sylens

Sylens is the founder of the Eclipse. On HADES' orders, Sylens had found and repaired Focuses for the Eclipse army, and began creating a Focus Network built to HADES' specifications. Wary of HADES' motives, Sylens created a backdoor in the Focus network, which allows him to listen to all communications within the network. After Sylens completed the Focus Network, HADES decided that Sylens had outlived his usefulness and ordered his dead. Sylens managed to escape, and is a fugitive ever since.

Sylens is a main supporting character in Horizon Zero Dawn, and allies with Aloy to discover the truth behind the machines and the Old Ones. He is voiced by and modeled after the American actor Lance Reddick.

Helis



Helis is the cult leader of the Eclipse. He is nicknamed 'The Terror of the Sun' by the Carja and 'Stacker of Corpses' by the Oseram. Helis is the secondary antagonist of Horizon Zero Dawn.

Olin

Olin Delverson is an Oseram scout and a friend of Erend. He was forced to work for the Eclipse after his wife and child were taken hostage. Olin is the first character on which Aloy notices a Focus.



Elisabet Sobeck

Elisabet Sobeck was an American scientist, robotic and engineer in the 21st century. She proposed and oversaw the development and implementation of Project Zero Dawn, the code name for a massive terraforming system designed to restore life on Earth after the Faro Plague, a rogue swarm of war machines that caused the extinction of life on Earth in the mid 21st century. Elisabet's genetic code was used by GAIA to create Aloy.

GAIA

GAIA is a personification of Mother Earth and the main AI overseeing Project Zero Dawn. While GAIA serves as the central intelligence of Project Zero Dawn, there were nine Subordinate Functions, dedicated to specific purposes such as detoxifying the Earth's atmosphere. The Subordinate Functions were not strictly artificial intelligences, but merely designed to be extensions of GAIA.



HADES

HADES is a rogue artificial intelligence (AI) and, together with HEPHAESTUS, the main antagonist of Horizon Zero Dawn. He used to be a subordinate function of GAIA, serving as the 'extinction failsafe protocol' for Project Zero Dawn, which would allow HADES to destroy and reset the terraforming process when an undesirable outcome is detected.





HEPHAESTUS

Just like HADES, HEPHAESTUS was one of the nine subordinate functions of GAIA. HEPHAESTUS was dedicated to the construction of underground Cauldron facilities, which would build the machines needed to complete the terraforming project.

HEPHEASTUS was transformed into a true AI by an unknown signal. The AI gained full control over the machines it created after GAIA's destruction. After the humans of the new world began hunting the terraforming machines for parts and resources, HEPHAESTUS made the machines hostile to humans and it produced combat machines to guard against human hunters and hunt and kill them.

Tribes

Nora

The Nora are a hunter-gathered tribe, specialized in archery and guarry tracking, with a religious worship of nature, motherhood, and child-rearing. Their Goddess, All-Mother, is embodied by a mountain and they believe that guarding its environment is their duty. The Nora are led by female elders, known as the Matriarchs and High Matriarchs. Every grandmother with at least two living generations of progeny is a Matriarch, and serves the tribe as a wise woman, healer, arbitrator of disputes, and source of religious authority. The High Matriarchs are the great-grandmothers with three or more living generations of progeny, and are the ones who decide the matters of tribal law and adjudicate the most serious disputes. The High Matriarchs are the Nora's ruling council, the Matriarchs their ministers.

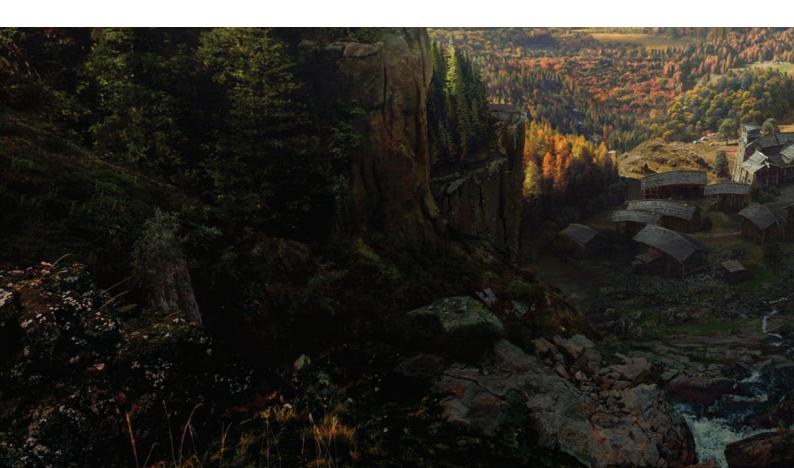
Hunter-warriors, known as Braves, are mostly, but not always, men. They hunt machines and guard tribal lands from hostile outsiders. They also collect food and hunt animals for meat and fur. Nora garments are mainly made out of the hunted animals' fur and feathers, and are accented by machine parts.

Nora train from an early age to use a bow, and are also adapt with spear and knives. They are skilled at using machine components to increase their armor and strengthen their weaponry.

Furthermore, Seekers are people within the Nora, granted immunity from the taboos against exploring ancient ruins and leaving Nora land. Only a Matriarch may confer the blessing of this status.

The Nora generally considers women to be more intellectual and physically flexible than men. They are less impulsive, less rash, and better suited for planning the long-term happiness of individuals and the tribe. On top of that, the Nora's religious believes hold motherhood as sacred. Although the creation of life is seen as divine, having more than two children strains resources and is discouraged by the Nora.

Nora do not marry; adults are free to carry on romantic and sexual relationships with other adults as they choose (also across gender lines), although having children is forbidden unless sanctioned by the Matriarchs with a 'Mate Blessing'. Women propose Mate Blessings to men when they want to have children. A child is seen as an inviolable compact between the two mates that bind the parents together. Nora mothers have full parental rights over their children, and can dissolve a Mate Blessing at any time and keep the children. A man



is expected to continue his parental duties even if his Mate Blessing has been dissolved. These duties include watching over and fostering the children, teaching them tories, playing games, and providing them discipline.

Birthdays are a major occasion, however, focus is not on the person who has lived another year, but the mother who gave birth to the person. Children are expected on their birthdays to give gifts to their mothers and spend the entire day with them. If the mother is no longer alive, the child spends the entire day at the mother's grave site.

Another yearly ritual, and the most significant one, is the Proving, in which youth compete to be recognized as adult Nora.

Nora rely on natural geological features, such as steep slopes, to protect their villages from machines intrusion. They respect the boundaries of machines spewing sites and do not interfere with the protector bots that guard these sites.

The Nora are masters at working with wood, beading, sewing fur, and weaving plant fibers. They use machine substances as paint to decorate their skin and create cave paintings. However, the Nora have little capacity to work with metal.

The Nora do not take more from the land (from All-Mother) than they deserve, and strictly regulate their population. They place a high value on communalism; food and shelter are shared. There is little notion of privacy among the tribe.

A good Nora is one who works hard to improve or protect the life of the tribe. Self-promoting and selfish behavior is frowned upon. If a hunter were to kill another hunter in a fight or dispute, he or she might be sentenced to serve the victim's family. Some crimes, like breaking taboos, are punished by shunning.

The Nora generally avoid contact with other tribes. Deadly force is often used against trespassers. They have, however, established minimal trade with the Carja.

Key Nora characters: Aloy (outcast turned Seeker) Rost (outcast) Teersa (High Matriarch)



Carja Sundom

The Carja are the largest tribe in Horizon Zero Dawn's world. After a crisis of succession, the tribe fractured into two opposing factions; the Carja Sundom, which this section will focus on, and the Shadow Carja (also known as the Eclipse).

The entire center of Horizon Zero Dawn's map is Carja Sundom territory, ruled by Avad, the 14th Sun-King. A creasing number of Oseram settlers also occupy these lands. Meridian, Carja Sundom's capital, stands at the heart of their territory and is the largest city in Horizon Zero Dawn. Their central location made the Carja the hub of trade.

The sun worshipping tribe is always expanding the power of the Sundom. Over time, nearly all of the tribes fell under their power, including the Oseram and the Banuk. Only the Nora has managed to keep them at distance.

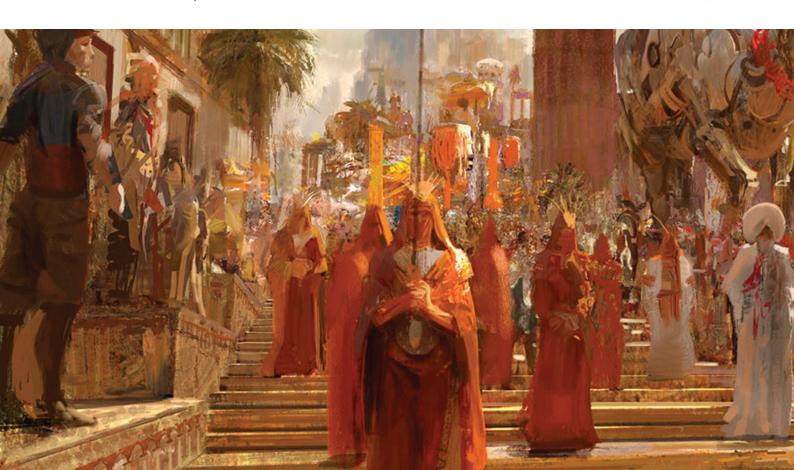
The Sundom reached the pinnacle of their power under Jiran, the 13th Sun-King, who performed brutal religious rituals. Over a period of ten years, thousands of people were forced to battle machines to the death in a gladiator-like matter in the 'Sun-Ring'. Jiran ordered his troops to raid nearby tribes for more and more captives and became know as

the 'Mad Sun-King'. Eventually, Jiran's oldest son, Kadaman, confronted his father, demanding to make an end to the carnage. Jiran responded by sacrificing Kadaman in the Sun-Ring. Avad, the middle sun, knew he was going to be next, and fled the city, leaving only one heir – four-year-old Itamen.

Avad teamed up with a faction of the Oseram warriors to plot an attack on Meridian to throw Jiran off his throne. When the attack began, many Carja soldiers joined the rebellion. They breached the city and killed Jiran. Jiran's most loyal followers fled westwards, taking Itamen with them. They eventually formed the Shadow Carja.

Avad took the throne, and, opposed to his father's regime, formed a progressive government. He invited his Oseram companions to share key positions, which is disliked by many Carja. However, the Oseram soldiers perform the most important and dangerous tasks for Avad's regime, including counterattacking Shadow Carja and fighting back hostile machines.

The Carja have a strict social hierarchy. At the top stands the Sun-King, seen as the living incarnation of the sun. Beneath him stand the Priests, who



observe the sun and stars, manage the treasury, and help to decide conflicts among lesser ranked Carja. Followed by the Priests are the Nobles, which are often military officials. Bellow them are the tribe's fighting men, followed by the Artisans, Traders, and Merchants. The lowest class of Carja belongs to farmers and servants.

When Jiran was killed, some social classes chose sides. Most of the priests and kestrels went with the Shadow Carja, while most of the nobles and artisans stayed in Meridian.

Carja Sundom clothing varies dramatically within social class. The higher the person's class, the more elaborate and colourful their outfit. Priests wear decorative headpieces and robes. Nobles dress their hair in complex fashions and wear a lot of jewelry. Soldiers often go bare-chested, with their faces and bodies painted with fearsome patterns. They also tattoo themselves extensively to record every hunt, battle, and kill. Traders and merchants wear colourful flowing gowns.

Opposed to the Nora, the Carja are dominated by men. A father wields ultimate authority over his family, and marriages are arranged by men. A man establishes and maintains a household for the family, and may take extended family or his servants' family under his roof.

Only men can serve as priests, nobles, soldiers, artisans, traders, and merchants. However, Avad's progressive regime is attempting to give women more freedom and opportunity, especially in the army.

Children are taught from infancy to obey their parents, as obedience to authority is the core ethic of Carja society. To disobey the direct command of a superior is a shameful and unnatural act, resulting in severe beatings or even execution.

Agriculture is the main foundation of Carja civilization. The manufacturing and sale of luxury goods also make up a good part of the economy. Prior to the Derangement, trade has always been an important sector.

Key symbols of the Carja are the sun and the Glinthawk, which appear often as visual motifs in engravings, murals and on clothing. Art is also a big focus since Avad's reign – including murals, sculptures, music, and poetry.

Key Carja Sundom characters: Avad (14th Sun-King)



Shadow Carja / Eclipse

After the execution of the 13th Sun-King Jiran, its loyal faction fled and settled at Sunfall, a military fortress at the far edge of the Carja Sundom, where they formed a cult called the Shadow Carja, led by Helis, Jiran's most trusted kestrel.

The Shadow Carja, also known as the Eclipse, live in bad conditions, as there is not enough food to feed the refugees (barely enough to feed the army) and not enough trade to pay the army. Furthermore, Avad is unwilling to forgive the slaughter of his former countrymen, and the Shadow Carja do not have the resources to effectively siege Meridian.

Although both the Shadow Carja and Carja Sundom are male dominated, the Shadow Carja clings to tradition and does not allow women any new rights or privileges.

Shadow Carja's economy is entirely based on its military. Laborers and artisans have been pressed into service, making whatever the troops need first. Everything is strictly rationed, and anyone who takes more than their share is executed. The corpses of thieves and deserters hang from the walls to

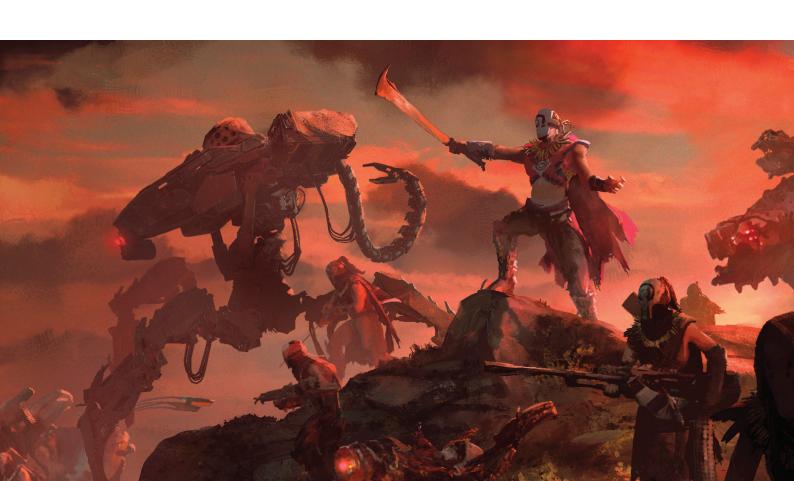
discourage those who might have provocative thoughts.

Also within clothing the Shadow Carja has clinged to tradition, varying outfits in social class. Compared to Carja Sundom they dress more austere and iconography is more extreme.

The military and elites have access to fine or exotic materials through raiding and hoarding. The refugee population, on the other hand, wear practical, functional clothing, with a focus on durability and longevity. Many of the refugees are highly skilled in repairing and maintaining their garments, but harsh conditions and lack of material clearly show.

At the beginning of Horizon Zero Danw, very little is known about the Eclipse, save for the fact that they have something to do with the corruption spreading among the machines.

Key Shadow Carja / Eclipse characters: Helis (former Sundom Kestrel, now cult leader)



Oseram

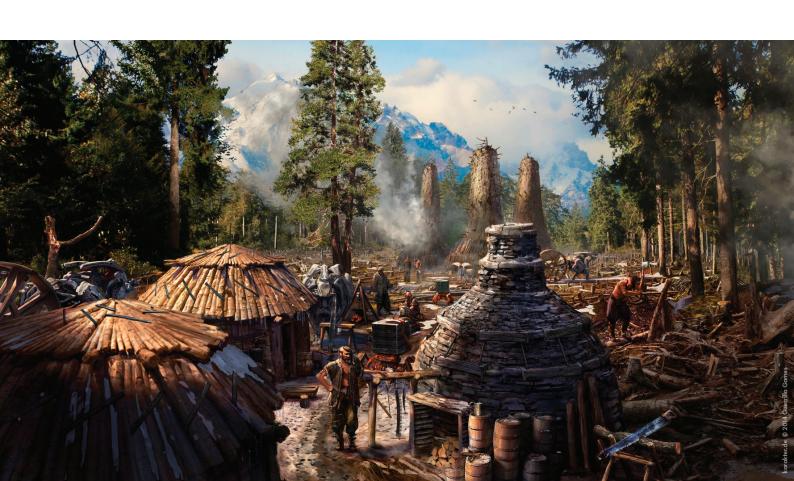
The Oseram inhabit 'the Claim' and are known for their exceptional skills as smiths and traders. They are the most technological advanced in Horizon Zero Dawn and the only tribe to work in iron, Oseram prefer functional practicality over decorative beauty. Their settlements often consist of circular structures.

The Oseram treats their vows as contract. If an Oseram swears something before an audience, he can be expected to fulfill his sayings. Failing to fulfill, or cheating or deceiving a fellow Oseram is considered to be a crime. Punishment for the crime are decided by the village's ealdormen, and range from fines to property seizures to painful public executions via frightening mechanical devices.

Oseram dislike authoritarianism and place high value on freedom of expression and disagreement. Ealdormen argue openly, and everyone argues with the ealdormen and with each other.

Furthermore, the Oseram can field impressive military forces, featuring heavily-armoured foot soldiers with two handen hammers, ranged combatants, and powerful cannons.

Key Oseram characters: Erend (Vanguard of Meridian) Olin (Scout and forced traitor)



Banuk

The Banuk is an individualistic nomadic tribe of hunters that inhabit the northern reaches of Horizon Zero Dawn in a cold and icy climate, called Ban-Ur. Although they do have permanent settlements, these are never well structured or fortified.

The people are not ranged in classes or on wealth, but more so on ability and talent; mainly at survival. Banuk believe that sparks of divine energy inhabit the machines. They refer to this energy as 'the blue energy', which is infinite and replenishes itself. Therefore it is not taboo to hunt and kill machines, doing so proves the hunter has overcome a challenge and is worthy.

Shamans communicate with the spirits within the machines, and have a special responsibility to study and interpret the machines. Hunters always offer Shamans the carcasses of their machine kills

as it is taboo voor hunters to harvest these kills without first making such an offering. Shamans use the machine components to provide practical and cultural objects, such as decoration, dyes for rock paintings, and special ammunition. Shamans sometimes escort hunters, and may use some of their creations to help find or fight machines.

The Banuk's main political unit is the Werak, which translates to something like 'pride' or 'troop'. A Werak is made out of families that band together to hunt. It is an informal arrangement – a group of people that follow a superior hunter.

Key Banuk characters: Sylens (banished)



Bandits

The Bandits are a scary, rough, brutish, and chaotic parasitic tribe, feeding of the endeavours of other tribes. Rather than producing anything themselves they raid villages and camps. Bandits transform almost everything into an irregular mishmash of material and form, making it look filthy and ugly.

Bandits' main "expertise" is to repurpose loot in terrifying ways. A Bandit skyline is often enough to ward off other tribes, especially in combination with their crude graffiti which communicate a hostile intent. Bandits are also dressed to intimidate; they use scraps of machine plates as armour and decoration, creating a terrifying spiked silhouette. The spike motif also comes back in their lawless and ruthless environments which represent the unorganised, organic style of Bandits.

Bandits do not abide to anyone's rules, and show neither fear nor respect towards enemies. Their brightly coloured outfits fade quickly due to their rough and chaotic lifestyle. This, however, does provide ideal camouflage for an ambush.

Bandits can be seen as an 'infection'; green landscapes and thriving villages are laid waste, starting a transformation that involves careless restructuring and chaotic outfitting. Bandits are the plague of the land.



Machines

Project Zero Dawn, the code name for the terraforming system, consisted of multiple animal-like machines. It is only after the Derangement that these machines have turned aggressive towards humans. Some of these machines only started to appear after the Derangement, with the sole purpose to fight and hunt humans on sight.

Watcher

Redeye Watcher

The Watcher (left), the weakest machine in Horizon Zero Dawn, and the Redeye Watcher (right), an upgraded variant, are basic scouting class machines. They are designed to scout for natural areas in need of rehabilitation, as well as to alert other machines once a threat has been detected. If a Watcher raises alarm, nearby enemies provide the primary threat response, though the Watcher will also attack

Watchers are quite clumsy. When attacking they often throw themselves at the target, tumbling over in the process and having trouble getting up.

Strider Broadhead Charger

These common machines are seen throughout the world, and are mountable after being Overridden. They appear in herds, often protected by a group of Watchers. When they spot a hunter or detect a loud noise nearby, or if the hunter is seen by a Watcher, the herd will almost always run away in the opposite direction. However, when the hunter gets very close to a Strider or Broadhead, they will stay to fight while the rest of the herd flees.

The machines function as Grazers, they gather small amounts of vegetation which they then convert to Blaze (fuel) and store in a canister on their back.





Tallneck

Tallnecks are surveying machines resembling enormous giraffes. They can be found patrolling fixed locations on the map. The by far biggest machines of Horizon Zero Dawn are invincible, non-hostile and oblivious to the presence of any other machines or humans, including Alov.

By leaping up a Tallneck's back, scaling its neck and Override the data node on its head, the fog covering the surrounding areas of the map will remove and reveal locations of points of interest (such as machine habitats and human settlements).

Grazers (left) and Lancehorns (right) can be found in herds, harvesting raw materials from the earth. Once threatened, they will prioritize fleeing over fighting, although a pair may break of to fight and protect the rest of the herd.

Scrapper



Scrappers are acquisition machines, traveling in packs harvesting materials from the carcasses of other machines.

They are dangerous up close, sporting multiple melee attacks, but they are also threatening ranged opponents with a laser cannon positioned on their head. Scrappers have a radar on their back which will periodically scan the area for threats, and makes hiding in tall grass difficult for Aloy.

Longleg

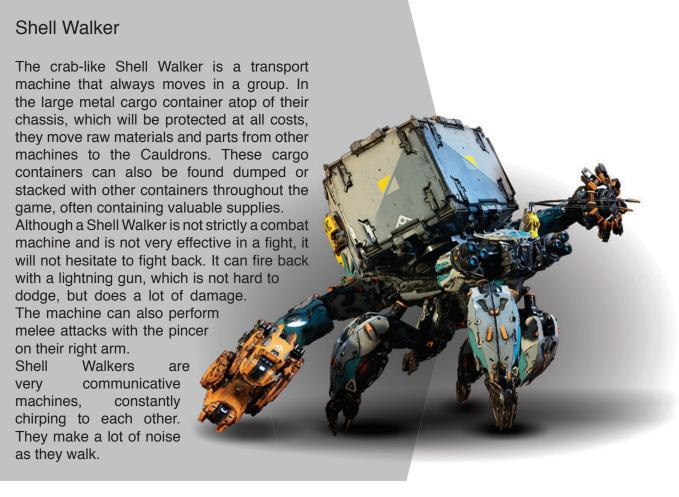
The Longleg is a bird-like reconnaissance machine. Similar to a Watcher, a Longleg is an agile machine that can alert other machines to its location via an Alarm Signal Antenna. It can be found protecting the weaker acquisition machines, typically in groups of three. Beside various melee attacks, a Longleg can use sonic blasts to disorient humans. It can also scan for threats in tall grass.



Trampler

Trampler is a bull-like acquisition machine and one of the larger Terraformers. Tramplers peacefully perform their function, but will attack once disturbed by a human. They are used for mining and processing of soil, with the ability excavate soil with their horns. They can produce explosions by releasing and detonating flammable gasses, which they use to attack humans. Also, like their name suggests, Tramplers attack by charging at and running over humans.





Fire Bellowback

Freeze Bellowback

The Fire Bellowback (left) and Freeze Bellowback (right) are transport machines, respectively equipped with Blaze and Chillwater. They were created to perform controlled burns to dead vegetation to make way for new vegetation, as well to control the number of plants an vegetation. Both versions were used to counteract each other to make sure their controlled burns did not get out of control. Besides various melee attacks, they can also perform dangerous long-ranged elemental-based attacks (fire and ice).





Stalker

Stalkers are combat machines that are mostly found in pairs in jungle environments. Unlike other combat machines, Stalkers employ stealth attacks. It is the only machine that has the ability to camouflage itself from view after detecting a threat. Stalkers often become aware of a human's presence before the human notices them. They tend to spend a lot of time clinging on the side of a cliff or perched in trees, making them difficult to see.

Stalkers can deploy Alarm Mines in their territory, giving them a very large detection range. When getting close, these Alarm Mines will give off an audible alert that, when getting even closer, increases in tone and frequency, eventually sending a flore we in the aler.



Glinthawk

The Glinthawk is one of two machines that are capable of flight. Its purpose is to scavenge destroyed machines. Initially, Glinthawks would flee from a human if one approached,

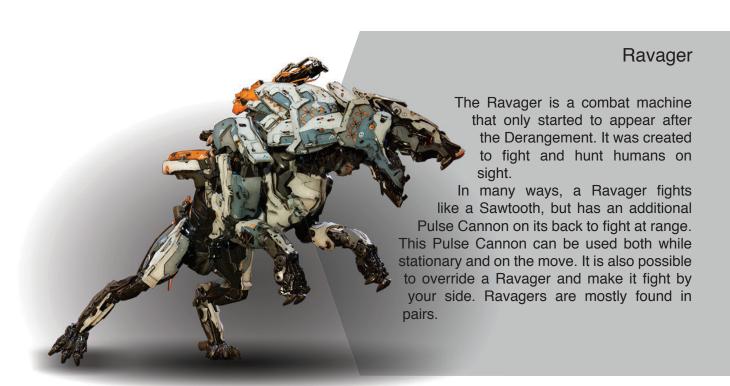
but after the Derangement they became hostile toward humans.

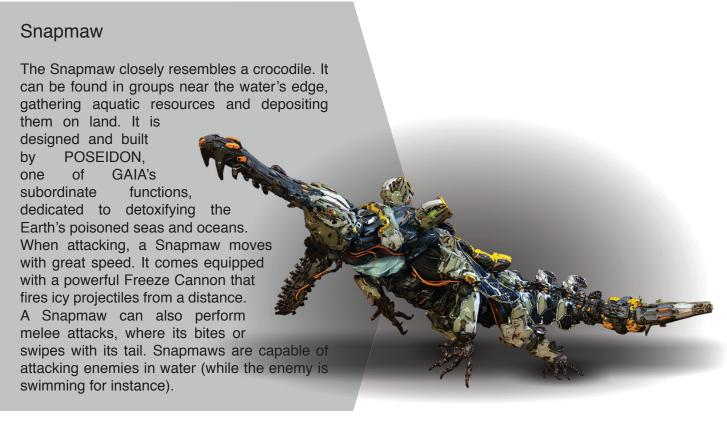
Glinthawks are typically found in groups of three or four, all sporting one ranged freeze attack and one melee attack.

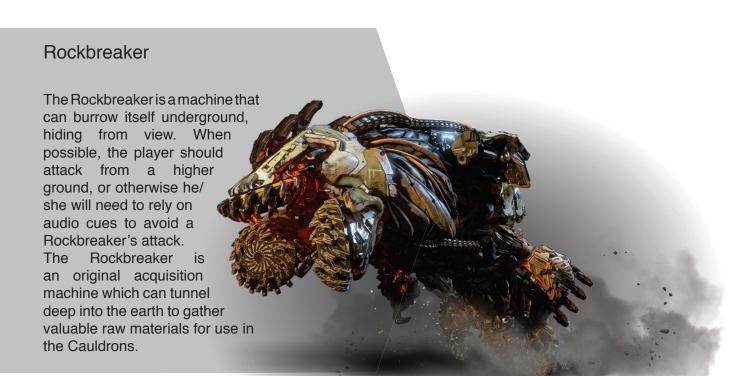


The Corruptor is an ancient machine, formerly known as the FAS-ACA3 Scarab. It was conceived by Ted Faro, and when in 2064 one of the swarms stopped responding to commands and became independent, the Faro Plague started. Millions of Scarabs began to swarm the world, and any counterattack was immediately crushed. Eventually, with no fuel left on Earth, the Scarabs fell dormant for the next few centuries.

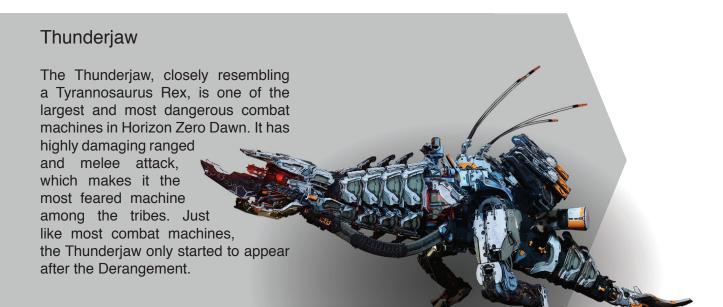
Centuries later, when Earth was terraformed and seeded with life again, the Eclipse began to reactivate the large number of Faro machines, including the Scarabs. Due to their ability to hack and corrupt machines, the different tribes started to refer to them as Corruptors. They take control of other machines, which they force to fight alongside them.

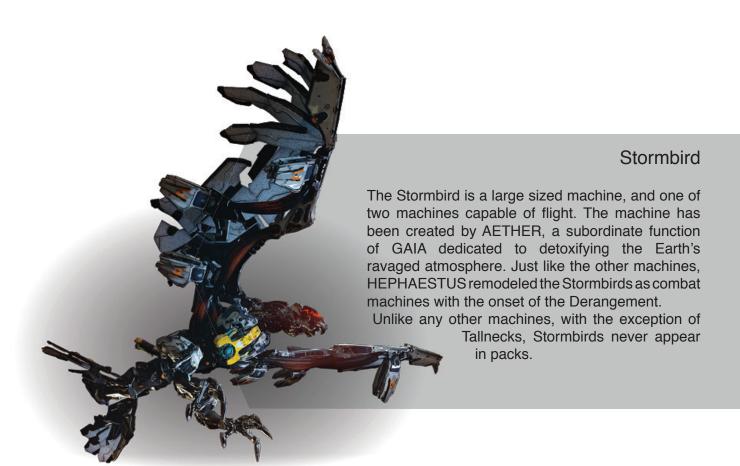












Deathbringer

The Deathbringer, formerly known as the FAS-FSP5 Khopesh, is an ancient war machine and the second largest machine in Horizon Zero Dawn. Just like the Corrupor, it was manufactured by Faro Automated Solutions as part of the Peacekeeper line of automated defense systems. The Deathbringer deploys overwhelming firepower against enemies and is capable of self-replication.

Unlike the machines produced by GAIA, Faro's machines bear no resemblance to animals, as they were built a long time before Project Zero Dawn. It was built as part of the Chariot line of peacekeeping machines, which wiped out all life on Earth after being yielded to a glitch. Once all the fuel on Earth was consumed, all Deathbringers fell dormant for hundred of years, similar to the Corruptors. HADES, however, managed



Current Merchandise Portfolio

Currently, Horizon Zero Dawn has a variety of merchandise items. This includes many generic items, such as basic apparel (hoodies and T-shirts), mugs and a keychain.

More interesting items are the wallet and the messenger bag, which, although they do communicate the look and feel of Horizon Zero Dawn, do not have a strong connection to the game in terms of product type. Products in Guerrilla's current portfolio that have a stronger connection to the game are the ones that embrace its visual achievements, such as the various statues and art prints. However, these, together with the adorable looking Funko figurines, are static products for

display purposes which do not evoke any interaction. Other products, such as the art book and the strategy guide, are safe bets that are expected to be released by any AAA game studio. Especially with Horizon Zero Dawn being a visually stunning game, releasing an art book can be considered to be essential.

The most unique (digital) products, and the product that conveys the Horizon Zero Dawn experience the most, are the free to download cosplay guides of Aloy and Rost. The guides give tips about how to dress up like two of Horizon Zero Dawn's most popular characters and give a clear breakdown of the characters' outfits.





Hoodies By Bioworld Europe & Gaya Entertainment €50,99 - €71,49



Wallet By Gaya Entertainment €24,99



Cap By Gaya Entertainment €29,99







Messenger bag By Gaya Entertainment €49,99



T-shirts By Bioworld Europe & Gaya Entertainment €9,99 - €18,49



Mugs By GB Eye & Pyramid International €10,99



Keychain By Gaya Entertainment €9,99



Wand scroll By Gaya Entertainment €32,00



Thunderjaw statue By Project TriForce - 15" \$199,99 (≈ €175)



By ThinkGeek - 10 cm €14,99



TOTAKU Watcher statue Modern Incons Aloy statue By ThinkGeek - 10.5" \$49,99 (≈ €45)



Stubbins Aloy plush By Gaya Entertainment - 9 cm €18,49





POP! figurines By Funko - 10 cm €15,99



Mystery Mini figurines By Funko - 6.5 cm €7,50



(Framed) posters By GB Eye €17,99 - €38,66



Limited art prints By Cook & Becker €85,00 - €1.100,00



Art book By Titan Publishing €27,49



Limited edition art book By Titan Publishing £40,00 (≈ €45)



Strategy guide By Future Press €38,99



Original Soundtrack By Sony Interactive Entertainment €16,99



Limitid vinyl By Sony Interactive Entertainment €55,00



Digital cosplay guides By Guerrilla FREE DOWNLOAD



Sticker pack for Apple devices By Sony Interactive Entertainment FREE DOWNLOAD

Promotional Products

Apart from their readily available merchandise, there have also been a couple of promotional products, as can be seen on this page spread (excluding promotional T-shirts and posters).

Seen on this page:

When pre-ordering the game at select retailers in Europe, a promotional item in the form of a keychain was available. This high-quality keychain features Aloy as a Sackgirl.

Another promotional product, as seen below, is a life size Watcher costume, made by Spectral Motion. The costume is worn on various events, first seen during E3 2016.

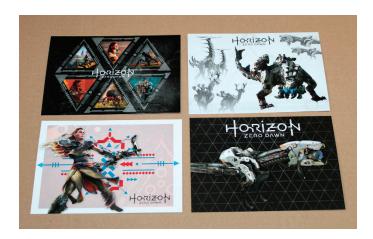
Seen on the page on the right:

The shown postcards were given away in Europe as a promotion for Horizon Zero Dawn, the same goes for the magnet set. Furthermore, the lanyard and the inflatable spear were respectively given away at Gamescom 2016 and E3 2016.

Finally, the beanbag is a bit of a mystery, which suggests that it could be a friends and family exclusive.















Physical releases of Horizon Zero Dawn

Four different physical versions of Horizon Zero Dawn have been released to the public. The first one being the standard edition, which only includes the game disc, packaged in a standard plastic case. This version of the game retailed for around 40 euros in Europe.

Besides this standard edition, Guerrilla has released a Limited Edition and a Collector's Edition version of Horizon Zero Dawn. The limited edition includes a SteelBook case with different artwork. It also comes with a small art book, which is roughly the same size as the game case. Furthermore it includes an exclusive PlayStation 4 theme and extra DLC containing exclusive outfits and weapons. The (currently sold out) Limited Edition had a European retail price of approximately 80 euros.

All these extras are also included in the Collector's Edition, which adds even more DLC. However, the main prize of the Collector's Edition is the exclusive 9" Aloy statue by Gentle Giant (which is different from the separately available Aloy Statue form the Modern Icons series by ThinkGeek). This most expensive edition of the game retailed for around 130 euros in Europe.

The final physical release version of Horizon Zero Dawn, The Complete Edition, released months later in December. The main inclusion of this version is The Frozen Wilds DLC. Apart from this, it also includes DLC from the Collector's Edition. Furthermore, the altered box art distinguishes the Complete Edition from the standard edition. The Complete Edition retailed for approximately ten euros more than the standard edition, making it 50 euros.









Press Kits

Horizon Zero Dawn



The press kit of Horizon Zero Dawn was developed by Fluid Studios (Brandum, 2017). It came in a clamshell box with the bolt text "EARTH IS OURS NO MORE" embossed on the front, sealed in a lasercut sleeve. Being a limited edition of 2236, each box was numbered individually on the back.

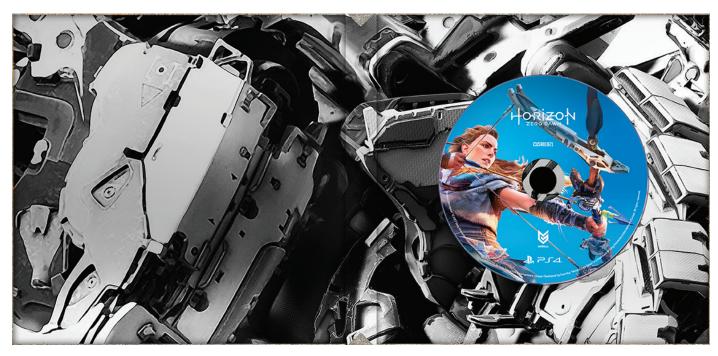
When opening the box, machine imagery is revealed on the inside. The box includes an introductory letter from Hermen Hulst (the Managing Director of Guerrilla), an exclusive 20 page art booklet, a poster with exclusive artwork, and, of course, the game disc.

50 key influencers received an exclusive VIP package, with the media kit being packaged in a bespoke Horizon Zero Dawn themed rucksack, together with a cap, a T-shirt and a framed picture of Aloy.



The box was produced in 10 different languages and delivered to 30 territories around the world.





Horizon Zero Dawn: Complete Edition

The press kit for Horizon Zero Dawn: Complete Edition comes in a square box, sealed with an individually numbered sticker, limited to 761 units. Inside the box a cardboard structure, covered in concpet art, keeps a Horizon Zero Dawn themed snow globe in place, with a fair amount of fake snow sprinkled atop of it.

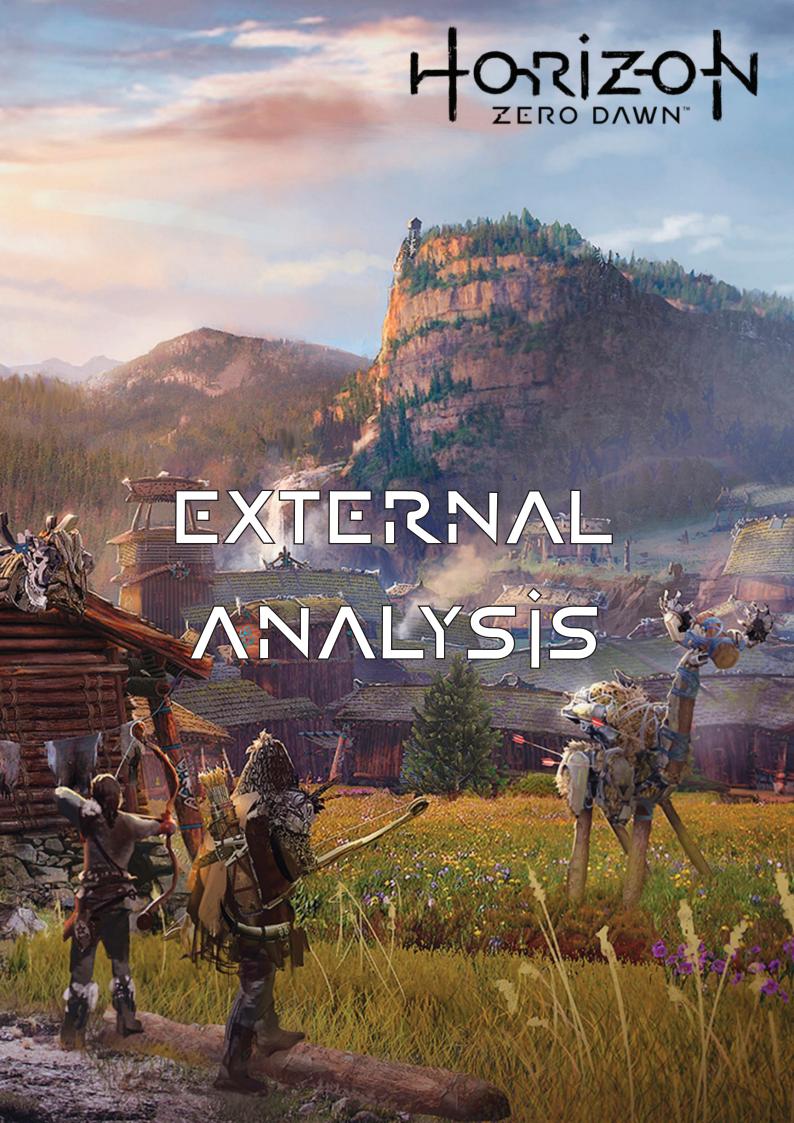
Upon taking the snow globe out of the box, it will be revealed that the game disc of the Complete Edition is attached to the bottom of the snow globe.











Target Group

To determine the target group, data of two different areas have been analysed. Firstly, data from within the game industry to determine which audience plays videogames. The second area focusses on the toy industry. A lot of merchandise can be categorized as a toy, and licensed products make a large part of the toy industry.

Since the game has been rated for teens by various international rating boards, young children will not be part of the target group. In large parts of Europe, the game is rated for ages of 16 years and older, however, it can be expected that the game also attracts a younger audience. In Germany, for instance, the game is approved for children aged 12 and above.

The average age of gamers is 35 (Lofgren, 2017), which makes it necessary to also include a relatively older audience in the target group. Keep in mind, however, that mobile gamers are also incuded in this number. According to Spielwarrenmesse eG (2017) there is also a large audience for toys for

adults, with a two-thirds increase of toy purchases by adults for personal use in the last five years. Adults aged 18 to 34 account for around half of the spend among adults, followed by 35-54 year olds at around a third.

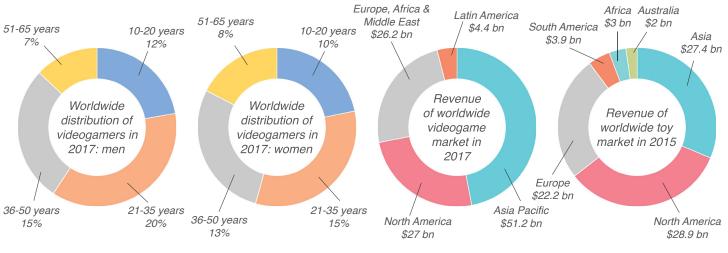
To narrow the age span of the target group, a focus on 20-35-year-olds was agreed upon during a discussion with Guerrilla. This audience includes many 'kidults' with a large disposable income.

Videogames are being played by both genders. According to Lofgren (2017), 41% of the videogame purchases in 2016 have been done by women, which makes them a large part of the target group – especially with the heroic lead character of Horizon Zero Dawn being female.

Videogames are part of a multi-billion-dollar industry, with Asia and North America being accountable for the biggest revenue (Statista, 2018). Within the toy industry, North America, Asia and Europe together were accountable for almost 90% of the worldwide revenue in 2015 (Statista, 2015). With this knowledge, the target group will include people from North America, Europe and Asia.



20 to 35-year-old people of both genders, situated in North America, Europe and Asia, who play Horizon Zero Dawn and are interested in and willing to buy merchandise.



Statista, 2018a Statista, 2018a Statista, 2018b Statista, 2016b





PEGI - Pan European Game Information Most of Europe, India, Israel, Pakistan and South Africa

Appropriate for ages rated 16+

This rating is applied to once the depiction of violence (or sexual activity) reaches a stage that looks the same as would be expected in real life. More extreme bad language, the concept of the use of tobacco and drugs and the depiction of criminal activities can be content of games that are rated 16 (PEGI, n.d.).





ESRB - Entertainment Software Rating Board Canada, Mexico and The United States

Teen

Content is generally suitable for ages 13 and up. May contain violence, suggestive themes, crude humor, minimal blood, simulated gambling and/or infrequent use of strong language (ESRB, n.d.).





ACB - Australian Classification Board Australia

Mature (M)

Contains content of a moderate impact and are recommended for teenagers aged 15 years and over.

Children under 15 may legally access this material because it is an advisory category. However, M classified films and computer games may include classifiable elements such as violence and nudity of moderate impact that are not recommended for children under 15 years. (Australian Classification, n.d.).





CERO - Computer Entertainment Rating Organization Japan

CERO D: for 17-year-olds and above Expression and content suitable only to 17-year-olds and above are included in the game (CERO, n.d.).

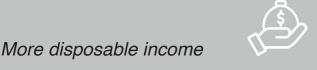




USK - Unterhaltungssoftware Selbstkontrolle Germany

Approved for children aged 12 and above in accordance with Art. 14 German Children and Young Persons Protection Act (JuSchG). These games feature much more of a competitive edge. Game scenarios are set within a historical, futuristic or mythical fairytale context, enabling players to distance themselves sufficiently from events. This categorisation includes Arcade games, Strategy games and Role-playing games as well as some Military Simulations (USK, n.d.).

Trend Analysis



In developed countries, a birth rate of 2.1 live births per woman is considered to be the rate in which the size of the population would remain stable without any migration. However, the birth rate across the EU countries is just 1.58 children per woman which leaves many adults with more disposable income, which they can spend on themselves (Harris, 2017). This offers extra opportunities for merchandise.

Age compression



Age compression is changing the dynamics of toys and games. There is a clear shift from traditional toys and games to video games (Tansel, 2010). Schor (2014) states that products and marketing messages originally designed for older kids are now targeted to younger ones. On the other hand, plush toys are expanding beyond younger age groups and are being bought increasingly by or for teenagers. Age compression also includes younger people in Horizon Zero Dawn's audience, creating a bigger overal audience for the game.

Millennials as 'kidults'



Millennials, born from 1981 to 1996, are predicted to outnumber the Baby Boomers in the U.S. in 2019, making them the largest living adult generation (Cilluffo & Cohn, 2018).

With 50% they are also accountable the most sales in the 'kidult' toy market (adults who buy toys for themselves) (npd, 2017).

With Horizon Zero Dawn aimed at (young) adults, opportunities can be seen in this trend.

Geoengineering



According to Meehan (2018), geoengineering will be a trend in the upcoming years. Geoengineering is trying to reverse the environmental damage that has been done, but is this a good idea?

Geoengineering is also a big theme in Horizon Zero Dawn, with Project Zero Dawn getting out of hand. Translating this in-game theme to real life offers new opportunities for Guerrilla.

Clean, safe and sustainable products



According to Cope & Cottney (2018) more brands will distinguish themselves from the competition with clean, safe and sustainable products. Moreover, consumers will be made more aware of environmental issues, such as the ocean plastic problem and its impact on wildlife and their own health. In collaboration with Parley, Adidas has already brought out multiple sneakers entirely or partly made out of ocean plastic.

Creating a clean, safe and sustainable product creates oppurtunites to extend Horizon Zero Dawn's themes beyond the in-game environment.

Physical stores and products



Bricks and mortar are re-emerging (Meehan, 2018). Many customers want to touch a product before they buy it. With new technological developments in artificial and virtual reality, new in-store experiences can be created.

Furthemore, there is a growing demand for tangible products, mainly in media, with a lot of people going back to buying vinyl records, physical books, and physical game copies (Weinswig, 2017).

This gives oppurtunities to translate Horizon Zero Dawn into a physical product.

Concerns about technology and privacy



Although technology is seeing exponential growth and mind-blowing innovations, there have been concerns about rapid changes and questions about people's ability to keep up with those changes. Especially in terms of privacy, where facial recognition, voice recognition and other biometric features cause concerns. Social networks, such as Facebook and Twitter have also failed to earn public trust, with extremist and offensive postings finding their way online on a regular basis.

On top of that, social media has addictive properties, controlling its users by likes and retweets to keep them hooked. Mobile phone use and social media influences is even causing depression in teenagers (meehan, 2018).

This trend can be seen as a threat.

Self-care and micro donations



In our world of chaos, people are taking more time to intentionally engage in self-care. Think about fitness and yoga, but also indulging in fun. 47% of millennials has stated that they have watched YouTube videos to improve their health or feel better after feeling down (Meehan, 2018).

Micro-donations are also an example of self-care, as stated by Meehan (2018). Some people, when emotionally touched by a news story, donate to a movement they support to make themselves feel better. Yet another trend that can be included in a physical product.

Board games and puzzles



According to Appell (2018) over the past few years the games & puzzles category has seen phenomenal growth, with U.S. sales going up with 23% in 2016 and 3% in 2017. Game play is appealing to all ages and a variety of interests, thanks to nice games, licensed games, cooperative games, new takes on old classics, and innovative board games.

The games & puzzels categorie offers opportunities. for Guerrilla.

Voice-activation



Voice-activated personal assistance continue to be popular. According to research done by Google (Kleinberg, 2018), it makes multitasking easer and helps users to get things done quickly and efficiently. It also empowers them to instantly get answers and information, and it makes their daily routine easier. With most voice-activated speakers placed in the center of homes, everyone in the household can easily access them. Voice-activating also offers a more human relationship with technology, people perceive the device as being more than just a toy, it is more so to be considered another person or even a friend.

New oppurtunites for Guerrilla can evolve out of this trend.

AR & VR



According to The Toy Association (Appell, 2018), more affordable and user-friendly virtual and augmented reality toys will hit the market.

Morover, Think with Google (Burgess, 2018) states that brands need to come up with creative ways to help people experience certain products online, before they buy it. With the use of augmented or virtual reality, a product can be brought to life.

AR & VR also offers opppurtunities to bring Horizon Zero Dawn to life in a broader sense.

Interactive play



Both expected by M. Hudak (2018) and The Toys Association (Appell, 2018), toys that cover greater interactive play will be in higher demand (Hudak, 2018). Examples of this are interactive and buildable robots, and radio controlled flyers (such as drones) that are easier to handle.

Interactive play can be seen as an opportunity for Guerrilla and Horizon Zero Dawn.

Mobile games

Accounting 20% of sales in 2016, mobile games have become the most influential segment of toys and games, expected to have a compound annual growth rate of 13% over the period to 2021 (Euromonito International, 2018). It will spread its influence further as most children will now grow up in a household with smartphone access.

The popularity of mobility in gaming can also be seen in the enormous success of the Nintendo Switch, which is a game console that can be played in handheld mode.

Although mobile games take away an audience form Horizon Zero Dawn (and therefore form a threat), it also offers oppurtunities to incude mobile features in a possible new product.

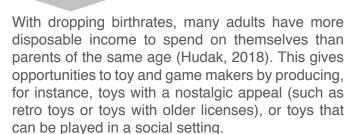
Construction toys, RC toys and action figures



Construction toys hold the largest share of the toys and games market. Globally it grew 7.8% in 2016. Although this is not as good as the double-digit growth in 2015, construction toys are expected to make a comeback as the fastest growing toys category globally, with an expected compound annual growth rate of 6.8% from 2016 to 2021 (Euromonitor International, 2017b).

Given the fact that children are retaining interest in toys into adulthood, categories with proven multi-generational appeal are expected to see a fast growth over the next five years (Euromonitor International, 2017b). These categories include construction, remote control, and action figures, which all offer opportunities for Guerrilla.

Toys for adults



The growth in the puzzles & games, as mentioned before, also signals an increased demand for toys among adults, since these games are often played during social occasions.

On top of that, children are retaining interest in toys into adulthood on a scale not seen in previous generations (Euromonitor International, 2017b). Again, opportunities can be seen for an adult audience.

Connected toys



The past few years have been about bringing toysto-life (License Global, 2015). An example of this is Skylanders, a video game accompanied by a range of products and figures. By placing a figure on a 'portal' it becomes a playable player in the game. Another example is Nintendo's Amiibo – figurines of various popular Nintendo and third party characters that unlock exclusive in-game content when connected with an Amiibo supporting game. Or LEGO Dimensions, a gaming experience that merges physical LEGO brick building with interactive console play.

Furthermore, with the rapid growth of mobile games, traditional toy and video game manufacturers are looking for ways to adapt (Euromonitor International, 2018). Within traditional toys, manufacturers are looking to integrate mobile gaming into their products, while video game developers are porting their non-mobile games to mobile platforms.

Integrating a physical product into Horizon Zero Dawn and vice versa offers new opportunities.

Collectible toys, blind bags and its unboxing experience



Stated at the New York Toy Fair (Appell, 2018), an unboxing obsession reigns. Since the mid 2000's, social media is overflowed with unboxing videos. Collectible toys represent 11 percent of all U.S. toy sales, with blind bags and surprise packs (a subset of collectible toys) growing 60% since January 2017 (Berger & Moran, 2018). People love to be surprised, which adds to the excitement of opening a blind bag and finding a toy that is missing from their collection; the act of unboxing a surprise toy from a blind bag is considered to be as much fun as the toy itself. On top of that, blind bags are affordable and an easy impulse purchase. This trend offers a whole lot of opportunities.

Licensing



Appell (2018) states that a lot of licensed toys of big blockbusters will be released in the near future. Licensing is driving traditional toy sales in 2018, with a grow of 5% in constant value terms (Hudak, 2018). Increased media access and wealth of new areas to draw on for intellectual property will help to continue the growth of the influence of licensed toys.

Also in the fashion industry licensed products reign supreme, with lead characters being most popular (Euromonitor International, 2017a).

Pet play



Especially for children who are eager to care for their own pets, playing with pretend pets is a growing trend. Pretend pets take away the responsibilities that a real, live animals carries, and makes it possible to "care" for fantastical beasts, as the current products range from cats and dogs to unicorns and dinosaurs (The Toy Association, 2018). These toys prepare kids for the real thing by teaching them how to be empathetic and nurturing. With Horizon Zero Dawn having a wide range of animal-like machines, this could be an interesting trend to dive into.

Toys that teach



STEAM toys (Science, Technology, Engineering, Art, and Math) have been popular over the past few years. The toys often incorporate new technologies and licenses to get kids excited about learning. This varies from toys to toddlers (learning the alphabet for instance), to toys for school-aged kids. This trend also includes toys that teach children how to make the world a better place by, for instance, being responsible citizens and being openminded about different cultures. Not only children themselves, but also parents are eager to get their children interested in these topics (The Toy Association, 2018).

Market Analysis



Shown diagram displays a large array of merchandise, arranged on price. The selected competing products are 'more than just a product', they have certain features which make them unique – often an interesting interaction. An explanation of all of these products can be found in Appendix B. In this blue stroke the current merchandise of Horizon Zero Dawn is shown, also arranged on price. The diagram clearly shows that most of Horizon Zero Dawn's products range between €0 and €60, with only a few products extending that price point. For the competitors, products going up to €200 are not exceptional, which clearly shows that there is a market for merchandise with a more premium price point.

With the Thunderjaw statue, Horizon Zero Dawn currently only has one product in the €100-€300 range. Looking at the competitors, it should be

possible to innovate within this price range.

Accordingly, this project will focus on a premium product, with a suggested mass retail price up to €300-€400.

Furthermore, three other market analyses have been done to gain a more personal insight concerning potential opportunities within the merchandise market. These market analyses can be found in Appendix C & D.













SWOT Analysis

Horizon Zero Dawn

Based on the internal and external analysis, strengths, weaknesses, opportunities and threats have been formulated, which are placed in an overview.

The strengths and weaknesses come from the internal analysis and concern the in-game content of Horizon Zero Dawn (based on various reviews and interviews - Appendix F) and its merchandise.

The opportunities and threats are based on the insights gained from the external analysis, most of it coming from the trend and market analysis.

In Appendix E two more SWOT analysis can be found; one about Guerrilla and another about Sony Interactive Entertainment.

Dutch pride Top selling and award winning game Fresh and new IP Ashley Burch's voice acting Aesthetics Gameplay Exploring possibilities Machines	Combat Story Character development Soundtrack Diversity in characters ENGTHSAloy Themes (nature, derangement, geoengineering) Immersive	Human enemies Stand-alone game (no online play, no announced sequel) Single player only User interface Melee	Facial animations Generic merchandise PlayStation exclusive (not playable by everyone) Released over a year ago
More disposable income Age compression Millennials and 'kidults' Geoengineering Clean, safe and sustainable products Self-care Micro donations Voice-activation Augmented reality Virtual reality Physical products Mobile games Furniture Licensing	Collectible toys Blind bags Unboxing experience Toys for adults Board games and puzzles Construction toys Remote controlled toys Action figures Interactive play Connectivity Animatronics Toy-to-life Peripherals Pet play Toys that teach	Concerns about technology Privacy Saturated market	More choices More popular and established franchises AT Mobile games

Search Areas

From the SWOT the most interesting and inspiring insights have been combined, and organised into a grid. The grid will be used to find basic initial ideas for search areas. All overlapping ideas have been clustered into eight initial search area ideas. These clusters are visualised in the grid with different coloured circles; same coloured circles fall within the same cluster. Out of these initial search areas, five will be expand upon. Various opinions have been stated to help choose the right (combination of) search area(s):

Guerrilla's opinion: Naturally it is important to know if Guerrilla sees potential in certain search areas. For this, the search areas have been discussed with Roland IJzermans, lead concept artist, and Jeroen Roding, community manager.

Users' opinion: This is probably the most important opinion. Seven different people between 20 and 35 years old have been interviewed and were asked their opinion about the different search areas. All of the participants have played Horizon Zero Dawn and were interested in merchandise, making them fit the target group.

The participants were also interviewed about both

Horizon Zero Dawn and merchandise in general to gain a broader insight about the users' thoughts about this topic. The results of these interviews can be found in Appendix F.

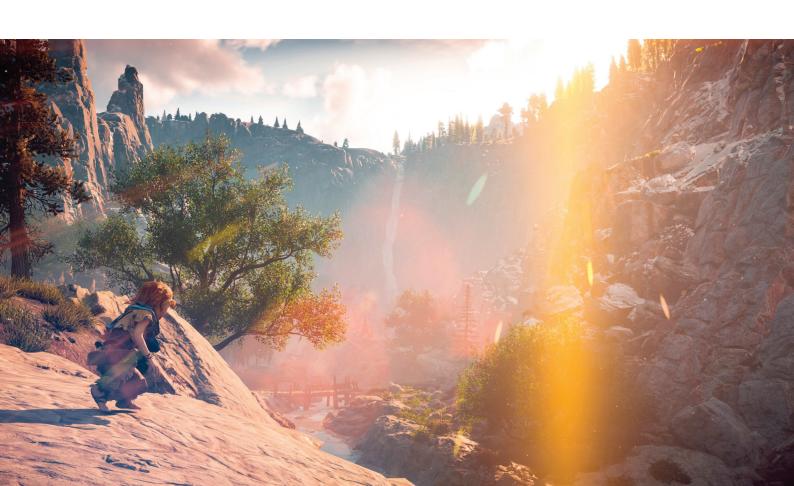
Personal addition: Something which I think is important to keep in mind, but has not been mentioned by Guerrilla or the users.

The three clusters that are not (yet) expanded upon (see next pages) are the following:

Unboxing experience: This is not a main search area since an unboxing experience alone does not result in a unique concept. The unboxing experience will be explored anyhow later in the process.

Static figurine: Most of Horizon Zero Dawn's current merchandise fall within this search area, and therefore this is not a desired search area for this project.

Everything else: Some loose ideas that cannot be arranged in clusters and do not have a lot of creative potential.



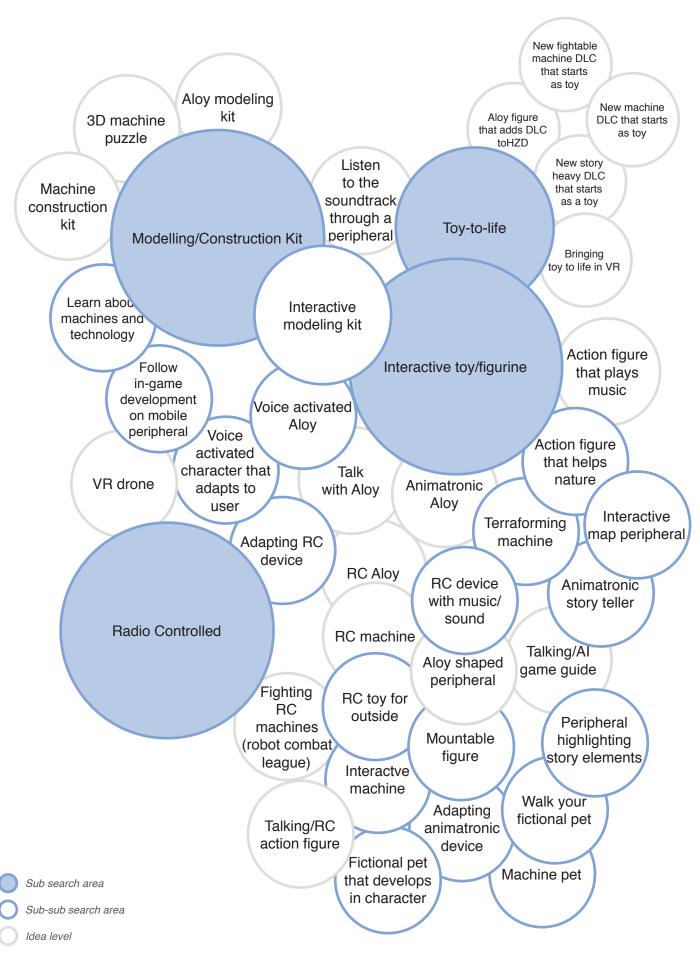
sejtiuntroddO Strengths	Geoengineering	Clean, safe and sustainable products	Self-care	Micro donations	Voice-activation	Augmented reality	Virtual reality	Mobile games	Furniture	Blind bags
Ashley Burch's voice acting			Motivational cool voiced by Ashley Burch	<i>i</i>)	Al personal assistant			Siri voiced by Ashley Burch		
Aesthetics							Reliving HZD's environment in VR	Real	HZD themed furniture	
Exploring	Real life ques	sts P	Real life quest	ts	(Real life quests with AR (Pokémor GO)	Exploring a VR environmen	life quests on mobile phone (Pokémon GO)		Seek hidden blind bags
Machines	erraforming machine Robotic lawn	Sustainable machine action figure	Machine themed beauty products			Machine in AR	Machine in VR	Mobile machine- focussed spin-off	Machine shaped furniture	Mystery figures of machines
Combat	mower						VR combat experience	Mobile combi experience	HZD punching bag	
Story				(Audiobook) (Relive story in VR			
Character developmen	nt				Voice activated character that adapts to user					
Soundtrack					Voice activate radio	ed			Radio or othe music player	
Diversity in characters	6	Products made out of diverse/foreign materials		Profit goes to beople in need			Experience different cultures in V		Diverse cultural furniture	Diverse characters ir blind bags
Aloy		"L	ook like Aloy	,,,	/oice activate Aloy	d Aloy in AR	Aloy in VR	Aloy locked mobile device		Various Aloy figurines
Themes (nature, derangement, geoengineering)	Focus on nature Grow	Focus on a sustainability	l 1 /	Profit goes to nature-focused charity			Experience nature and th loss of it in V	he loss of	Furniture	
Virtual reality	Geo- engineering \ experience		۱		Voice activated VR experience			Mobile game combined with VR		



ognojagnyo privodal	oliboxiiig experience	Toys for adults	Board games and puzzles	Construction toys	Remote controlled toys	Action figures	Interactive play	Connectivity	Animatronics	Toy-to-life	Peripherals	Pet play	Toys that teach
Vist appea packa	aling	Audiobook	Stunning poard game or puzzle	Interactive modeling kit		Falking action figure)	(Talking/RC action figure		Talking/Al game guide	/	Ashley Burch as teacher
Prochidde packa Mach them packa	en in aging nine ned) (3D machine puzzle	Machine construction kit		Machine figure Mountab figure	Interactve le machine	RC machine	RC machine	New	eractive map peripheral	Walk your fictional pet Machine pet	Learn about nature and the world Learn about machines and technology
Use for comba	at to ox	fiction	Combat ocussed board game Story heavy board game		RC machines robot combat league)	Story focussed action figure set	Pop-up store/in-store experience		Animatronic	fightable machine DLC that starts as toy New story leavy DLC that starts as a toy	Foiiow	ts	Learn to fight
Audiov unbo experi	xing	Comic	Audiovisual board game	\	Adapting RC device RC device with music/ sound	Action figure that plays music	HZD DJ set)	animatronic device) (in-game developmer on mobile peripheral Listen to the soundtrack through a peripheral	in charac	parn to make music
		R rated	HZD themed	Aloy modelir g kit Build your		Aloy action figure	Talk with Aloy) (Animatronic Aloy	Aloy figure that adds DLC to HZD	Aloy shape periphera		different cultures
			VR board game VR board game experience	own (mini) garden	VR drone	that helps nature)		Br	add DLC to HZD ring toy to life in VR) (VR pet	nature and the world Learn about HZD in VR



Search Area 1: Interactive Object



This is quite a broad search area, ranging from modelling kits to radio controlled devices to animatronic figures to toys with AI. The search area is focussed on toys with added functionality or interaction, opposed to Horizon Zero's Dawn current toy line-up. Some existing products that fit in this search area can be seen on the right, with some of them being explained in Appendix B.

The Toy-to-life section is made smaller because, although potential, it is a very risky area. Both Disney Infinity and LEGO Dimensions have been discontinued due to lacking sales. This does, however, not mean that toy-to-life cannot be explored; Skylanders is one of the best-selling game franchises ever, and Nintendo Amiibo is still very popular with many figures selling out instantly.



At Guerrilla they were quite short about this search area, they think this is a very interesting and potential search area with a lot of opportunities.

Users' opinion

All participants were positive about this first search area. Especially a building kit was something that all participants liked, but they differed in opinion about what to do with the model once built and finished: most people would like to keep it just as a display piece, and just a few of the participants were also interested in interacting with the built model. Something that over half of the participants mentioned was that they were very interested in a Horizon Zero Dawn themed LEGO set.

Furthermore, it was thought that this search area would attract a big target group.





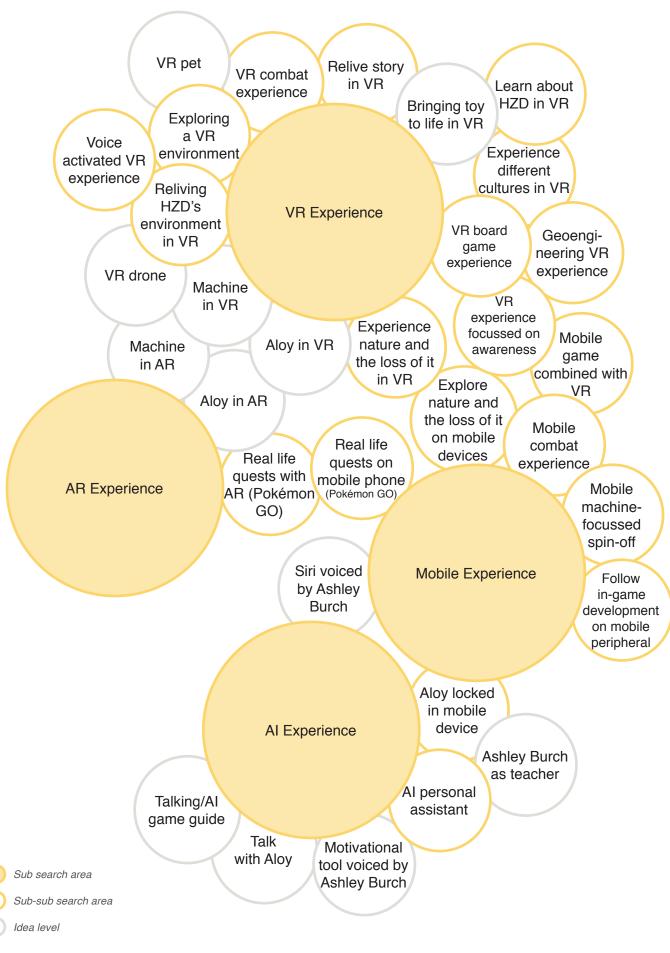


"without having seen the rest I think I can already tell that this is the coolest search area."

- Tino, 23



Search Area 2: Digital Experience



The second search area focusses on an experience within a digital environment, potentially supported by a physical product. This includes virtual and augmented reality experiences, but also experiences on mobile or artificial intelligence devices.

Examples (some can be seen on the right) for a VR experience are Lenovo's Jedi Challenge (Appendix B) and various games for PlayStation VR or Oculus Rift. Pokémon GO and (Snapchat's) facial recognition filters are examples of both an Al and mobile experience. Current Al experiences (overlapping with the first search area) include Apple's Siri, Amazon's Alexa and Sphero's Spider-Man (Appendix B).

This is a search area with a lot of new exploration possibilities, since most of the technologies are reasonably new, and therefore not yet used to their full potential. However, with the technologies still in its infancy, many (minor) issues are almost quaranteed to occur.

Guerrilla's opinion

At Guerrilla they get that a lot of people think that VR is the future, but it needs a fun implementation. The company is a firm believer in VR and sees the technology as one of their strengths - RIGS: Mechanized Combat League is a VR game developed by Guerrilla Cambridge.

Furthermore, since Horizon Zero Dawn takes place in some sort of parallel universe of Earth, Guerrilla does see opportunities in AR. However, the company sees this search area more as a marketing tool that fits well with a release of a new title.

Users' opinion

Opinions varied on this search area, but by many was mentioned that it is a bit sensitive of becoming a gimmick. Also mentioned by multiple people was that AI often does not work well, which makes it an uninteresting technology to them.

Furthermore, VR was seen as too short of an experience. Anyhow, VR and AR are still considered to be the most potential technologies within this search area, but the technologies need to have a really good implementation.



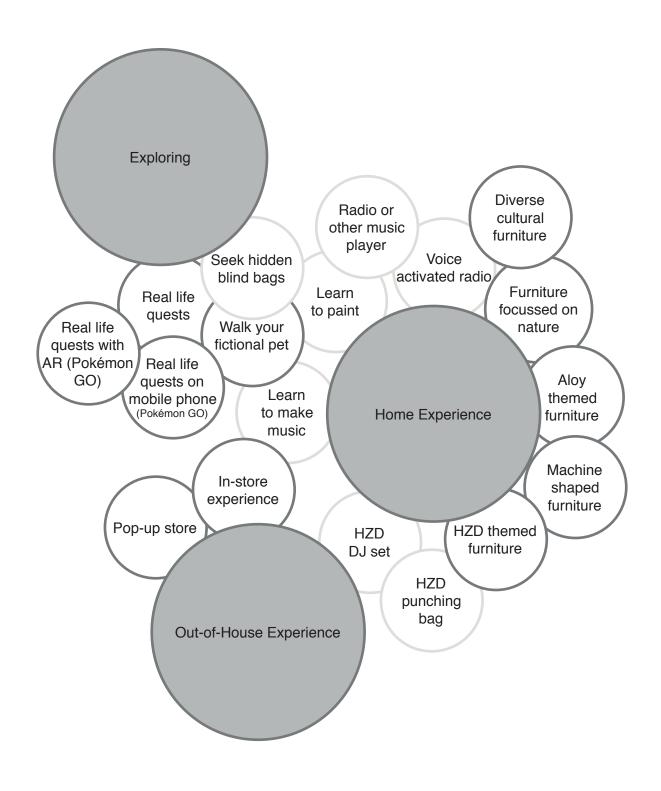
"VR is supposed to be immersive, but often, because it is such a short experience, it becomes a lot less immersive than a regular game." - Glenn, 22

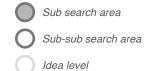






Search Area 3: Experience HZD in a Physical Environment





This search area focusses on translating Horizon Zero Dawn into an environment. This can be an experience outside, but also an in-house experience or an experience in any other public building or area. Examples are a tool to stimulate the exploration of nature, Horizon Zero Dawn themed furniture and an in-store (pop-up) experience. The latter one should most likely be combined with a new product launch.

Guerrilla's opinion

At Guerrilla they really like an outside experience. They would like it if Horizon Zero Dawn is being associated with going outside. The game also revolves around the beauty of nature.

User's opinion

In this search area a lot of people mentioned that they would like a life-sized sculpture of one of the machines. Not for in their own house, but more so for events. All of the participants liked the idea of a pop-up store, which could have a life-sized machine as a center piece.

In terms of furniture many participants saw possibilities. However, the furniture should not be too big or chunky; a table or sofa would be too big of an investment, and too big of a presence in a room. This would probably only attract a really small audience. In a pop-up store, however, tables and sofas could be valuable as decoration.

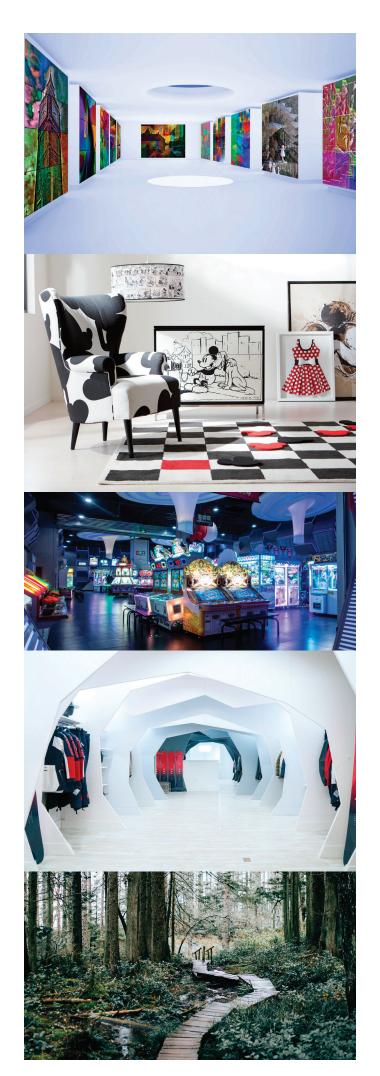
Furthermore, an outside experience was also received positive. One of the participants mentioned the idea of a Horizon Zero Dawn themed paintball area, another one mentioned an archery experience.

Personal addition

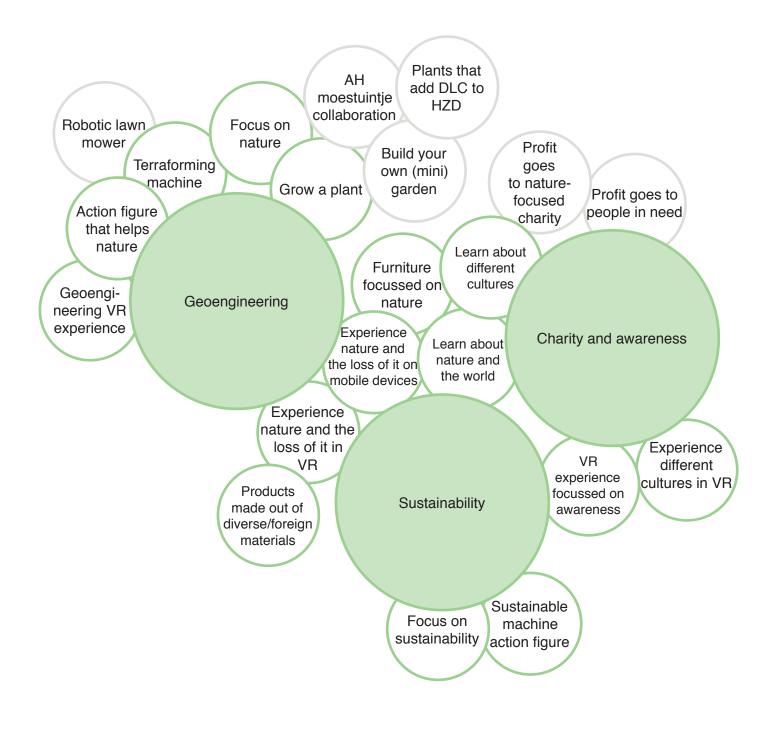
I would like to add that I believe that an in-store experience should be combined with a new product release.

"The robots leave a very big impression, I would not mind if they would be exhibited somewhere in a public area."

- Justus, 24



Search Area 4: Earth Support - Nature and Culture



Sub search area

Sub-sub search area

Nature plays a big role in Horizon Zero Dawn, but also in real life. A lot of (negative) environmental changes are occurring because of human impact. Furthermore, there is also a focus on different cultures, which resonates with Horizon Zero Dawn's different tribes with different values.

This search area includes raising awareness on the mentioned topics, but also aims at a sustainably produced product that helps the user to make an impact.

Once again, this search area can be combined with the first search area.

Guerrilla's opinion

This connects to going outside as mentioned in Search Area 3. Guerrilla has a big active cosplay community that goes outside to make their shots in nature. Overall, there is a strong connection between the game and nature, but gamers and nature are a difficult combination to catch.

User's opinion

Most participants were very positive about this search area. The ones that were less positive were more worried about difficulties about implementing this search area in a desirable product. It might come across as forced.

However, still a lot of participants saw great opportunities in this search area, it connects really well with Horizon Zero Dawn.

"I have always experienced merchandise as something capitalistic, and this is quite the opposite."

- Jordi, 23

"I think it is great if you can put something out there that can help people, and also put the name of your product on there. Especially because the game is about that, so there is no bullshit around it."

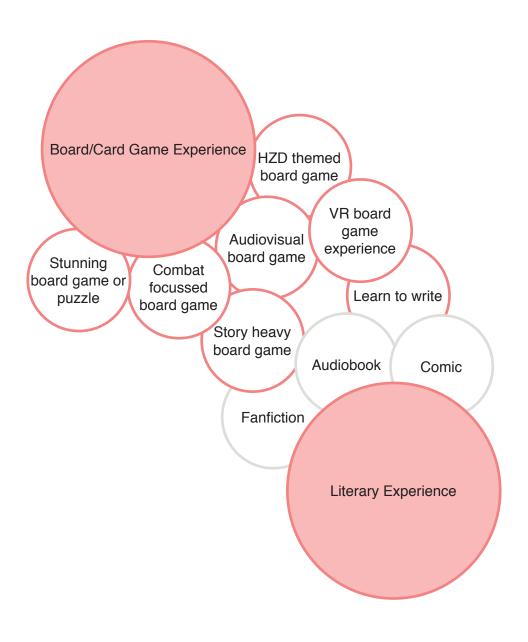
- Oscar, 30



"it brings Horizon's themes to life like no other merchandise can do." – Ilja, 33



Search Area 5: Board Game and Literary Experiences



The final search area focusses on board games and literary experiences. These are the more laidback solutions, not as action packed as the game.

The board game experience, obviously, hints at a Horizon Zero Dawn themed board game. The literary experience, on the other hand, includes a book or an audiobook. This could be a whole new story set in Horizon Zero Dawn's world with its beloved characters and/or with new ones, or it could be Horizon Zero Dawn's existing story in book form.

Guerrilla's opinion

According to Guerrilla, board games are a very potential area to explore. It fits Horizon Zero Dawn's current audience well, and miniatures of certain board games resonate well with the collecting effect. The company is absolutely interested in board games and is curious about all the different possibilities within this search area. It is a segment in which they think they could and should go. However, they do think board games are a bit of a nerdy segment which will probably not attract a new audience.

In terms of books, Guerrilla sees potential in romans.

User's opinion

Most participants saw potential in a board game, even the ones that generally dislike board games. It is believed to have a lot of potential for Horizon Zero Dawn.

The participants were also quite positive about literary experiences, both novels and comics. A lot of Horizon Zero Dawn's massive world is untold in the game, and a book could expand on that. However, one of the participants mentioned that a novel should probably release before the game instead of after, a comic book is more likely then. The biggest worry is that books could, eventually, milk the franchise.

Personal addition

I think this search area has a lot of potential, but I am afraid that it ends up being another "safe" and predictable merchandise product, something which this project is aiming *not*l to be.





"When I buy merchandise it is because I want to know more about certain things or because I want to be more immersed in a certain world, a book can help with that."

Lloyd, 30



Conclusion

Based on the various opinions (Guerrilla's and users' opinions and personal additions) stated about the search areas, a final search area can be chosen. Search area 1 (Interactive Object) and 4 (Earth Support – Nature and Culture) were received most positive, and therefore this project will continue with a combination of the two. All parties found search area 1 to be the coolest with the most potential. Search area 4 seemed to be the most fitting for Horizon Zero Dawn and it makes an interesting challenge.

The chosen combination of search area 1 and 4 means a focus on an interactive physical product that touches upon environmental or cultural matters.

Furthermore, search area 2 (Digital Experience) was perceived as cool, but niche. This does not mean that none of search area 2's elements can be implemented, it just means that a digital experience will not be the primary focus in the upcoming ideation phase.

Search area 3 was also received positively by all

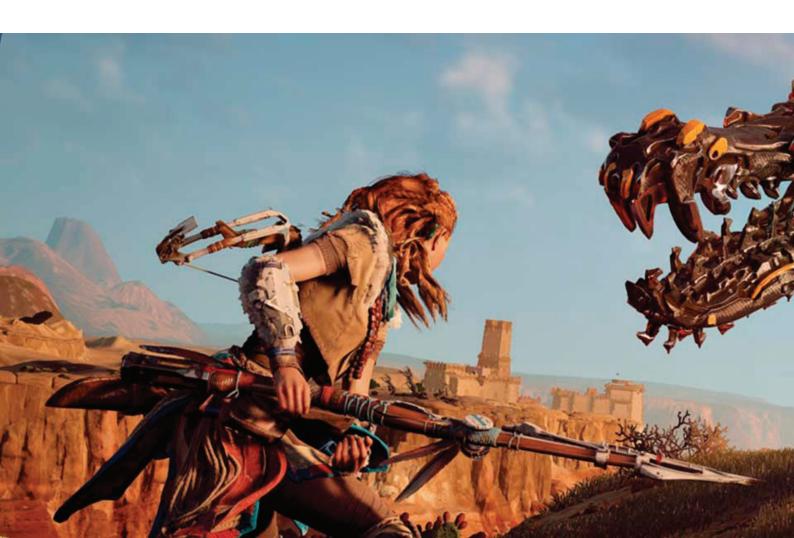
parties, but this search area makes more sense for the release of a new title. On top of that, the outside experience, about which Guerrilla was most excited, is also part of the chosen search area, which even goes a bit deeper in the topic of nature.

Finally, search area 5 (Board Game and Literary Experiences) was also received positively but falls in line with Horizon Zero Dawn's safe current merchandise line-up. It feels like a natural fit for Horizon Zero Dawn, but not like a natural fit for this project.

Search Area 1: Interactive Object

CHOSEN SEARCH AREA Search Area 4: Earth Support

- Nature and
Culture



Design Brief

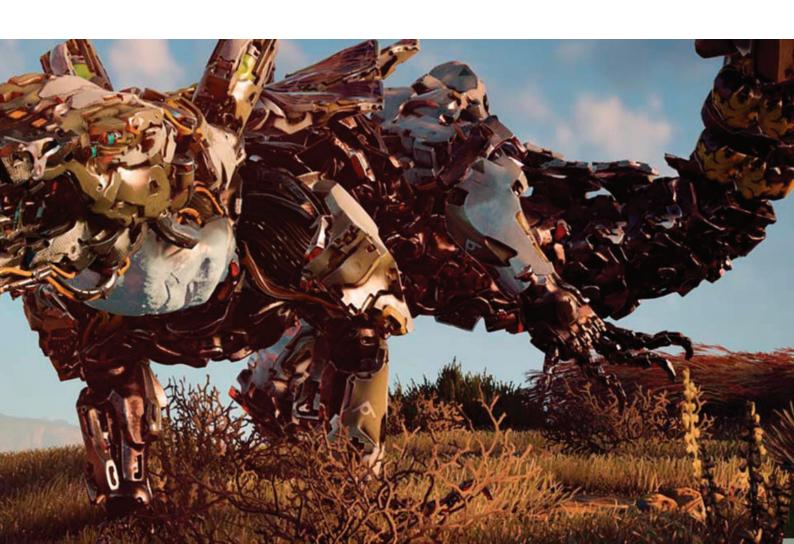
Horizon Zero Dawn is a stand-alone single player videogame without sequel or online possibilities, making the game's experience stop once the game is finished. Usually, there are multiple years between Guerrilla's game releases, which will result in Horizon Zero Dawn slowly disappearing out of the spotlights. Merchandise is one way to keep the franchise alive and relevant, however, the strong themes and the unique experience of Horizon Zero Dawn are not translated well in the current merchandise lineup.

To recap, the merchandise that will be designed needs to do three things:

- 1. It should reflect the chosen search area by having a positive impact on the environment and/or on humanity;
- 2. It should keep the Horizon Zero Dawn title alive and relevant until Guerrilla releases a new game;
- 3. It should reflect Horizon Zero Dawn by extending the game's themes and experiences.

This brings us to the following design brief:

Design a Horizon Zero Dawn themed product that has a positive impact on the environment / humanity, while also maintaining IP awareness by extending the game's experience and themes beyond the game until Guerrilla releases a new game.







Preliminary Ideas

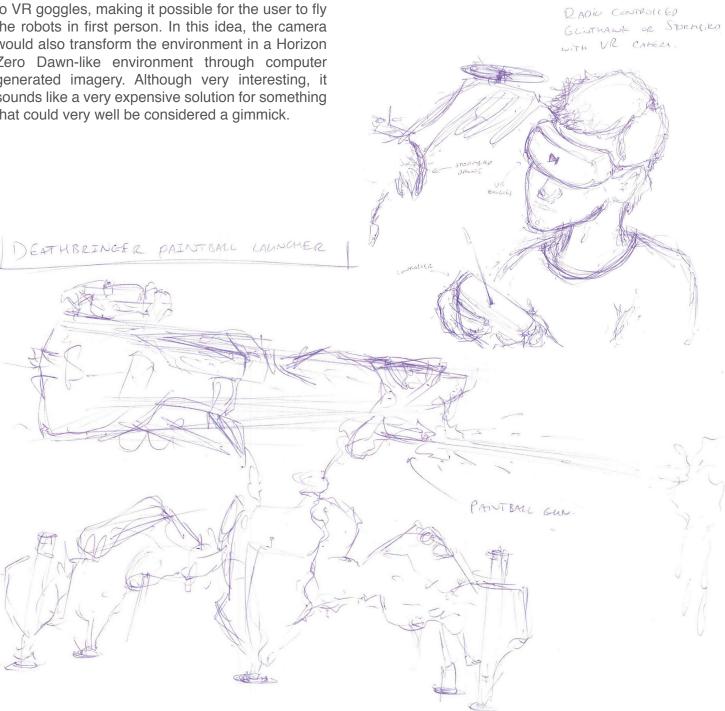
Before the ideation phase, some preliminary ideas were already generated. These mainly included generic ideas such as action figures, LEGO sets, and radio-controlled robots.

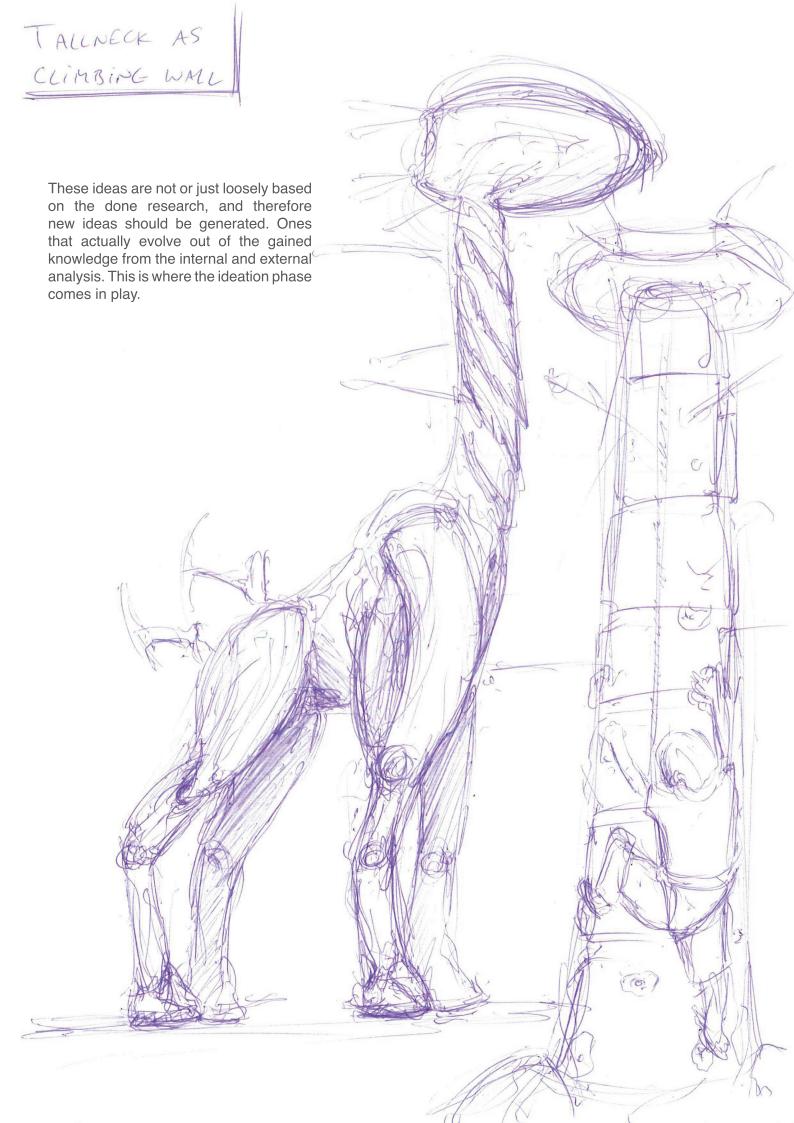
On this spread some of the more interesting ideas are highlighted, of which most, unfortunately, are very difficult to realise or to keep affordable.

On this page, right: A radio-controlled drone shaped like a Glinthawk or Stormbird, with a camera attached to it. The camera broadcasts live footage to VR goggles, making it possible for the user to fly the robots in first person. In this idea, the camera would also transform the environment in a Horizon Zero Dawn-like environment through computer generated imagery. Although very interesting, it sounds like a very expensive solution for something that could very well be considered a gimmick.

On this page, bottom! Paintball tracks are often decorated with military props; tanks, airplane wrecks, crates, etcetera. For this idea, a life-sized Deathbringer is part of a paintball track, also firing paintballs at passersby.

On the right page: In Horizon Zero Dawn Aloy has to climb Tallnecks in order to overwrite them, which will reveal a part of the map. Climbing a Tallneck could be realised in real life by creating a Tallneckshaped climbing wall.





Interaction Vision

Awe-inspiring - Immersive - Conscious

Horizon Zero Dawn's current merchandise does not hold any active interactions. Most of the items are display pieces or wearables, creating a proud, but static interaction.

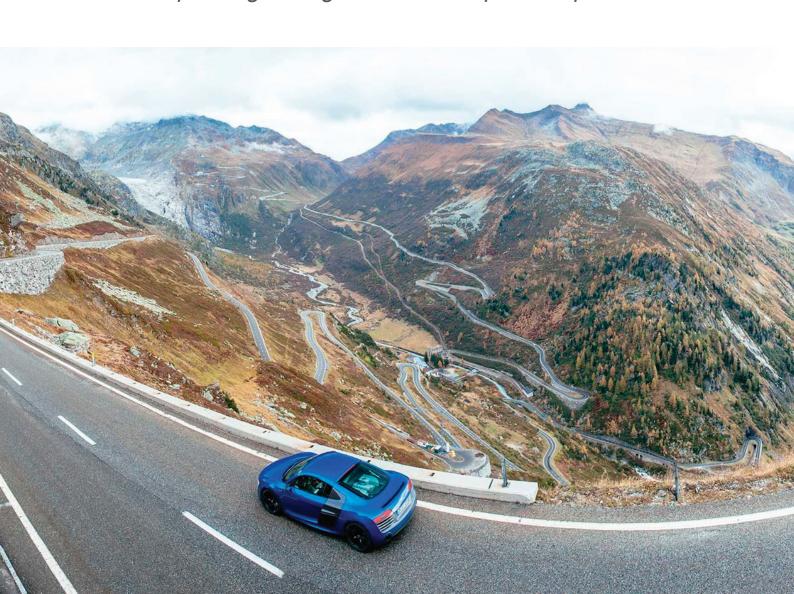
In this project it is important to translate the interactions that players have with the game into a physical product. Therefore, the two chosen interactions are **awe-inspiring** and **immersive**. Awe-inspiring refers to the visual aesthetics of Horizon Zero Dawn, which are praised by both critics (see reviews in section "About Horizon Zero Dawn") and players (Appendix F). Immersive is another term that was often mentioned in the interviews (Appendix F), and something which is important in any videogame, movie or fantastical environment. Furthermore, to also include the chosen search

area, a third interaction is chosen: **conscious**. It should be clear for the final user that he/she or the product has a positive impact on the environment or humanity.

To gain a better feeling of the interaction vision, an analogy is formulated:

Like passing through the Swiss Alps in a sports car. Driving a sportscar, feeling the grip of the tires on the tarmac while cornering, and holding the steering wheel tight while pushing the car to its limits ensures a feeling of **immersion**. This all while still staying **conscious** about the **awe-inspiring** environment, the capabilities and limits of the car, and the safety of the passengers.

Like passing through the Swiss Alps in a sports car



How To...

In order to gain more inspiration regarding the topic, a 'how to...'-session was organised. The session was conducted with six different people, all in their twenties, with a background in Industrial Design Engineering, making them all familiar with the 'how to...'-method. As an introduction, the 2015 E3 trailer of Horizon Zero Dawn was shown to the participants. Every participant received an A3 sheet of paper (six sheets in total) with a 'how to...' question formulated on it. Within three minutes they had to write down or draw as many ideas as possible; quantity over quality. After three minutes all sheets were passed through, where again the participants received three minutes to write down ideas. This ritual was repeated until all 'how to...' questions were tackled by every participant – six 'how to...' questions by six participants.

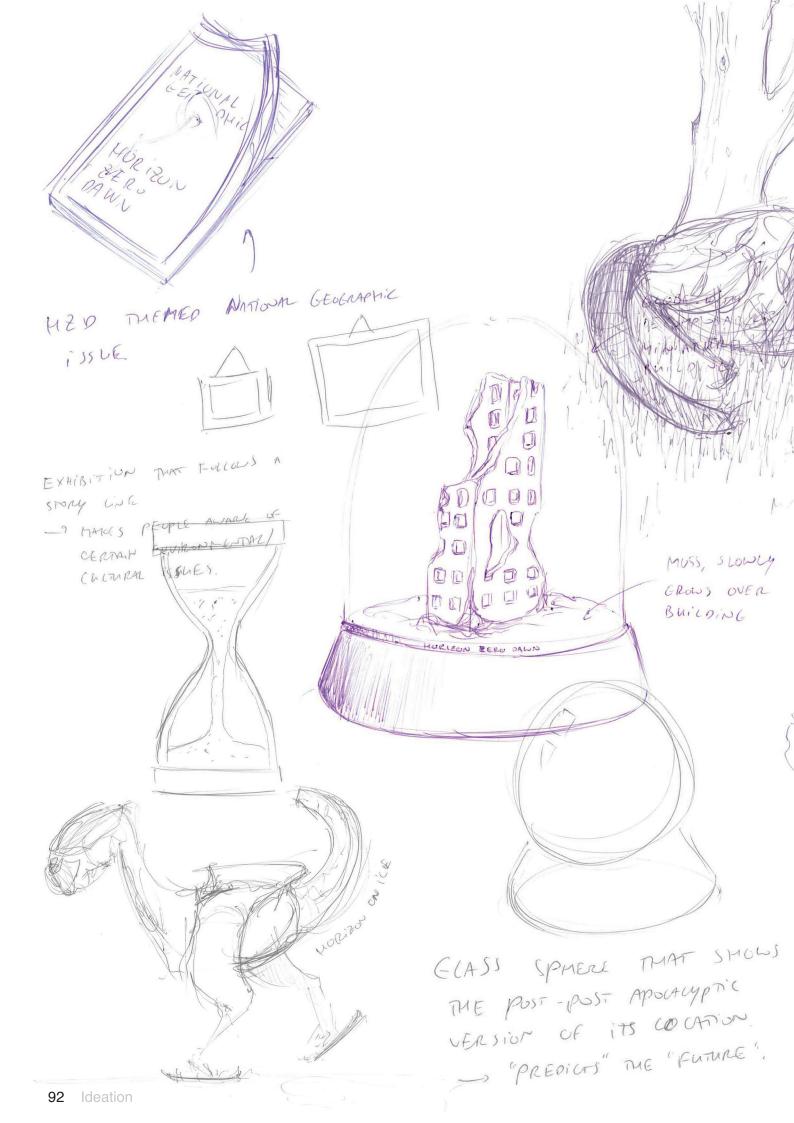
The following questions were asked:

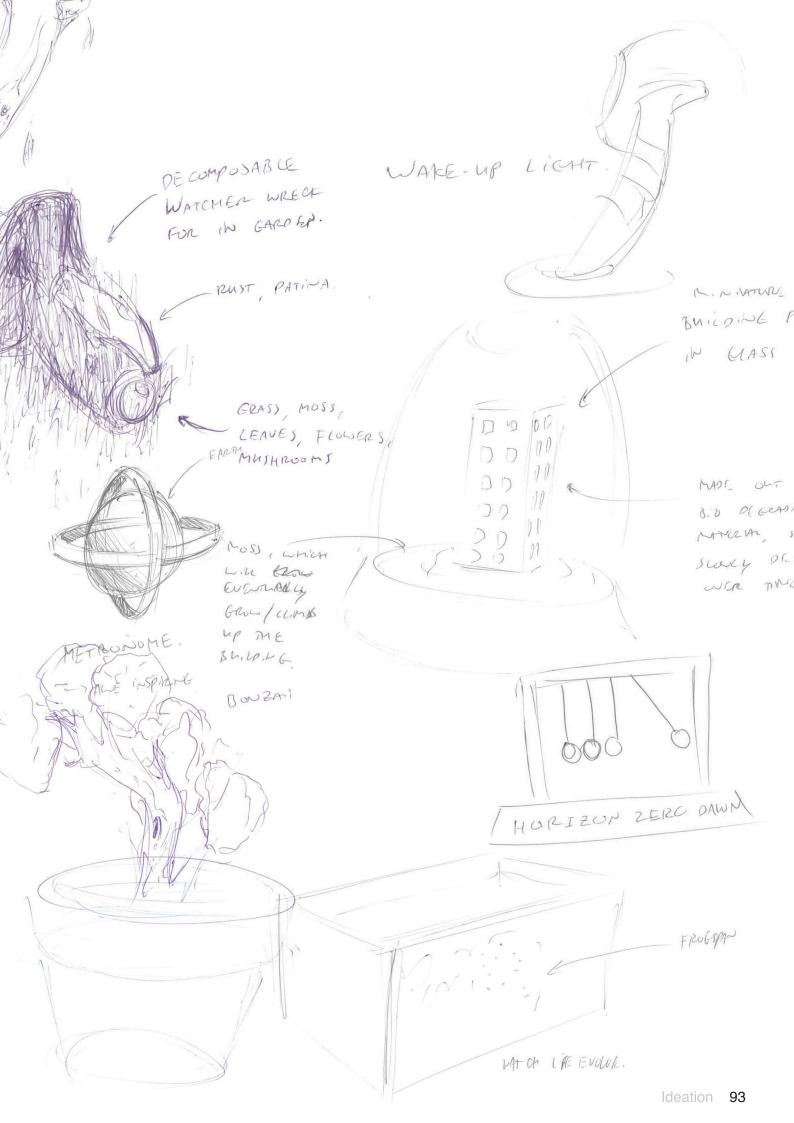
- How to astonish people with a physical object?
- How to spread consciousness/become conscious?
- How to make an impact on the environment and humanity?
- How to translate digital into physical?
- How to stimulate exploration?
- How to immerse in a fictional environment?

All filled in 'how to...' sheets can be found in Appendix G.

After analysing all 'how to...' sheets new ideas were iterated. Some of the ideas can be found on the next page spread.







Direction

After analysing the various ideas on the 'how to' sheets, more concrete ideas started to develop. Where at first all ideas seemed to be far from each other, some ideas appeared to have more potential. One of these potential ideas, which also sparked the interest of both Guerrilla and multiple other people, was a biodegradable miniature city within a glass globe. Inside the globe moss would slowly grow, overtaking the city, while the city itself would slowly degrade, representing nature reclaiming Earth.

This is also an apparent topic in Horizon Zero Dawn, where plants have grown over the cities of the Old Ones, forming the beauty of the Ruins. The 2015 E3 trailer of the game visualises this very well, the images on the camera roll are screenshots taken from this trailer.

When looking further into the miniature city idea and discussing it with fellow students, it became apparent that there are companies that produce small enclosed self-sufficient ecosystems in glass jars. In these jars various plants and mosses are planted, which re-use the water they evaporate themselves. New plants and even mushrooms and microfauna can suddenly appear inside the jar, making it an ever-changing display piece.

The whole idea of an ecosystem has a lot of potential for merchandise. It fits well within the scope of this project and highlights some of Horizon Zero Dawn's themes very well.

#urbanjungle



This direction can be backed by the growing trend of indoor plants. Rääbus (2018) states that the trend, originally from the 1970s and 80s, is back. With many people living in apartments without a garden, indoor plants are a good solution to still connect to nature on a daily basis. The trend is growing fast, especially among millennials, with indoor plants slowly overflowing Instagram. Not only are indoor plants aesthetically pleasing, they also boost air quality and mental wellbeing (McCormack, 2017).











Substrate

The substrate layer is often soil based, and can be mixed with fine bark, mosses, and/or sand, among others.

Charcoal layer

The charcoal layer acts as a purification element that cleans the water just before it passes down into the false bottom. Furthermore, the charcoal layer inhibits mold growth, promotes cleaner air quality, provides additional surface area for micro fauna, and provides nutrients

For this layer various types of coals can be used, such as horticultural coal, cleaned bonfire coal, lump wood charcoal, willow/vine charcoal, or activated carbon. However, charcoal briquettes should never be used as these contain chemicals which will create an unhealthy environment in the terrarium.

Mesh barrier

The mesh barrier makes sure that nothing mixes with the false bottom. Ideally it should be made out of a synthetic material to promote its longevity. Examples are dried moss, carbon fiberglass window screen, weed blocker or garden fabric (not optimal), filter floss or polyester fluff, or plastic poked full of holes for those on a tight budget. Materials such as metal screen cannot be used, as these will rust or corrode.

Drainage element

The drainage element, or false bottom, will keep water separate from the other layers in the terrarium. It will also create an optimal water cycle and keep the substrate from becoming putrid. The false bottom is a key component that ensures the long-term success of any terrarium.

of any terrarium.

The false bottom can be made out of gravel, large pebbles or stones (which are difficult to distribute evenly), hydro balls, or unconventional items such as marbles. The open spaces of this layer create an optimal water cycle.





Inspiration Board

Mother Nature reclaims what is hers



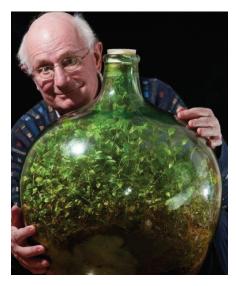




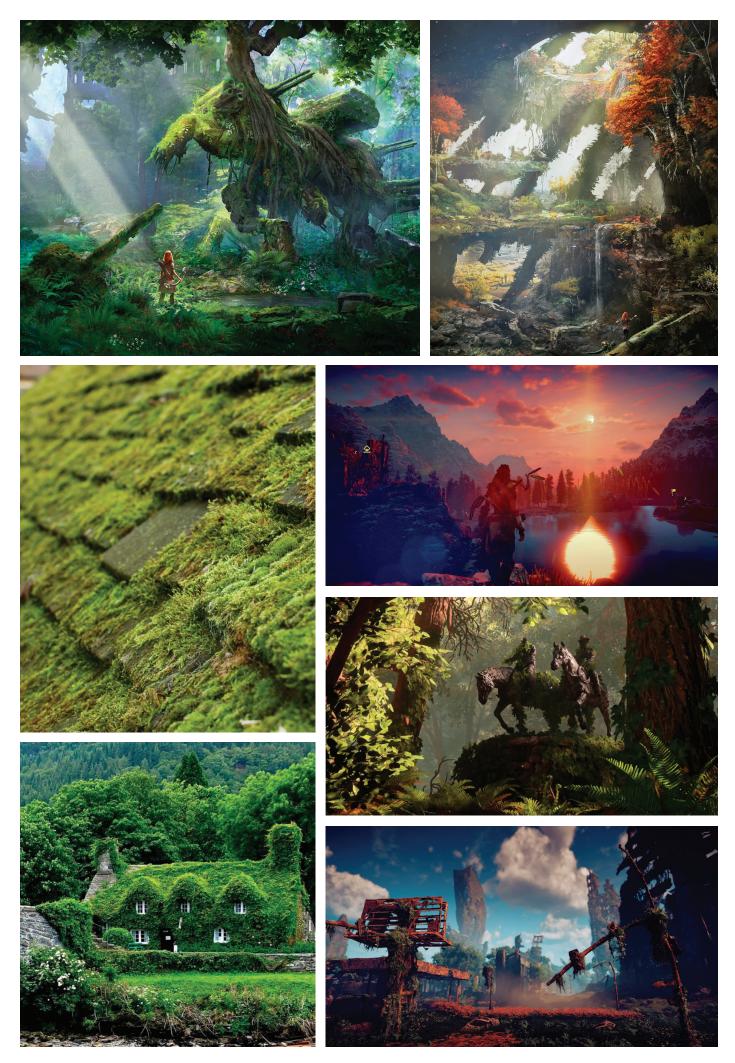












Visiting Spruitje,

Spruitje,

One of the better known brands in the Netherlands that produces jarred ecosystems is Spruitje,. The Amsterdam based company evolved out of a love for both nature and sci-fi, which makes it fit well with Horizon Zero Dawn. Spruitje, produces a variety of plant-focussed products, which are currently being sold in over 50 different stores, located in the Netherlands, Belgium, Germany and France. What makes Spruitje, stand out is the inclusion of a lamp in most jars, including the humongous Big Brother – a 77 cm high jar with a diameter of 47 cm.

When approached via Instagram, Spruitje, was very eager to cooperate, and a visit to their workplace was quickly scheduled.

Although the visit did not provide a whole lot of new information (a lot of online research had already been done beforehand), actually seeing all the jarred ecosystems and speaking to someone who works with them on a daily basis was very inspiring. By luck someone had just dropped off his/her four-year-old Big Brother of which the plants "needed" a trim (this can be done by the buyer him/herself, but Spruitje, also offers this as a service). Seeing this Big Brother gave a good indication of how well plants grow inside a closed ecosystem. It also shows that jarred ecosystems can survive for multiple years — this four-year-old one had still a lot of life in it.

To top it off, Spruitje, gave one of their Pickles (it is named like this because it is literally an ecosystem in a pickle jar) for experimenting and prototyping purposes.

Day 1



4 years later







Big Brother €399,00 - €434,00 H 77 cm - Ø 47 cm



Pickles €175,00 H 37 cm - Ø 15 cm



Little Brother €125,00 - €160,00 H 40 cm - Ø 26 cm



Edison's Garden €225,00 - €249,00



H 35 cm - Ø 25 cm

Some, but not all of Spruitje,'s products. Only their enclosed ecosystems are included here.

Mystery Mini by Funko of Sylens placed inside the Pickles already makes it slightly Horizon Zero Dawn-esque.

Morphological Chart

A morphological chart helps coming up with new and creative ideas by defining different solutions for various parameters. One solution of every parameter has to be chosen, with all chosen solutions getting combined to create an idea that would normally not have been thought off. Please note that this morphological chart revolves around a self-sustaining ecosystem in a jar, as described before. A bigger version of the morphological chart can be found in Appendix H.

It is possible to select the different solutions yourself, trying to come up with unique combinations. However, in this case an online randomizer was

used (random.org) to create truly random and unbiased combinations.

By filling in A to H (the solutions) seven times (the parameters) on random.org, the randomizer will generate a random list containing all the letters. The first seven letters will be the chosen combination of solutions.

In case of the list pictured on the bottom right: an ecosystem that supports a PlayStation. It will not have any visuals but will make use of coloured lights and vibrations. The ecosystem will contain a humidity sensor and a decorative cave.

	А	В	С	D	E	F	G	Н
Positioning	Standing straight	Hanging	Floating	Leaning	Supporting	Supported	Moving	Upside down
O_A D Shape	Traditional	(Mason) jar	Robot	PlayStation (support)	Unconventional	Furniture	Square	Round
Visuals	Illustration/ art	Live stream	Slideshow	Video	Photo	Animation	Videogame	None
- Lights	Full light	Spot	Disco light	From within	Grow light	Coloured light	Stroboscope	None
Motion	Animation	Life	Moving figures	1 Wind	Radio controlled	(Sipration	Sound	None
((p)) Sensors	Humidity	Light	Time	Camera	Motion	Pressure	Heat	None
Props	Figurine(s)	Miniature buildings	Cave (Cauldron)	Cloud	Driftwood	Rocks	Practicalities	None

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RANDOM - ORG

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True Random Number Service

Do you own an iOS or Android device? Check out our app!

List Randomizer

This form allows you to arrange the items of a list in random order. The randomness comes from atmospheric noise, which for many purposes is better than the pseudo-random number algorithms typically used in computer programs.

Part 1: Enter List Items

Enter your items in the field below, each on a separate line. Items can be numbers, names, email addresses, etc. A maximum of 10,000 items are allowed. Please don't enter anything you would consider confidential (here's why).



Drawings **Web Tools Statistics Learn More**

RANDOM.ORG

Search RANDOM.ORG Search

True Random Number Service

Do you own an iOS or Android device? Check out our app!

List Randomizer

There were 56 items in your list. Here they are in random order:

- 2. D
- 3. H
- 4. F
- 6. A
- 7. C
- 8. C 9. D
- 10. B
- 11. B
- 12. E 13. E
- 14. C
- 15. B
- 16. G 17. A
- 18. C
- 19. H
- 20. G
- 21. E 22. D
- 23. B
- 24. G 25. E 26. C 27. A
- 28. A

On this page spread, two ideas, which were generated with help of the morphological chart, are highlighted.

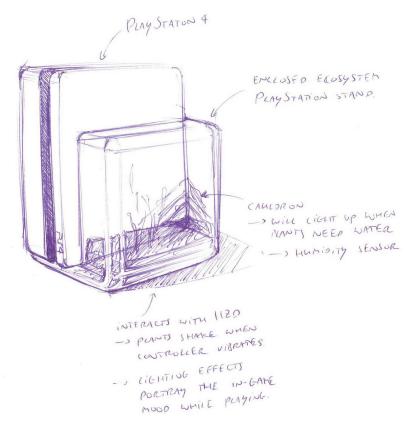
The first one (green line) is an interactive stand for PlayStation 4. The ecosystem interacts with Horizon Zero Dawn whilst the game is being played. When the controller vibrates, movement will occur inside the terrarium as well. Furthermore, different coloured lights portray the in-game mood, with for example red indicating that danger is approaching. On top of that, a decorative Cauldron is placed inside the ecosystem, which, thanks to a humidity sensor, will light up once the plants need water. However, two problems occur with this idea. First of all, the ecosystem is shaped to fit specifically around a PlayStation 4. Since the PlayStation 4 will eventually be replaced (assumption), and since the PlayStation 4 already has multiple differently shaped models, the ecosystem will most likely become obsolete once a successor is announced. It is also not a shape that is likely to look pleasing

when it is not supporting a PlayStation. This brings us to the second problem: if the plants happen to die and the ecosystem is emptied, the owner will be left with an undesirable weirdly shaped product.

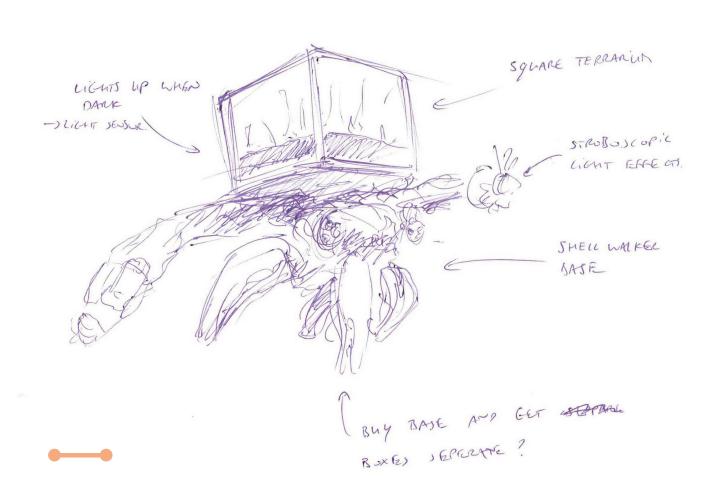
The second idea (orange line) is a figurine of a Shell Walker. The crate on its back is the ecosystem, which will light up when the light sensor detects darkness. Just like the first idea, the product reacts to Horizon Zero Dawn. The figurine uses stroboscopic light effects to strengthen the game's experience. It may also be possible to create a figurine with interchangeable crates, so the ecosystem can be switched for something else (collect all the crates!).

A product that is interactive with Horizon Zero Dawn reoccurred often while using the morphological chart. This makes it seem like an obvious choice to continue in this direction. It also fits well within the search area, design brief, and interaction vision.

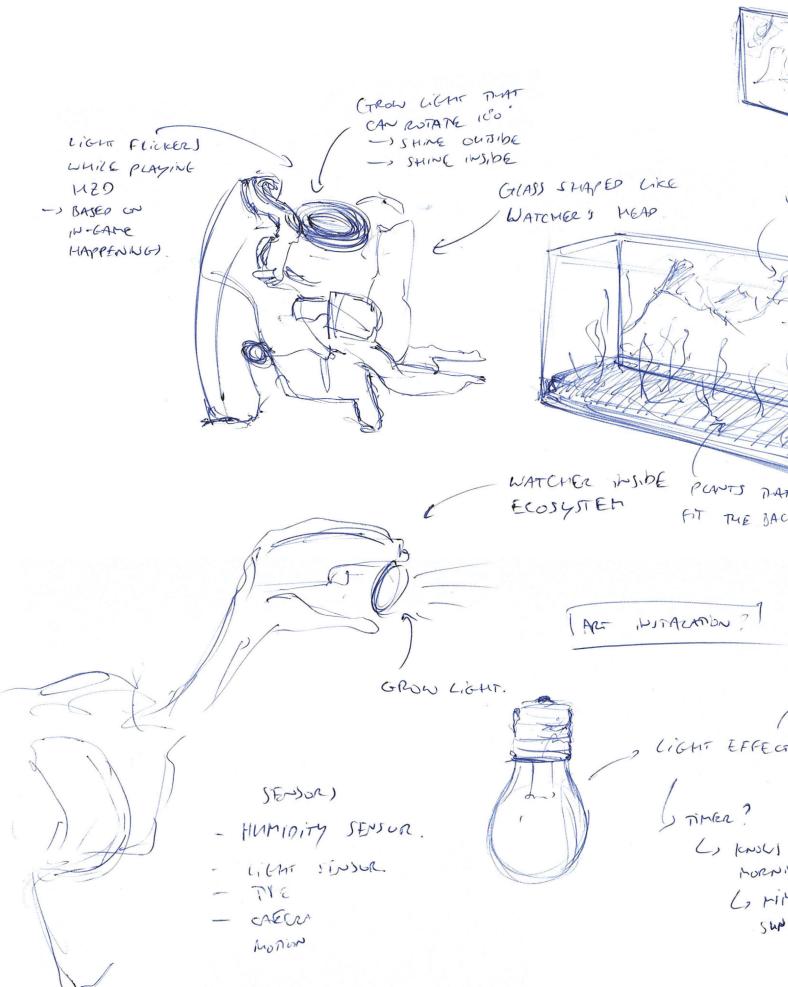
	А	В	С	D	E	F	G	Н
Positioning	Standing straight	Hanging	Floating	Leaning	Supporting	Supported	Moving	Upside down
O D Shape	Traditional	(Mason) jar	Robot	Play tation (support)	Unconventional	Furniture	Square	Round
Visuals	Illustration/	Live stream	Slideshow	Video	Photo	Animation	Videoga le	None
Lights	Full light	Spot	Disco light	From within	Grow light	Colc ared light	Stroboscope	None
Motion	Animation	Life	Moving figures	1	Radio controlled	Vibration	Sound	None
((p)) Sensors	Humidity	Light	Time	Comera	Motion	Pressure	Heat	None
Props	Figurine(s)	Miniature buildings	Cave (Cauldron)	Cloud	Driftwood	Rocks	Practicalities	None

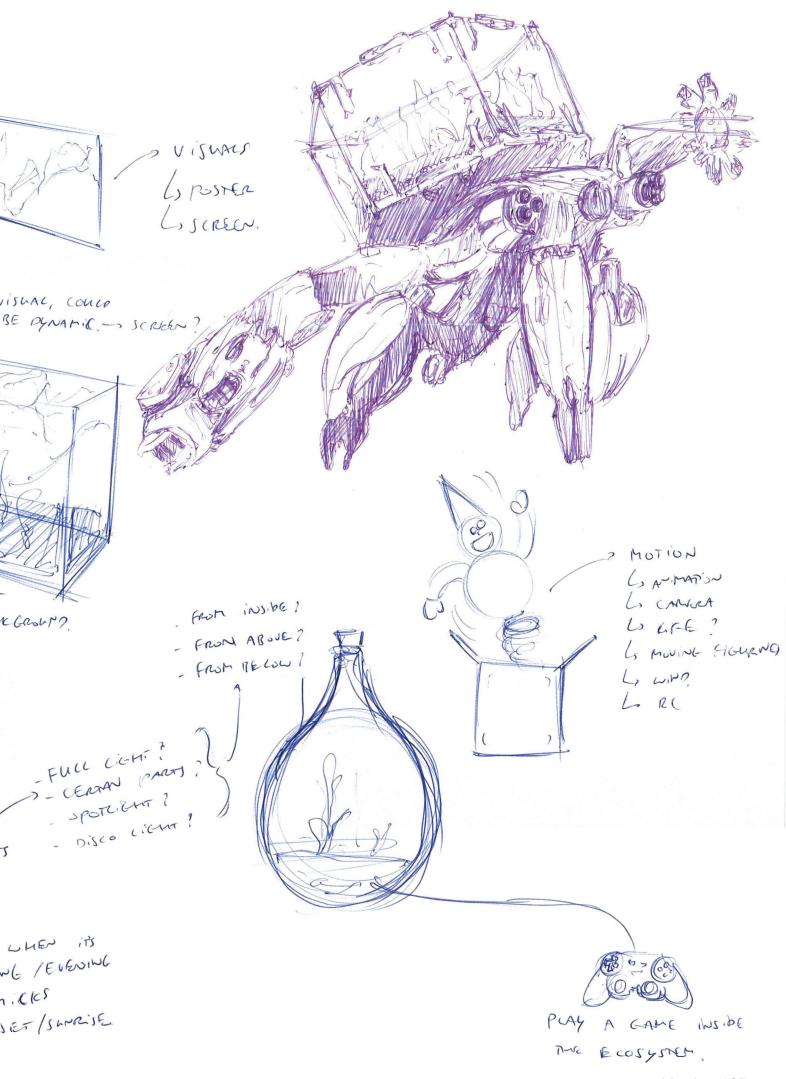


- SHAPE NOT USABLE AFTER PLAYSMATION 5 CONES OUT - WHEN PLANT DIE SHAPE WON'T LOOK NICE



From all of the ideas (some shown on this spread), the three ideas that are best fitting according to the list of requirements and wishes (Appendix I) will be further developed into concepts.









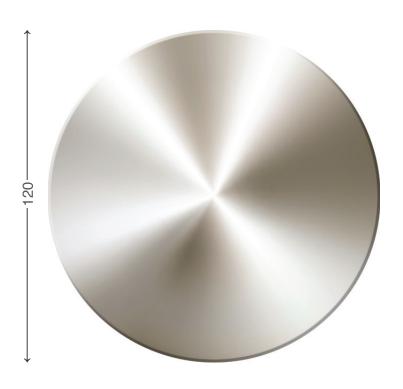
Concept 1 - Collectible Ecosystem

For the "regular" fans of Horizon Zero Dawn

Out of (a combination of) all the ideas, three different concepts were developed. One for the "hardcore" fans, and two more subtilized concept for the "regular" fans.

The first subtilized concept is focused on the fans that love the game but are not die-hard fans or collectors of the franchise. For this target group the price should stay relatively affordable, that is why a mass retail price of less than €100 has been decided upon.

The concept revolves around several relatively small self-sufficient ecosystems (H 15 cm - Ø 12 cm). Besides plants (unique to every variatoin), every ecosystem contains one of Horizon Zero Dawn's beloved elements. These could be characters, robots or ruins, and give buyers the chance to choose one or multiple of their favourite Horizon Zero Dawn themed ecosystems. Of course, collectors are free to buy all different variations to complete the set.



Rough retail price estimation

- Glass jar – based on readily €5-15 available jars.

- Plants – Spruitje, sells a refill for €20-30 the Pickles for €50, this concept is much smaller.

- Figurine – similar to the TOTAKU €10-15 figurines.

- **Total** (depending on product €35-60 quality)

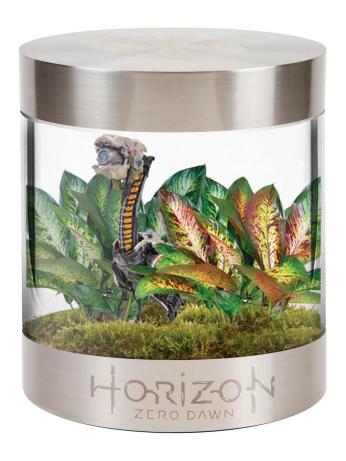


108 Concepts ← 120 →









Concept 2 - Introductory Ecosystem

For the "regular" fans of Horizon Zero Dawn

The second subtilized concept is also aimed at the "regular" fans and is a bit subtler than the first concept. The concept is more focussed on those people that are looking for an interesting enclosed ecosystem than those that are looking for a unique piece of Horizon Zero Dawn memorabilia (although the second group is also more than welcome to buy the product). Because of this, this concept should ideally be available in plant stores.

Just like the first concept, the main feature of this concept is an enclosed ecosystem, comparable in size to the Spruitje, Pickles (H 30 cm - Ø 15 cm). Compared to the first concept, the Horizon Zero Dawn elements will be less apparent. Besides plants, the ecosystem will only contain a miniature setting of the game (ruins), which is slowly being overgrown by plants. Of course, Horizon Zero Dawn logos will flaunt the jar, making it extra clear to the user that this is a collaborative effort with the game.

Additional to Concept 1, this ecosystem will have an inner light. The light will shine from inside the ruin, with the power supply being located underneath it. The light can be charged on a magnetic charging dock, which makes it possible to enjoy the ecosystem wireless.

The used light should produce little to no heat in order to not have any influences on the eocystem; it is purely aesthetic. A bright LED is recommended. This applies to all lights that are mentioned in this thesis for any of the concepts.

Rough retail price estimation

- Jar + ecosystem - similar to the	€125-175
Spruitje, Pickles.	
- Ruins – based on 6.5" figurines.	€20-40
- Magnetic charging dock	€10-30
- Total (depending on product quality)	€165-245



Mother Nature...



...slowly reclaims...



...what is hers

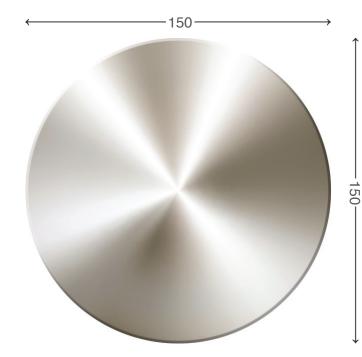


Magnetic charging dock (top view)



HORIZ-ON









Concept 3 - Shell Walker Ecosystem

For the "hardcore" fans of Horizon Zero Dawn

Just like the other concepts, the Shell Walker Ecosystem revolves around a self-sufficient enclosed ecosystem. To make the connection with Horizon Zero Dawn even more apparent than the rest, the ecosystem is placed inside the (now transparent) crate of a Shell Walker scale model. Not only does it look cool, it also shows that Horizon Zero Dawn's machines are one with nature.

Three points are highlighted to better explain the concept.

1. When playing the game

The shell walker interacts with Horizon Zero Dawn through WiFi by reacting on certain in-game events with e.g. light, sound, and/or vibration. This should create a more immersive experience while playing Horizon Zero Dawn.

2. When not playing the game

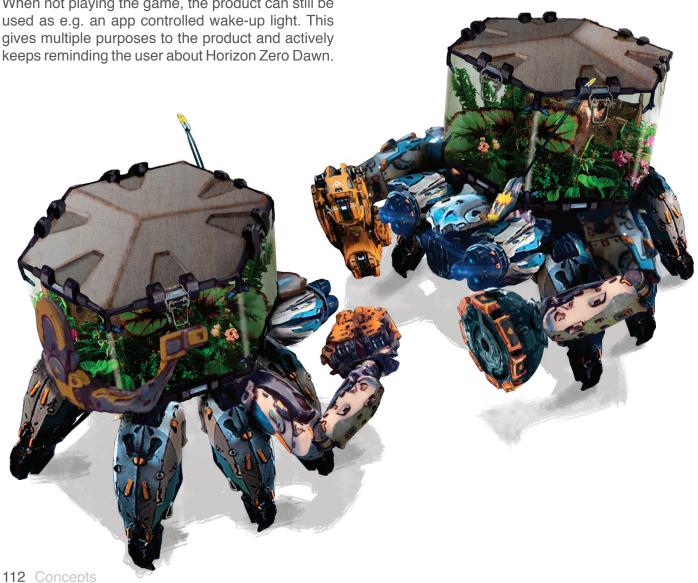
When not playing the game, the product can still be

3. When the plants have died

Obviously, it is not the intention that the plants die, but it could happen over time. In this case the crate can be emptied and used however the user likes. Some of the possibilities are a storage box, a candy jar, an aquarium, or to try again with new plants.

The Shell Walker Ecosystem is aimed at the diehard fans of Horizon Zero Dawn, and will be a limited release

Since this concept fits best with the whole story of this thesis, the decision has been made to mainly focus on this final concept. Although the other two concepts will also be validated and developed a bit further, it is only the Shell Walker ecosystem that (during the course of this project) will receive a detailed prototype and an unboxing experience.



1:1 scale orthographic views can be found in Appendix J



- **Total** (depending on product quality)

- Lights - estimation.

for the Pickles.
- WiFi element

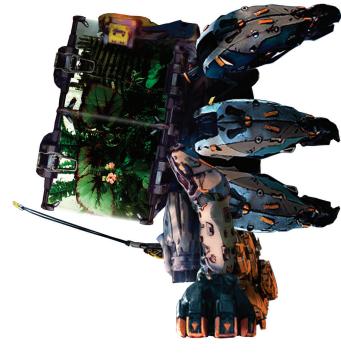
€10 €15 **€280-400**

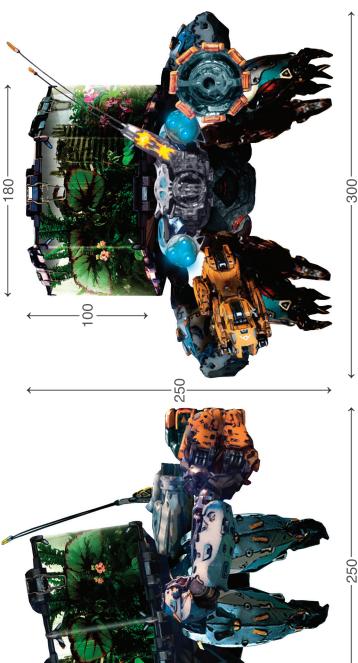
€200-300

Rough retail price estimation - Shell Walker – similar to the

€25 €50

Thunderjaw statue, but moveable.
- Custom jar – estimation.
- Plants – Similar to Spruitje,'s refill







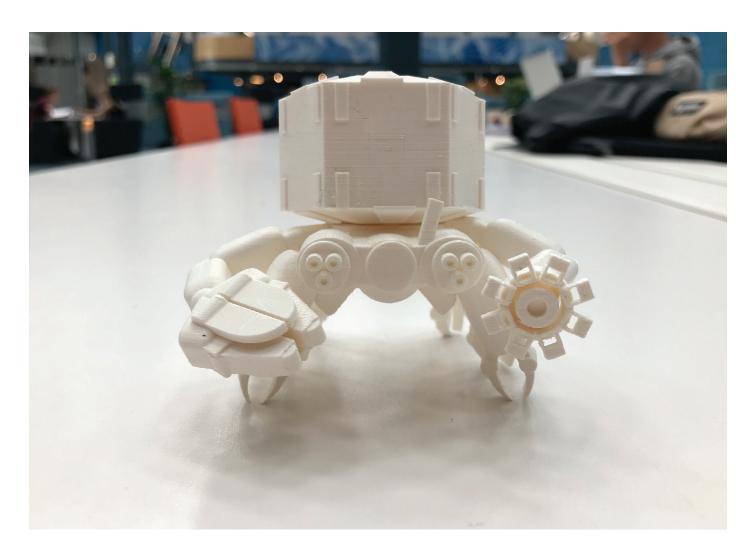


Preliminary 3D Prints

To get a better understanding about the Shell Walker, which is normally only visible in a digital environment on a 2D screen, a 3D model was downloaded (Patton, 2018) and 3D printed. The small scaled model (the one with the crate is approximately 9 x 9 x 9 centimetres) already received a lot of positive comments from Horizon Zero Dawn fans.

This small model lacks a lot of detail, making it necessary to create a different model for the next prototype. This 3D print, however, will be very helpful in doing so, as it gives a clearer overview than 2D images.





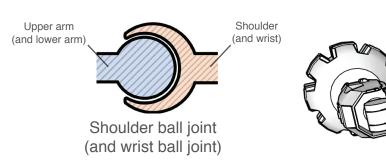


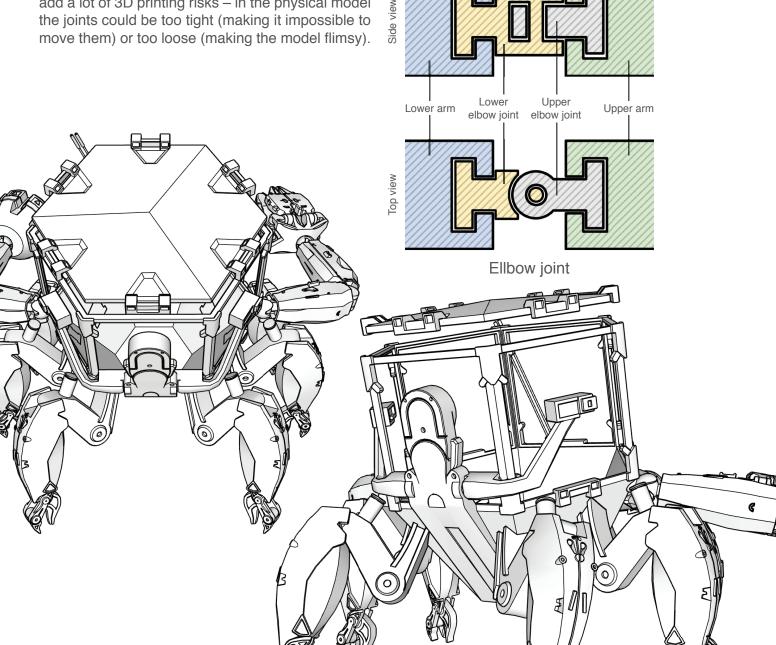
Shell Walker 3D Model

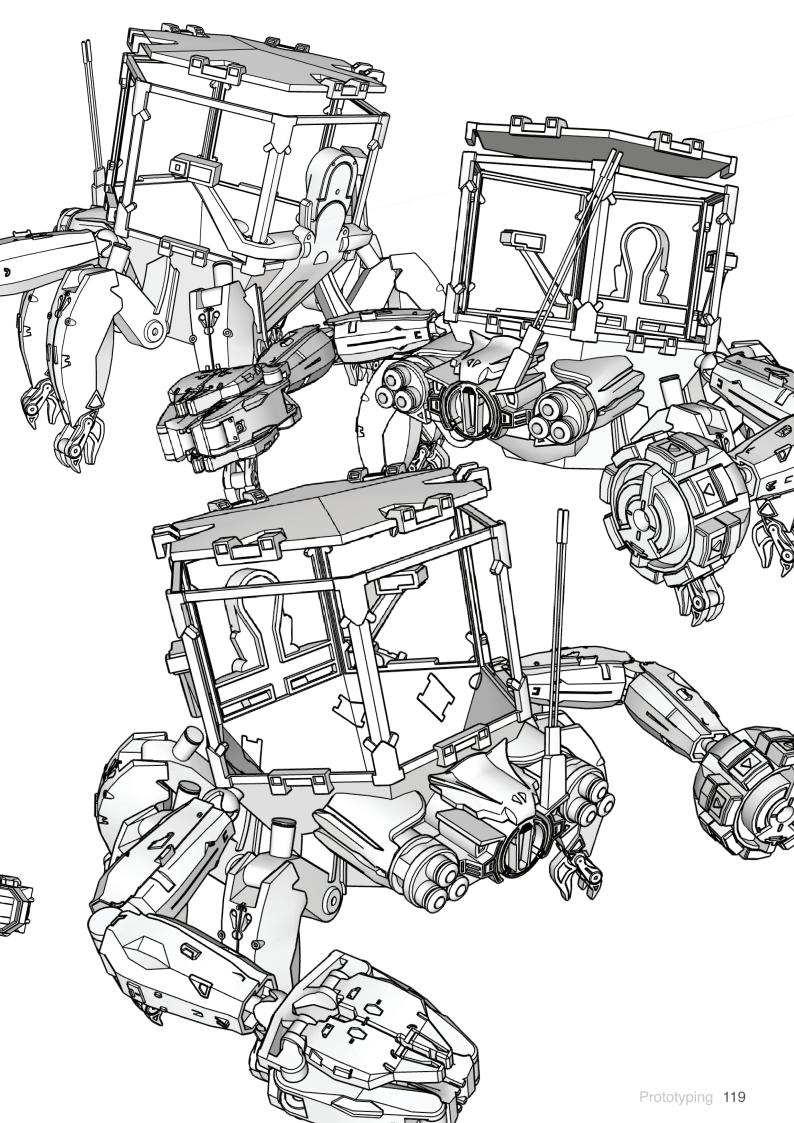
To create the full-sized prototype there was decided upon using 3D printing. To do so, a digital 3D model is needed. Whit the help of the 1:1 orthographical views (Appendix J) and a lot of online reference material, the Shell Walker was modeled in Google SketchUp (which might be the worst software for this job but given the fact that it is the 3D program that I am most familiar with I gave it a shot).

The arms are modeled to be fully operational. The shoulders and wrists of the Shell Walker contain ball joints, while the elbows allow both under- and upper arm to hinge and rotate separately. This does add a lot of 3D printing risks – in the physical model the joints could be too tight (making it impossible to move them) or too loose (making the model flimsy).

118 Prototyping







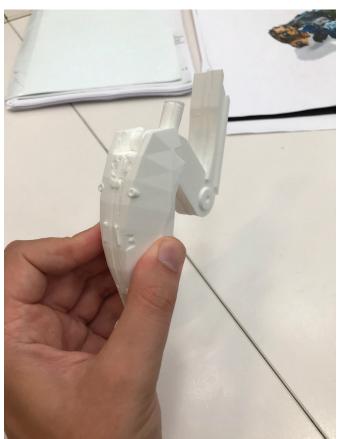
Building the Shell Walker

To translate the digital 3D model of the Shell Walker into a physical one, it had to be 3D printed. For this, the Ultimaker 2+ was used. Since the whole model did not fit in the 3D printer, it had to be divided into different part. Eventually, approximately 10 printers had to be used for countless hours to complete all prints. The body, for instance, had to be split in half in order to fit in the printer, with both halves taking over 50 hours to print.

After everything was printed, it looked like a modelling kit that still needed to be assembled. Before doing so, all support material had to be removed and every part had to be carefully sanded. During this process it also became apparent that 3D printers are not flawless – multiple parts were printed faulty and had to be reprinted (or remodeled).









Eventually, after every part was printed correctly, all support material was removed, and everything was sanded smoothly, the Shell Walker was ready for assembly. Most parts were printed as two halves (to minimize support material). These halves were attached to each other with metal pins and plastic glue (the metal pins keep the parts in place while the glue is drying, while also providing extra solidity).

When everything was assembled I found out that the joints were a bit flimsy, which made me happy that I did not model the legs to be movable (this would make it impossible for the prototype to stand straight). It is difficult to get the margins right with 3D printing, but the hope was that a layer of paint would add that extra thickness to make the joints less flimsy.



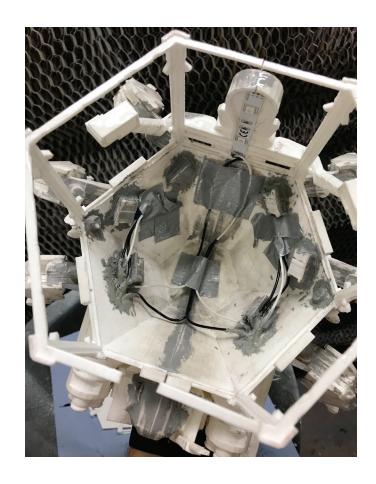


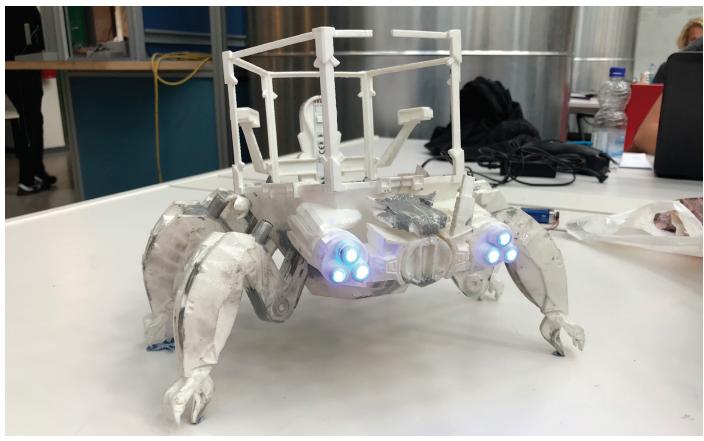
The seams between different parts and some 3D printing inaccuracies were filled with filler, followed by more sanding after drying. Creating a 3D printed model is tedious, but it pays off in the end.

For this prototype two different light areas were decided upon; outer and inner light.

The outer light consisted out of six blue LEDs, placed inside the Shell Walker's eyes. These were all carefully soldered together with a switch and an attachment for a 9V battery.

The inner light, located in the Shell Walker's back support, had a different power source (to simplify the build, the eventual product should only have one overarching power source) and was a lot easier to apply. It is made out of a multi-coloured LED strip which came with a wireless remote to change the LED's colours. The LED strip could easily be cut in the desired size with regular scissors. Furthermore, the strip came as a sticker, which made it easily applyable to the model.





To smoothen everything out even more, XTC 3D was applied. This substance falls somewhere between filler and primer. The sticky fluid is applied with a brush, and in its four hours of drying it slowly levels and fills minor gaps, seams, and other inaccuracies, while leaving a glossy finish. Ideally, this should be followed by even more sanding to make the smoothest surface possible, which will, however, remove large parts of the glossy finish. To save time, there was decided upon not sanding the XTC 3D layer (only on the lid, to give it a try).

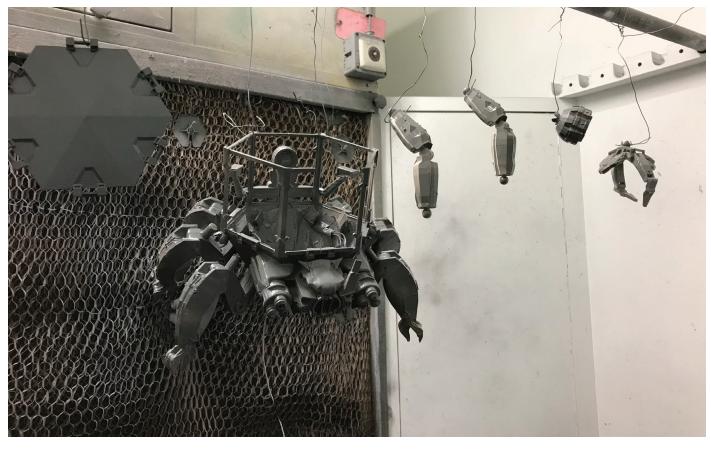
The thickness of the XTC 3D layer did make the ball joints less flimsy. However, the fluid did not reach the elbow joints, not changing their flimsiness. This is probably for the best, as these joints were already assembled, and XTC 3D turns rock-hard after drying – it would have probably dried the elbow joints stuck.

Finally, a fresh layer of grey spray paint was applied. First on the lid, as a first try. Being impatient caused me to spray on too much paint, making it drip. When dried, the drips were still visible on the lid, which made it necessary to sand the whole lid again. This

did, however, turn the lid in the smoothest part of the whole model.

The whole model was spray painted in the same grey colour, which should indicate that it is still a prototype (opposed to painting it fully detailed in colour). The ball joints of the shoulders and wrist became even less flimsy after this layer of paint, making them firm enough to withstand the weight of the arms and hands. Again, the flimsy elbow joints were not affected by the paint.

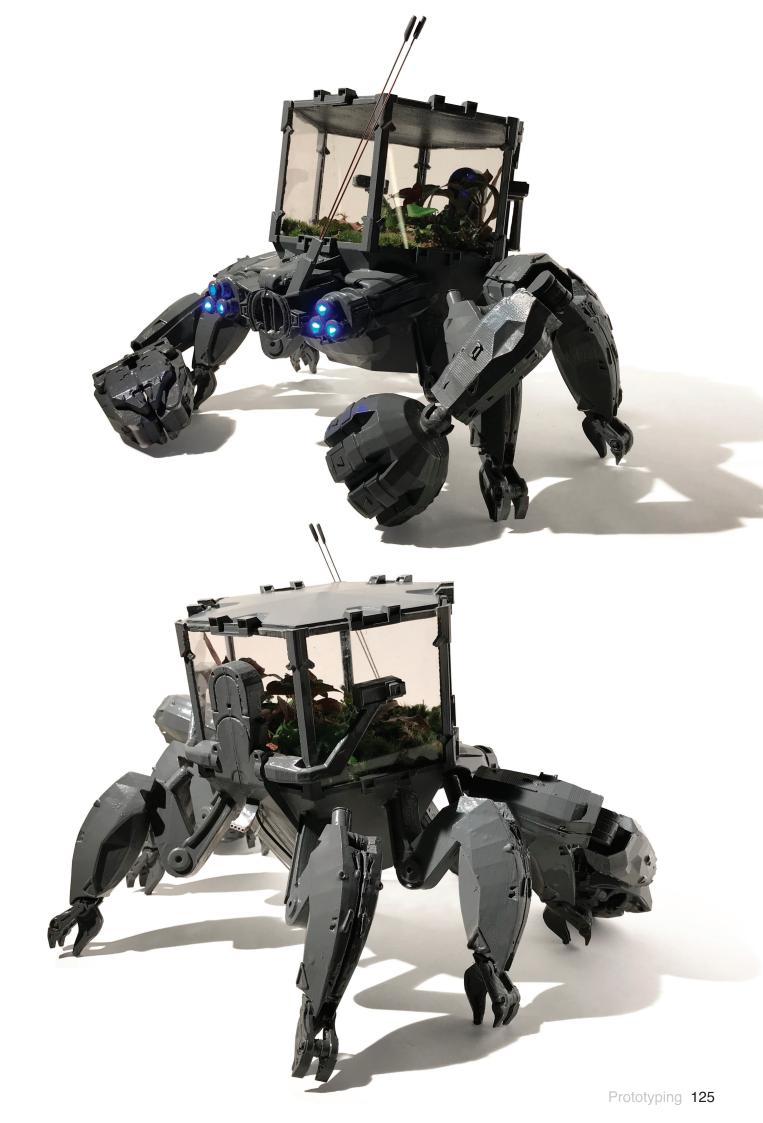
Finally, Spruitje, was approached again to help with adding the plants, of which they did a lovely job.



Shell Walker Prototype

Although all parts of the prototype are sized similarly to the orthographic views that can be found in Appendix J, its stance made it a bit wider. The representation of the concept is still there, and therefore this is not necessarily a bad factor. It is still a model that I am personally proud of, and has received a lot of intrigued looks and compliments from passersby.





Ecosystem Prototype

The ecosystem prototype was a lot easier to make than the Shell Walker prototype. It is nothing more than a standard Spruitje, Pickles with a TOTAKU Watcher figurine placed inside. This prototype should represent both concept 1 and 2.

To add a bit of extra flair, the Horizon Zero Dawn logo was sandblasted onto the metal lid. To do this, double-sided tape was stuck on a thin sheet of plastic. Next, the logo of Horizon Zero Dawn was laser cut out of this combination of double-sided tape and plastic. The double-sided tape made it easy to stick the piece of plastic onto the metal lid and made

sure it stayed in place. The thinness of the plastic made sure that it was easily bendable, so it could curve around the lid without any problems. The rest of the lid was covered by duct tape, which made sure that only the logo cut-out would be affected by the sandblast.

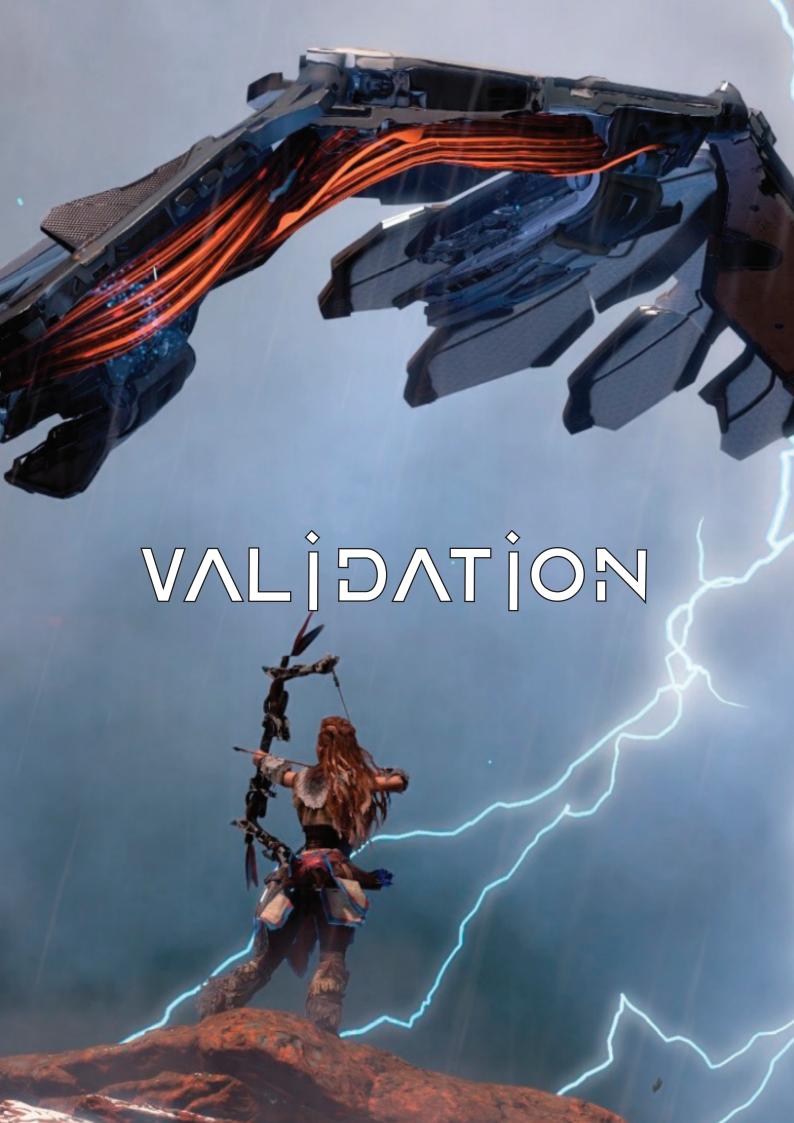
After sandblasting and removing the plastic stencil, a subtle permanent logo became visible on the lid.

When looking back at page 99 it becomes visible how much the plants have grown in just three months.









User Test

To validate the concepts and find elements that needed to be changed, added, or removed, the prototypes were brought to Guerrilla, where (obviously) a lot of Horizon Zero Dawn fans work. Although a user test was prepared beforehand, the visit did not go as planned (in a positive way). Intentionally, a room was reserved to discuss the various concepts one on one. However, eventually the door of the room was left open, allowing everyone to come in and discuss what was on the table (the prototypes and various A3 sheets, which can all be found in Appendix J & K), turning the user test into an open discussion. This has probably provided more new and unexpected insights than the original planned user test would have provided.

Eventually approximately 20 people, a combination of both male and female with a large age range, had spoken their minds about the concepts (as it was an open discussion, ages were not mentioned, but the age range will be estimated around 20 to 45 years old).

Furthermore, concept 2 was also discussed with multiple non-Horizon players (five people, both male and female, aged 22 to 27), as this concept has the least apparent Horizon Zero Dawn features and could attract new players to Horizon Zero Dawn.







Concept 1 - Collectible Ecosystem

General

- The simple look works for this concept.
- This concept is very fitting as a promotional release (similar to the snow globe).
- This concept feels very achievable.



The (top of the) lid needs to be transparent to provide the plants with enough light (or a light should be included).

The various figurines and it's collectible feature are cool aspects of this concept.

The shown statues of the men on horses are especially nice, as they are not too obvious, but still recognizable.

Needs more space for the false bottom.

Concept 2 - Introductory Ecosystem

General

- This concept feels very achievable.
- Most participants were most likely to buy this concept.
- Connection with Horizon Zero Dawn is a bit too subtle.



Lid needs to be transparent to provide the plants enough light (or a light should be included).

The golden lid of the Spruitje, fits better with the plants (and with most participants' interior) than the shown silver lid.

Including a Tallneck would be cool.

The ruins were also received positively.

A more traditional shaped jar was prefered (Appendix K, Form Study of Concept 2) – or possibly a shape that represents a blaze canister, to make the connection to Horizon Zero Dawn more apparent.



Wood may create an interesting look.

Concept 3 - Shell Walker EcosystemSpecs

General

- Although everyone absolutely loved the concept and wanted to have it, most participants mentioned that (knowing it would come with a large price tag) they would probably not buy it. It is more a statement piece for the hardcore fans and that is exactly at who this concept is aimed.
- The product could be slightly reduced in size.
- Multiple participants mentioned the Shell Walker being their favourite robot.



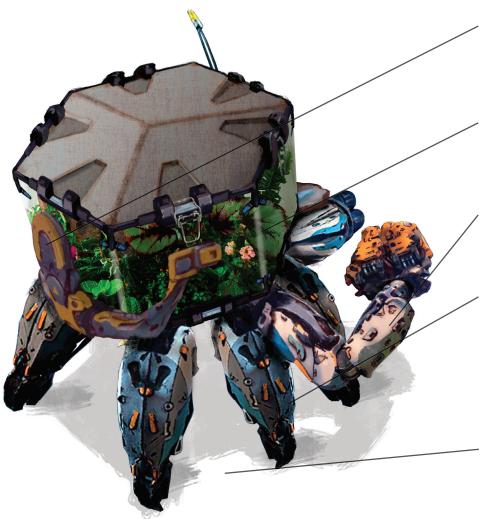
A transparent lid would look better, this is something most of the particiapnts mentioned.

Figurines or characters are not needed inside this ecosystem, the Shell Walker body is already sufficient.

Many participants wanted a removable crate, however, this is not possible due to the fals bottom being hidden underneath the crate.

Lights are enough to strengthen the in-game mood of Horizon Zero Dawn – sound is already present in the game, and vibration was not prefered.

It would be cool to add a motion sensor and servo in the eyes, so the eyes could follow a passerby. This would make the product too expensive, but could be added as an option for those that are willing to spend a fortune.



Instead of having lights in the back, lights in the lid were prefered.

The little beams of the pysical prototype that are on every edge of the glass (and not on the renders) should stay.

Paintjob should either be fully detailed or abstract.

Not only the arms, but also the legs were preferred to be movable.

A base, based on Horizon Zero Dawn's terrain, was prefered to be positioned underneath the Shell Walker. Attaching the Shell Walker with a transparent beam to this base will make it possible for the legs to still be movable.

Specs

	Concept 1 Collectible Ecosystem	Concept 2 Introductory Ecosystem	Concept 3 Shell Walker Ecosystem
Size	H 180 mm Ø 120 mm	H 370 mm Ø 160 mm	L 250 mm W 250 mm H 225 mm
Price	€35 - €60	€165 - €245	€280 - €400
Real plants	Yes	Yes	Yes
HZD themed interior	Yes (Various)	Yes (Tallneck or Ruins)	No
HZD themed exterior (excluding logos)	No	Yes (Canister)	Yes (Shell Walker)
Lamp	No	Yes (white)	Yes (multi colour)
Sound	No	No	No
Vibration	No	No	No
Interactive with HZD	No	No	Yes (WiFi)
Interactive with smartphone	No	No	Yes (WiFi)

Based on the concepts AFTER processing the comments of the user test's participants.





Concept 1 - Collectible/Promotional Ecosystem









The first concept did not change that much, mainly practical adjustments have been made.

First of all, part of the lid has been made transparent to allow more light to reach the plants. Unfortunately, the whole top cannot be made transparent as a lid is a necessary feature for maintenance. A solution to make the whole top transparent is to rise the bottom metal ring all the way up towards the upper edge of the moss and make a lid out of the whole glass top part. This will, however, drastically change the proportions of the design in a negative way. So, for now there has been decided on a partly transparent lid, further research could result in a more aesthetically appealing solution (as mentioned before, this project will mainly focus on the Shell Walker Ecosystem).

Secondly, the whole ecosystem has been made taller to allow more space for the false bottom, something that the concept was initially missing.





Made taller to supply room for the false bottom.

180

Concept 2 - Blaze Ecosystem

Previously "Introductory Ecosystem"



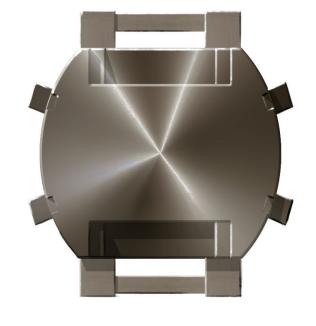
Visually, the second concept has been changed most drastically to make the connection to Horizon Zero Dawn more apparent.

First of all, the whole shape of the ecosystem has been changed to resemble a Blaze canister.

Furthermore, a Tallneck is placed inside the ecosystem. The Tallneck does not replace the Ruins that were initially part of the concept but adds a variation to the product. The buyer him/herself can decide which one to buy.

Apart from these two major changes/additions the concept has stayed quite similar to its initial version.

Another, more traditional but less appealing, shape variation with wooden elements can be found in Appendix L.







160

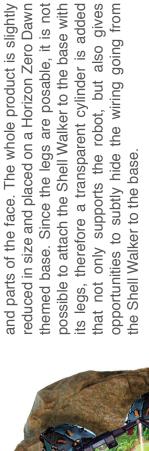
Concept 3 - Shell Walker Ecosystem



The Shell Walker Ecosystem has been changed the most – some practical adjustments, and some changes based on the preferences of the user group.

One of the practical changes, similar to concept 1, is the transparent lid to allow more light to reach the plants. After having the finished prototype for a while it also became apparent that this was necessary, as the moss slowly turned lighter and the plants were not doing as well as the ones in Spruitje,'s gifted ecosystem. Not only is making the lid a practical adjustment, it is also a preferred one, as it will make the plants more visible. In the initial concept (and the prototype) it is only possible to take a good look at the plants by squatting down until your eyes level with the plants, or by lifting the Shell Walker to eye height.

Furthermore, not only the arms are posable (which was the case in the prototype), but also the legs

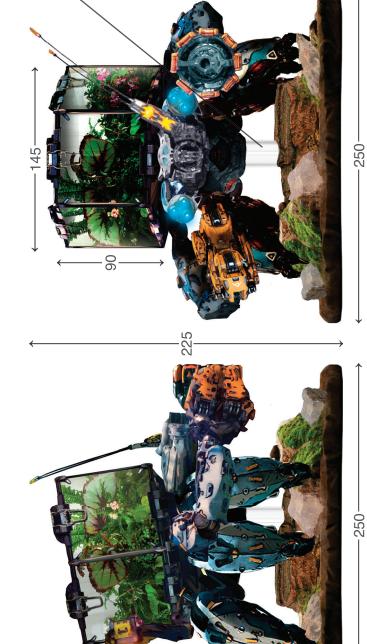


Transparent lid to allow more light to reach the plants.

Both arms and legs are posable.

Transparent support to

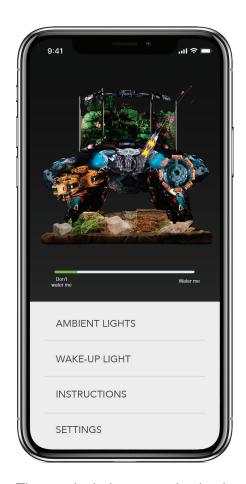
natisparent support to allow the legs to move and the cables to go to the model.



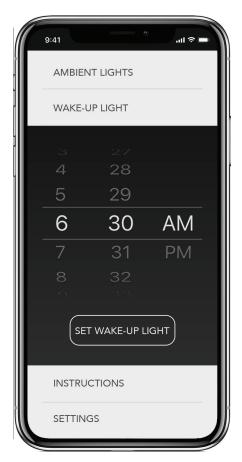
250

App

Since the Shell Walker has a WiFi element build inside, there is also a possibility to connect the product with a smartphone. Although Bluetooth would have been a simpler technology to use for phone connectivity, WiFi is also possible (WiFi was chosen because, compared to Bluetooth, this is easier to connect with a PlayStation, which is of higher priority than connecting with a smartphone). Connecting will go in a similar fashion as with a GoPro – the Shell Walker can be found and chosen as an option in the WiFi settings.







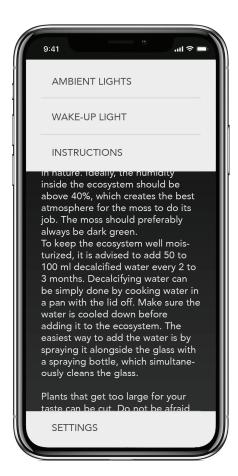
The app includes a couple simple options. On the home screen, an image of the Shell Walker can be seen. When synchronized with the actual Shell Walker, the image can light up in a similar fashion as the physical product.

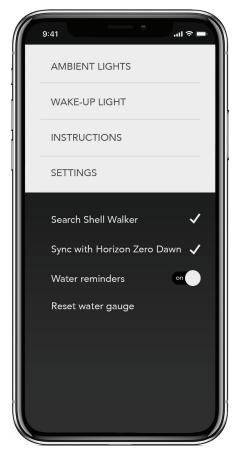
Underneath the Shell Walker image, a bar can be spotted which indicates whether or not the ecosystem needs water. This is purely time based, as no humidity sensors are placed inside the ecosystems (which, of course, is an option, but comes with a price tag).

The first option, ambient lights, makes it possible to choose different light options for the Shell Walker when not synced to Horizon Zero Dawn. It functions in a similar fashion as a remote for an RGB LED-strip. Dynamic lights, such as flashing and fading, are also possible options.

With the brightness bar the intensity of the light can be changed, while the speed bar indicates the speed of the dynamic light options.

Secondly, it is possible to be woken up by the Shell Walker. An "alarm" can be set to trigger a wake-up light.







Furthermore, instructions about how to take proper care of the plants and how to sync the Shell Walker with Horizon Zero Dawn can be easily found in the app.

And, of course, the app comes with a settings menu.

Finally, it is possible to receive push notifications to be reminded to water the Shell Walker. If preferred, push notifications can be switched off in the settings menu.

Size Comparison

50 mm 40 mm 30 mm 20 mm 10 mm Funko Mystery Mini – Sawtooth Funko Mystery Mini – Funko Mystery Funko Mystery Funko Mystery Mini – Sackgirl Funko Keychain Mystery Funko Mystery Funko Mystery Funko Mystery Funko Mystery Funko Mystery – Aloy Mini – Mini – Mini – Mini – Mini – Mini – Corruptor Bellowback Thunderjaw Watcher Aloy Erend Helis Sylens Rost Grazer 50 mm 40 mm 30 mm 20 mm



Horizon Zero Dawn: Complete Edition – Press Kit

Collectible Ecosystem



Shell Walker Ecosystem



Horizon Zero Dawn – Collector's Edition

50 mm

40 mm

30 mm

20 mm



Stubbins – Aloy



TOTAKU – Aloy



TOTAKU – Watcher



Funko Mystery Mini – Tallneck



Funko POP! – Aloy



Funko POP! – Erend



Funko POP! – Helis



Funko POP! – Watcher



Funko POP! – Watcher (glow in the dark)



33 cl Coca Cola can for reference

50 mm



Modern Icons - Aloy



Blaze Ecosystem (without stand)



Project Triforce – Thunderjaw



Blaze Ecosystem (with stand)

Unboxing Experience

Luxurious - Revealing - Exciting

As stated earlier in this thesis (Search Areas), an unboxing experience should be part of the final product. Nowadays an unboxing experience is almost essential, especially with the more luxurious products. The goal is to make the packaging so likable that it almost becomes a stand-alone product, making the owner want to keep it. In Appendix M an inspiration board and some initial sketches can be found.

With the Shell Walker being a limited, high quality product, which falls in line with art toys, there was chosen for a luxurious approach for the packaging. To build extra excitement, a slow reveal of the main product (the Shell Walker figure) will be part of the unboxing experience. The to-be-discussed unboxing experience for the Shell Walker Ecosystem can also be applied to the other two concepts.

To give the packaging a luxurious feel, the design of it was approached in a simplistic way. The outer shell (which protects the main packaging from scratches) is black with a subtle pattern (similar to the pattern on the box for the Collector's Edition of Horizon Zero Dawn), and sports golden logos and imagery. This makes clear to the buyer what is inside the box without revealing too much. By opening the outer shell, the main box can be slid out slowly.

The main box does not have any imagery anymore, similar to many coffee table books, which often have more visuals on the dust jacket (detachable cover) than on the actual cover of the book.

The lid should have a low tolerance compared to the box, so when the lid gets lifted, the rest of the box will slowly slide out. This is similar to board games and Apple products, which (when discussing the unboxing experience with others) many people have indicated to be a very likable and luxurious feature of an unboxing.

When removing the lid from the box, colourful nature-focussed concept art gets revealed. What is inside of the box is still hidden by a high-quality paper cover.

Lifting the cover gives a sneak peek of the Shell Walker but does not yet fully reveal it – there are still multiple small boxes that are hiding the rest of the product. Inside the small boxes the ingredients for the ecosystem are stored (clay aggregate, substrate,

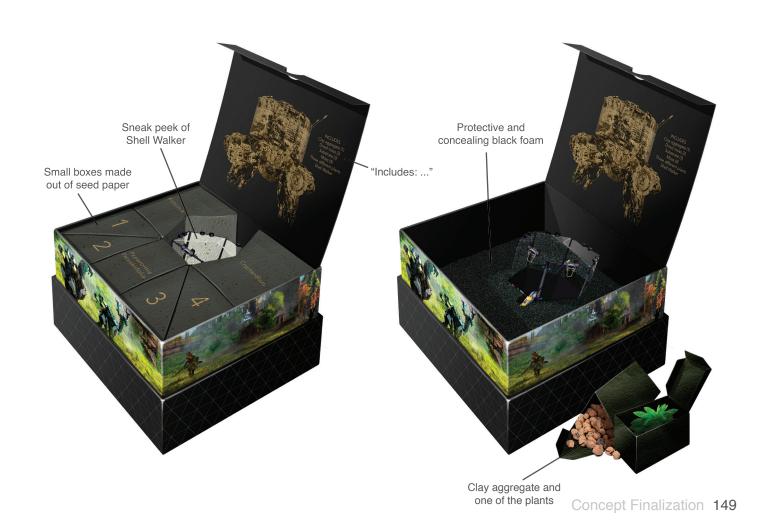


various plants, etc.). The ecosystem needs to be assembled by the owner to make shipping (when ordered online) possible. When doing an in-store pick-up, however, it should be possible to have the ecosystem fully assembled, as long as the buyer brings it home carefully.

The small boxes are made out of seed paper, which is a biodegradable cardboard material with plant or flower seeds merged inside of it. This means that, when the boxes are of no use anymore, they can be buried, and new life will grow out of it.

When all the little boxes are removed, the bottom half of the Shell Walker is still hidden by a foam layer. Not only does this extra step add an additional revealing moment to the unboxing, it also offers necessary protection to the Shell Walker. This is the final layer that needs to be removed before the Shell Walker can be seen in its full glory.







Availability

To find out if the concepts are viable to be sold instore, various independent plant, design, game, merchandise, and concept stores were visited. Being independent stores made it possible to discuss the topic with the store owners. The opinion of every store can be found in Appendix N.

Apart from the in-store possibilities, the concepts should also be made available online (PlayStation store for instance).

Out of the store visits it became clear that there is not a lot of potential to sell the concepts in plant stores. Most plant stores are quite traditional and picky in what they sell, and a science-fiction-based ecosystem does not fit well in the portfolio of most of them.

Design stores are also not the most perfect fit with the concepts, but it really depends on what kind of designs the store sells. If the store mainly sells futuristic or modern items, then the concepts might fit in well. However, all of the visited design stores had a more traditional or classic approach, which is quite the contrary.

The concepts should probably be sold in stores that are already familiar with toys and merchandise, which results in three potentialities:

- 1. Game/merchandise/toy stores
- 2. Concept stores
- 3. Shop in shops

The game, merchandise and toy stores seem the most obvious, but still need some convincing. Some stores found the concepts to be too expensive, but others were very willing to give it a try. The big game stores are, unfortunately, hard to approach, as the people working in-store are mostly just cashiers and are likely to have little knowledge about wholesale. However, with Horizon Zero Dawn being as popular as it is, the bigger game stores will probably be convinced easily.

Furthermore, the stores that sell art toys and highend action figures also seem like a perfect fit to sell the high-end ecosystem concepts.

Surprisingly, concept stores seem to be the best fit for selling the various concepts. They are often very open minded and are willing to sell new, innovative and unique products. They also do not shy away from expensive products. From all the visited stores, the concept stores seemed to be most willing to sell the concepts.

To specify the concept stores a bit more, it should be stores that already sell art toys, high-end action figures, or unique designer products, but the main focus of the store could still be on something else (clothes for instance).

Finally, multiple store owners recommended a "shop in shop" experience in, for instance, de Bijenkorf. As the name already indicates, this is a small store or stand located inside a bigger (department) store. This gives opportunities to shape the whole store or stand to create the ultimate Horizon Zero Dawn shopping experience. Being located inside a popular store also means that a lot of people will encounter the shop in shop.



Quantity

With the Shell Walker being aimed at the "hardcore" fans of Horizon Zero Dawn, it is unlikely that a huge amount will be sold. Therefore, it is advised to limit the production number of this concept. Similar to the limited vinyl, 1,000 to 1,500 (individually numbered) is a rough estimation of what could be the production quantity of the Shell Walker. Not only ensures this that the Shell Walker will (eventually) sell out, it also adds an extra collectability factor to the product and makes it more desirable to own.

The other two concepts are a bit less risky and could be sold as an open edition. However, if the smallest ecosystem is being given away for free (in case of it being a promotional product), making it limited could create a more valuable and desirable feeling for the owner. The production number could be similar to the Press Kits – approximately 750 units.

Possible Manufacturers **Plants**

Since Guerrilla does not produce merchandise themselves, two different companies need to be approached for the production of the Shell Walker Ecosystem – a company that can make (action) figures/statues, and a company that is experienced in enclosed ecosystems.

Spruitje,

DESIGN HOUSE

- High quality
- Very likely able to produce the other two concepts
- Ecosystems are not their core business

Design House Stockholm is a company that makes designer furniture, including an enclosed ecosystem in the form of the Grow Greenhouse. Since this is only a small line of products in their portfolio, it can be assumed that Spruitje, is more experienced in creating enclosed ecosystems. As a design house, however, Design House Stocholm seems most likely to be able to produce the other two concepts (Collectible Ecosystem and Blaze Ecosystem).

- Cheaper than the other options
- Does not feel as luxurious
- Follower instead of innovator
- Unlikely able to produce the other two concepts

Just like Spruitje, Growing Concepts specialized in enclosed ecosystems. The brand does, however, feels a lot less luxurious than Spruitje, and Design House Stockholm. On top of that, their upcoming ecosystem (Egg Medium) looks almost exactly like the Grow Greenhouse from Design House Stockholm, which indicates that Growing Concepts can be considered to be a follower instead of an innovator. Doing merchandise with living plants is quite innovative, and therefore Growing Concepts does feel like an odd fit.

Furthermoe, Growing Concepts does not seem like a company produces or develops products themselves (they use pre-existing jars), but merely only does the assembly part, making them unlikely to produce the Collectible Ecosystem and/or Blaze Ecosystem.









- High quality
- Already willing to collaborate
- Amsterdam based
- Likely able to produce the other two concepts

Spruitje, has been named multiple

times in this thesis already, so

an introduction should not be

necessary. As helpful as Spruitje,

has been during the project, it is

only fair to approach this company

for the plant part of the Shell

Walker. High quality can also be

to be up to the task to also

produce the other two concepts

(Collectible Ecosystem and Blaze

seems

expected from the brand.

Furthermore, Spruitje,

Ecosystem).

Body



- + High quality
- + Experienced in big figures
- + Experienced in dynamic figures

The Japanese company Bandai makes high quality, well finished products. A lot of their products have many points of articulation, making it a good fit for the Shell Walker.



- + High quality
- + Experienced in big (limited) figures
- + Experienced in dynamic figures
- Expensive

Medicom, another Japanese company, is best known for their art toys, although the company also produces high quality action figures.

Medicom's best known art toy is the BE@RBRICK, which is available in many variations, collaborations (fashion, popculture, artists), and sizes (going up to 70 cm).

Although the artsy element of the company fits well with the artistry of the Shell Walker, this comes with a relatively high price.



- + Amsterdam based
- + High quality
- Not experienced in dynamic figures
- Not experienced in big figures
- Not experienced with technology

UNGA is located in Amsterdam, in the same street as Guerrilla. Making Guerrilla join forces with both UNGA and Spruitje, would fully make it an Amsterdam product, which could be a cool feature.

Furthermore, UNGA is mainly experienced in static mini figures, so producing the Shell Walker could be a bit out of their alley.



Bandai x Star Wars "Samurai Stormtrooper" (limited action figure)



Medicom BE@RBRICK x Daft Punk (vinyl art toy)



UNGA x Disney (vinyl toy)



- + High quality
- + Experienced in big (limited) figures
- Wide variety of products and materials
- Unlikely to collaborate with a big commercial company

CASE STUDYO is a publisher and producer of artworks by contemporary artists. Out of a close interaction between CASE STUDYO and the artist they create unique objects.

Since all of their products are in collaboration with established artists (e.g. Piet Parra and Cleon Peterson) it might be undesired for CASE STUDYO to collaborate with a big commercial company (Guerrilla/Sony Interactive Entertainment). However, with their wide variety of limited products (art toys, sculptures, furniture) the company seems very suitable to produce the Shell Walker Ecosystem.



- + Very cheap
- + Experienced in big figures
- + Experienced in dynamic figures
- Low quality
- Very cheap look and feel
- Little detailing

Jakks Pacific is probably best known for their BIG-FIGS, which is a range of big action figures, available in 20" (50 cm), 31" (78 cm), and 48" (122 cm). Jakks' products are priced fairly cheap, the BIG-FIGS retailing approximately €25 (20").€70 (31"), and €140 (48"). In comparison, a good quality 15" toy from for instance Hot Toys retails for somewhere between €300 and €600. With that in mind, it should also be mentioned that the quality of Jakks Pacific comes nowhere near the quality of Hot Toys, and actually feels quite cheap.

The hard-surfaced figures (Stromtrooper for instance) of Jakks look pretty good, however, the soft-surfaced areas (human skin, clothes, drapes) are seriously lacking in aesthetic quality.

With the Shell Walker being made out of only had surface, Jakks could be a possible contender, but only if the price needs to stay low. However, since most participants during the first interview stated that they wanted high quality products, Jakks cannot be considered to be the best contender.



CASE STUDYO x Piet Parra "Give Up" (vinyl lamp)



Jakks Pacific BIG-FIG x Star Wars (48" Stormtrooper)



Jakks Pacific BIG-FIG x Star Wars (20" Rey)

Recommendation

For the plant part Spruitje, seems to be the best contender. However, another company may need to be approached overseas to keep the plant distribution somewhat local. For the body of the Shell Walker various recommendations can be given.

The most fun company would probably be UNGA, which would make the Shell Walker a full Amsterdam product. However, looking at their current portfolio, UNGA does not seem like they are up for the job, but that can only become certain by approaching the company.

More fitting companies are Bandai and Medicom. Both deliver quality, both are experienced in action figures in dynamic parts, and both companies (especially Medicom) seem to have no problem with limited releases.

Another fitting company, although difficult to win over, is CASE STUDYO. This company makes so many different kinds of (limited and big) products that they seem very likely to be able and willing (if a big commercial company was not involved) to produce such a unique product as the Shell Walker Concept.

Additional possibile manufacturers:

- Hasbro (experienced, but Shell Walker Ecosystem is unlikely to give them sufficient profit)
- Mattel (experienced, but Shell Walker Ecosystem is unlikely to give them sufficient profit)
- Funko (very stylized)
- Kidrobot (very stylized)
- Hot Toys (very expensive)
- Sideshow (very expensive)
- Takara Tomy
- ThinkGeek
- Sphero (should be good with the technology part)
- ThinkGeek
- Project Triforce (does not seem to exist anymore)



Bandai x Gundam



Medicom x KAWS "Small Lie" (vinyl art toy)



CASE STUDYO x Piet Parra "Popfruit" (resin sculpture)





Recommendations

Although the concepts that were presented in this thesis are liked by many people, it is mainly the concepts' features that can be recommended.

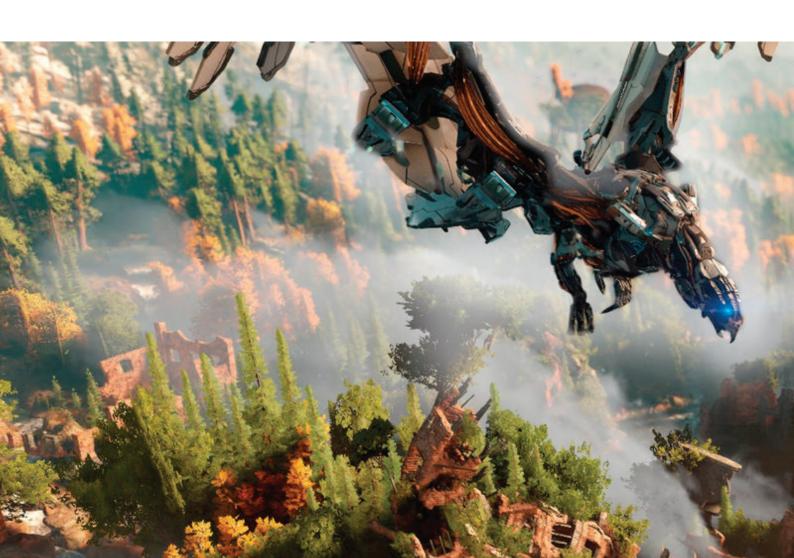
Especially the usage of real plants in merchandise, whit merchandise often being seen as something materialistic or capitalistic, is a unique feature which will be of high value for a game such as Horizon Zero Dawn, and for the world of licensed merchandising in general. Not only does it represent the game very well, it also brings a bit of nature into the house of gamers and merchandise collectors. Something many gamers may not already have, and may not be interested in otherwise.

Doing this in combination with an enclosed ecosystem (instead of non-enclosed plants) is also a great entry level for maintaining indoor plants. Enclosed ecosystems do not need a whole lot of attention while still adding nature and an extra bit of flair to an interior. What is more, an enclosed ecosystem is a better conversation starter than a "standard" indoor plant.

Furthermore, it is not a necessity to make the Shell Walker Ecosystem (or any Ecosystem concept for that matter) interactive with Horizon Zero Dawn, although adding some sort of interaction is highly suggested. Maintaining the plants is already one level of interaction, but adding more levels of interaction is recommended.

In terms of selling, it is recommended to place the products in game, merchandise, and concept stores, and possibly toy stores. The products are best fitting alongside art toys, high-end action figures and unique designer products. The products should definitely also be sold online.

Finaly, an unboxing experience should be part of the product, as this boosts the first impression. Recommended is a luxurious, revealing, and exiting experience.



Further Research

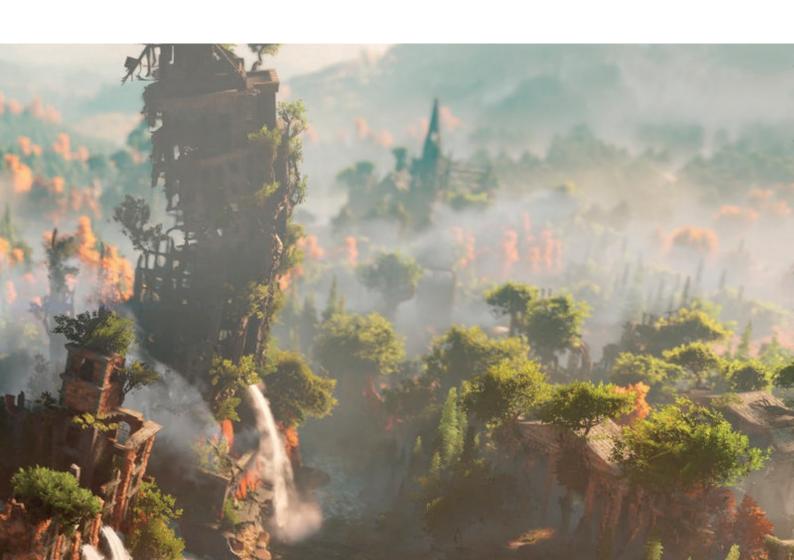
For the various concepts, further research can be conducted. Since the main focus of this project has been on the concept of the Shell Walker Ecosystem, the other two concepts are not as fleshed out and could use another iteration step. Especially in terms of styling more iterations can be done. The charging dock from the Blaze Ecosystem, for instance, makes the concept look a bit fragile, as if the dock does not firmly hold the ecosystem. And for the transparent lid of the Collectible Ecosystem there might be a more appealing solution.

Although the Shell Walker Ecosystem is quite fleshed out, it can still be improved. The way the joints should work on a possible production model can be specified, the technology can be improved and implemented in a prototype, and a better fitting lid with an air-tight fit could be designed.

Furthermore, the app of the Shell Walker has not been the main focus of the project and therefore still needs to be tested. It could still be improved and more functions could be added. It could also use some more design iterations. Do people prefer the current modern look, or would they rather have a tribe-like Horizon Zero Dawn themed layout?

The same goes for the unboxing experience, which has also not been a main focus during the course of this project. The discussed unboxing experience is merely a first step towards the desired experience.

Finally, the discussed possible manufacturers could be approached, and new, possibly better ones could be approached as well.



Conclusion

The goal of the merchandise that had to be designed during this project had to do three things.

1. It should reflect the chosen search area by having a positive impact on the environment and/ or on humanity.

This was done by implementing real plants in merchandise. Creating a product around a self-sufficient ecosystem makes the user involved with nature without having to do too much or know too much about maintaining plants – it is a good entry level. Furthermore, while the ecosystem will slowly grow full of plants, the owner should grow more aware of nature and its role on the planet. In the concepts Mother Nature reclaims what has always been hers in a visible way.

2. It should keep the Horizon Zero Dawn title alive and relevant until Guerrilla releases a new game. By making the concept interactive with Horizon Zero Dawn, the user has a new reason to replay the game (or start playing the game for the first time). Also, every time when the user has to maintain the plants (watering, trimming), he or she will get reminded about Horizon Zero Dawn. Same goes for

the wakeup light function, which reminds the user of Horizon Zero Dawn every morning.

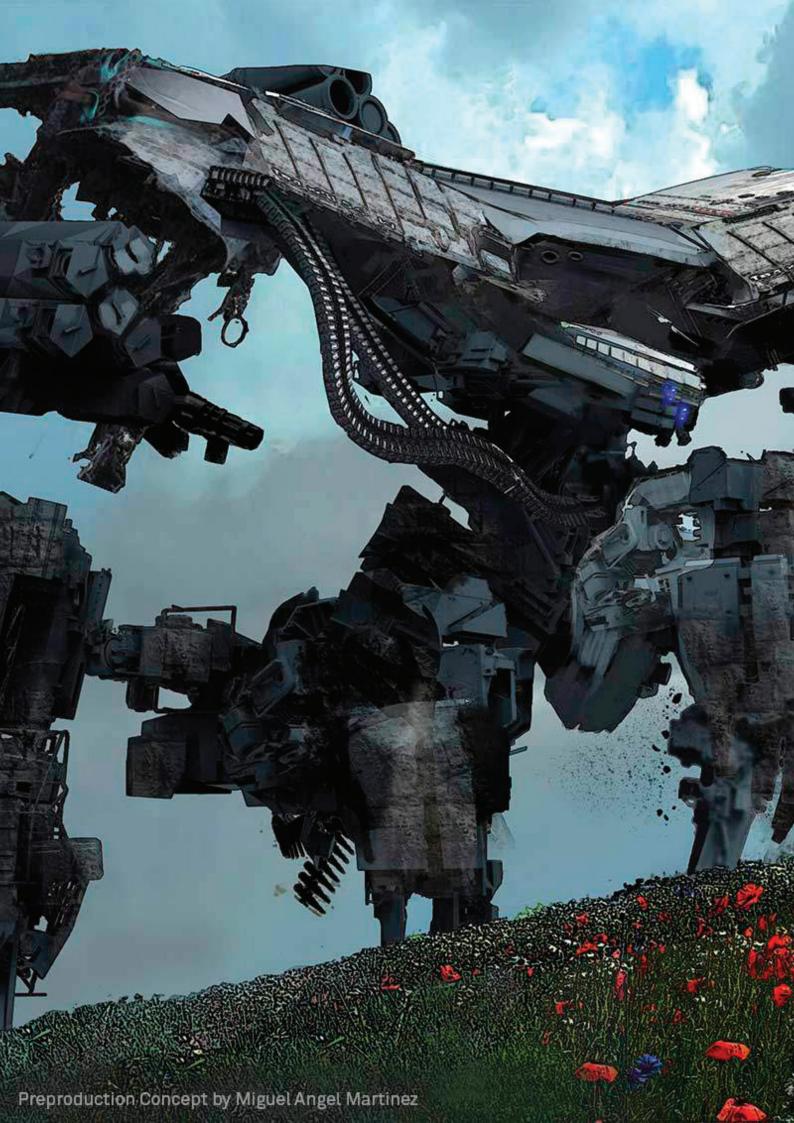
Furthermore, by releasing a high-quality Horizon Zero Dawn themed product line, years after the game's initial release, Guerrilla can show that Horizon Zero Dawn is still very alive and relevant.

3. It should reflect Horizon Zero Dawn by extending the game's themes and experiences.

The big natural themes of the game are reflected in the real plants that are implemented in the concepts. Furthermore, having the Shell Walker be interactive with Horizon Zero Dawn extends the experiences of the game beyond the television screen.

In conclusion, the designed merchandise has real plants placed inside of it. Not only does this extend the themes of Horizon Zero Dawn, this also makes the users aware of the beauty of nature and thereby having a positive impact on the user's perception of the environment. This all will help in keeping the Horizon Zero Dawn title alive and relevant in the years where Guerrilla is not releasing any games.







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APPENDIX A - Awards

Before Release

Game Critics Awards: Best of E3 2015 (Makuch, 2015)

Nominated Best of Show

Won Best Original Game
Nominated Best Console Game

Nominated Best Action/Adventure Game

Game Critics Awards: Best of E3 2016 (Hussein, 2015 and Pereira, 2015)

Nominated Best of Show

Won Best Original Game
Nominated Best Console Game

Nominated Best Action/Adventure Game

Gamescom Global Awards 2016 (IGN, 2016)

Nominated Best Preview/Vision

Golden Joystick Awards 2016 (Loveridge, 2016)

Nominated Most Wanted Game

The Game Awards 2016 (Stark, 2016)

Nominated Most Anticipated Game

After Release

Develop Awards 2017 (Develop, 2017)

Won Animation

Gouden Kalf Award 2017 (NOS, 2017)

Won Best Interactive

Golden Joystick Awards 2017 (Dwan, 2017 and Chalk, 2017)

Won Best Storytelling
Runner-Up Best Visual Design

Won Best Gaming Performance (Ashley Burch)

Won Best PlayStatyion Game
Runner-Up Ultimate Game of the Year

Nominated Best Audio

The Game Awards 2017 (The Game Awards, 2017)

Nominated Game of the Year Nominated Best Game Direction Nominated Best Narrative

Nominated Best Natrative

Nominated Best Art Direction

Nominated Best Performance (Ashley Burch)
Nominated Best Action/Adventure Game

New York Game Awards 2018 (Whitney, 2018)

Nominated Big Apple Award for Best Game of the Year Nominated Herman Melville Award for Best Writing Statue of Liberty Award for Best World

Nominated Great White Way Award for Best Acting in a Game (Ashley Burch)

45th Annie Awards (Annie Awards, 2018)

Nominated Outstanding Achievement for Character Animation in a Video Game

Writers Guild of America Awards 2018 (Variety, 2018)

Won Outstanding Achievement in Videogame Writing

21st Annual D.I.C.E. Awards (Makuch, 2018 and Plunkett, 2018)

Nominated Game of the Year

Nominated Outstanding Achievement in Animation
Nominated Outstanding Achievement in Art Direction
Nominated Outstanding Achievement in Character (Aloy)

Nominated Outstanding Achievement in Original Music Composition

Won Outstanding Achievement in Story
Won Outstanding Technical Achievement

Nominated Adventure Game of the Year

Nominated Outstanding Achievement in Game Design Nominated Outstanding Achievement in Game Direction

NAVGTR Awards 2018 (NAVGTR, 2018)

HZD had the most nominations (17), and the most wins (7)

Won Animation, Technical

Nominated Art Direction, Period Influence

Nominated Character Design Nominated Control Precision

Nominated Direction in a Game Cinema

Won Game Design, New IP
Won Game Engineering
Nominated Game of the Year
Won Game, Original Action
Won Graphics, Technical

Won Innovation in Game Technology

Nominated Lighting/Texturing

Won Original Dramatic Score, New IP

Nominated Performance in a Drama, Lead (Ashley Burch)

Nominated Sound Effects

Nominated Use of Sound, New IP Nominated Writing in a Drama

SXSW Gaming Awards 2018 (SXSW, 2018)

Won Excellence in Visual Achievement

Nominated Excellence in Animation

Won Most Promising New Intellectual Property

Nominated Excellence in Gameplay
Nominated Excellence in Design
Video Game of the Year

18th Annual Game Developers Choice Awards (GDCA, 2018)

Nominated Best Audio
Nominated Best Design
Nominated Best Narrative
Won Best Technology
Nominated Best Visual Art
Nominated Game of the Year

16th Annual Game Audio Network Guild Awards (GANG, 2018)

Nominated Audio of the Year Nominated Music of the Year

Nominated Sound Design of the Year Nominated Best Original Soundtrack Album Nominated Best Cinematic/Cutscene Audio

Nominated Best Dialogue

Won Best Original Instrumental

Won Best Original Choral Composition

14th Annual British Academy Games Awards (BAFTA, 2018)

Nominated Artistic Achievement Nominated Audio Achievement

Nominated Best Game Nominated Game Design

Nominated Music Nominated Narrative

Won Original Property

Nominated Performer (Ashley Burch)

APPENDIX B - Product Range



Star Wars Jedi Challenge By Lenovo €199,99

A smartphone-powered AR experience featuring lightsaber battles, holochess, strategic combat, and local multiplayer support.



App-Enabled Droid By Sphero €99.95 - €119.95

Sphero's small app-enabled droids include BB-8 (pictured), BB-9E, and R2-D2. The three droids can be controlled with multiple smart devices (phone, tablet, watch). An additional Force Band (also pictured) can be bought for €80, which fastens to your wrist and allows you to control BB-8 with just a wave of your hand.



Droid Inventor Kit

By littleBits

€119.95

With the electronic modules form the littleBits kit, kids can create a droid themselves and bring it to life. With a free app, new tricks can be taught to the droid and it can be send on various missions.

By lifting your skills, parts can be re-configurated to design a totally new droid.



Landspeeder
By Radio Flyer
\$199.99 (≈ €175)

This Landspeeder has room for two kids. It features an interactive dashboard with lights and real movie sounds. Top speed is 8 km/h



Star Wars Drones
By Propel
€129,95

Small and limited, individually numbered, drones shaped like Star Wars machines. One of them even has a Scout Trooper riding it (pictured).

All drones are hand painted and come in a luxurious box with a 3D representation of the drone popping out. The inside of the box lights up.

The drones come with a remote controller and a lightsaber-shaped screwdriver. The remote controller has a built-in speaker, which can play various songs and scenes from Star Wars.



Star Wars Vivofit Jr. 2

By Garmin

€99,99

The Vivofit tracks the activity of kids and features chore management and schedule alert tools for parents. It is both bump and water resistant, and thanks to a battery life of one year it does not need intermediate charging.

The Star Wars Vivofit comes with an app that motivates children to achieve their activity goal of 60 minutes per day.



Death Star Speaker

By Plox

€169,90

Plox's Death Star Bluetooth speaker rotates above a magnetic foot, defying the laws of gravity.



Millennium Falcon
By LEGO
€849,00

LEGO has made countless products with Star Wars, this Millennium Falcon being their biggest one to date. With 7500 pieces, it is one of the biggest sets ever sold by LEGO. It comes with multiple LEGO figures and has detachable body panels to see the highly detailed inside of the Millennium Falcon.



Star Wars Pilot Helmet
By Hasbro
€249,99

This helmet is a highly detailed replica of Poe Dameron's X-Wing helmet. It has an internal microphone which activates sounds and interaction with BB-8.



Force Link 2.0
Millennium Falcon
By Hasbro
€119,00

This Force Link 2.0 Kessel Run Millennium Falcon features Bluetooth technology that allows for interactive social play.

Force Link 2.0 wearable technology (sold separately for 39,99 in the Starter Set) activates sounds and phrases. When picking the Millennium Falcon up, for instance, flying sound effects can be heard.



Ultimate Co-Pilot Chewie

By Hasbro

\$129,99 (≈ €115)

The 40 cm tall FurReal Friens Ultimate Co-Pilot Chewie speaks when it hears your voice, growls when you shake it and responds with over 100 different sound combinations. It laughs when it is getting tickled and curls up for a sleep when laid down.



Play-Doh Chewbacca By Hasbro \$14,99 (≈ €13)

By filling Chewbacca up with Play-Doh and pressing down on his arms, Play-Doh hair will grow on his head. Once its hair gets too long, it can be chopped off with BB-8 scissors, included in the set. A comb is also included to create a larger variety of hairstyles.





These replicas of lightsabers contain 64 super-bright LEDs that power on and off in succession, recreating a realistic beam effect. The lightsabers make different sound effects and they include motion and clash sensors.



Star Wars Mega Playset

By Hasbro

€139,99

On the outside, the playset looks like a 24" (61 cm) BB-8 and features lights and sounds for great exterior play and display. When opened, it reveals a multilevel playset including three Force Link activation areas with lights and sounds. The set also includes two 3.75" (9.5 cm) Force Link-activated figures.



Disney Playmation
By Hasbro
\$119,99 (≈ €105) (Starter Pack)

Playmation is a system of toys, wearables and companion apps. The system is designed to keep kids active, replacing screens with pretend play. Through a companion app, players can receive missions and track scores and accomplishments.



Black Panther Glove Set
By shopDisney
£23,00 (≈ €26,50)

These power gloves of Black Panther include push-button and motion-activated battle sounds.



Labo By Nintendo €69,99 - €79,99



amiibo By Nintendo Starting from €10,00



Super Mario Cereal By Kellogg's \$2,99 (≈ €2,50)



Pokémon GO Plus By Nintendo €39,99

Nintendo Labo is a gaming and construction toy platform, used as an extension for the Nintendo Switch. The platform uses kits that include cardboard cut-outs and other materials that need to be assembled with Nintendo Switch's display and Joy-Con controllers to create a Toy-Con that can interact with game software and vice versa. With Nintendo Labo, users can learn the basic principles of engineering, physics, and programming.

amiibo is Nintendo's wireless communications and storage protocol for use between compatible toys-to-life figurines and the Nintendo 3DS, Wii U, and Switch. The figurines use NFC to interact with supported video game software, potentially allowing data to be transferred in and out of games and across multiple platforms.

A year after the launch of amiibo figurines, Nintendo also started to release amiibo trading cards, which hold the same NFC technology as the figurines.

Kellogg's also implemented amiibo in their Super Mario Cereal box.

The Pokémon GO Pluss is a small device that lets players enjoy Pokémon GO while on the move, not having to look at your smartphone. The device connects to a smartphone via Bluetooth and notifies players about events (nearby PokéStop and nearby Pokémon) in the game using LED and vibration.

These functions also came available in the Pokémon GO Apple Watch app, which also integrates workout summaries to track players' physical activity while playing.



Spider-Man By Sphero €139,95



Ultimate Lightning McQueen
By Sphero
€349.99



Smashers By Zuru €7,99 - €14,99



Adventure Time Mystery Minis

By Funko

\$6,99 (≈ €6)

This interactive superhero has LCD eyes and motion sensors. With an app on smartphone or tablet players can join Spider-Man on its missions where he takes on the worst villains.

It is also possible to just start a conversation with Spider-Man. With its motion sensor he is able to react to people passing by. Spider-Man can also be set to wake you up, or he can guard your room.

This remote-controlled version of Lightning McQueen can be controlled by an app on smartphone or tablet. Lighting responds to commands with his personality on display, thanks to emotive actions and speech. When not driving, the app can be used to create scrips for Lightning. Sphero's Lightning McQueen has animated eyes and an animatronic mouth, bringing the character to live. When watching Disney*Pixar's Cars with Lightning, he will react to the movie.

Smashers are small collectible mystery figurines. The figurine gets revealed by throwing the smash ball (the packaging) against the wall or by smashing it. A fun little interaction added to the excitement of mystery packs.

These Mystery Minis come in tin cases, not only adding extra functionality to the packaging, but also adding a new collectible (both the tins and the figurines).



Pizza Hut Pie Top II

By The Shoe Surgeon

\$150 (≈ €130)

The 2017 Pizza Hut Pie Top by The Shoe Surgeon is equipped with Bluetooth technology that links to the Pie Top phone app. Once connected, a pizza can be ordered by pushing the button on the shoe's tongue. Only 64 pairs were made and sent to taste makers and media.

In 2018 Pizza Hut and The Shoe Surgeon teamed up once again for the Pie Top II. Two colourways were made of these shoe, limited to 50 pairs priced at \$150. Not only can this second version order a pizza, it can also pause the TV when the pizza gets delivered.



LAIKA is an American stopmotion animation studio, known for its feature films Coraline. ParaNorman, The Boxtrolls and Kubo and the Two Strings. The company's chairman, Phil Knight, is also one of the founders of Nike. With every film that Laika releases, Nike designs a promotional shoe which can be won by a moviethemed giveaway. All shoes come in a special box, and in the case of the Coraline release (pictured), some also came with movie props that were actually used in the movie.



NBA Jersey By NikeConnect €80.00

NikeConnect technology is built into the tag on the bottom of the jersey. To make use of this technology, a smartphone app needs to be downloaded. After this, the smartphone can be tapped on the tag of the jersey, unlocking exclusive access, such as NBA highlights, exclusive gear, and game tickets.



Happy Meal By McDonald's €3,95

The Happy Meal is McDonald's well-known kid's menu, which always includes a little surprise in the form of a toy. The toy collections, which are often licensed, change every couple of weeks and makes every McDonald's visit exciting.



Home Decor & Furniture

\$39,95 - \$1,999.00 (Disney furniture)

Not even home decor is safe from licensing. Ethan Allen, for instance, has made a large range of Mickey Mouse themed furniture, including chairs (pictured), beds, tables, dressers, cabinets, cribs, and more.



Skylanders By Activision VARIES (€44,95 for PS4 Starter)

This toys-to-life action video game series is played by placing physical character figures (the Skylanders) on the "Portal of Power", a device that reads the figures' tags through NFC and imports the character into the digital game as a playable character.



Disney Infinity
By Avalanche Software
€29,99 (3.0 Starter Pack)

Disney Infinity is a video game that synchronizes collectible figurines with the game, which unlocks characters from Disney and Pixar. The game was released on all major platforms, including Nintendo 3DS, PlayStation 3, Wii, Wii U, Xbox 360, Windows, iPad and Apple TV.



LEGO Dimensions

By Traveller's Tales

VARIES (€59,99 for PS4 Starter)

LEGO Dimensions is a toysto-life action-adventure video game featuring characters and environments from over 30 different franchises. The Starter Pack contains the game, the USB toy pad, and three mini figures which can be played within the game.



Fallout 4 Pip-Boy By ThinkGeek \$120 (≈ €105)

A faithful reproduction of the ingame item. The Pip-Boy pairs with Bluetooth to a phone or tablet to give access to the phone's ability to take and place calls, as well as its contacts, SMS messages, and audio files. Even when not paired, the Pip-Boy can still be used as an alarm clock or a cosplay prop, displaying the Status, Special, and Perks screens from the game. The knobs, dials, and buttons actually work.



Modeling Kits

PRICE VARIES

There are a lot of licensed modelling kits. Pictured is Optimus Prime (Transformers), made out of small metal parts from a kit by Metal Earth. Metal Earth also sells licensed kits from Star Wars, Star Trek, Marvel, Batman, Harry Potter, Caterpillar, My Little Pony and many more.

Other well-known modelling kits are those of Revell (which produces model cars and planes from almost every brand, but also licensed kits from Star Wars, Star Trek and Halo) and Bandai (best known for Gundam).



Albert Heijn Moestuintjes

Free with every €25 spent at AH

Albert Heijn has multiple promotional events where they give away collectible products or discount after spending a certain amount of money at one of their super markets. Most interesting are the Moestuinties, which introduces children to gardening and stimulates them to get more involved with healthy and sustainable food. However, children are not Albert Heijn's only target group, as adults also enjoy collecting the various seeds. When giving away the "free" products, Albert Heijn also often sells related products in their super markets. For the Moestuintjes these included garden gloves for children, a growing calendar, and stickers (among others).



Board Games

PRICE VARIES

A board game is a tabletop game that involves counters or pieces moved or placed on a pre-marked surface or board, according to a set of rules. Some games are based on pure strategy, but many contain an element of chance, and some are based purely on chance, with no element of skill.



Trading Card Games

PRICE VARIES

A trading card games or collectible card game is a kind of strategy card game that consists of specially designed sets of playing cards. Best known are Magic: The Gathering, Yu-Gi-Oh! Trading Card Game (based on the manga series) and Pokémon Trading Card Game (based on the video game series).

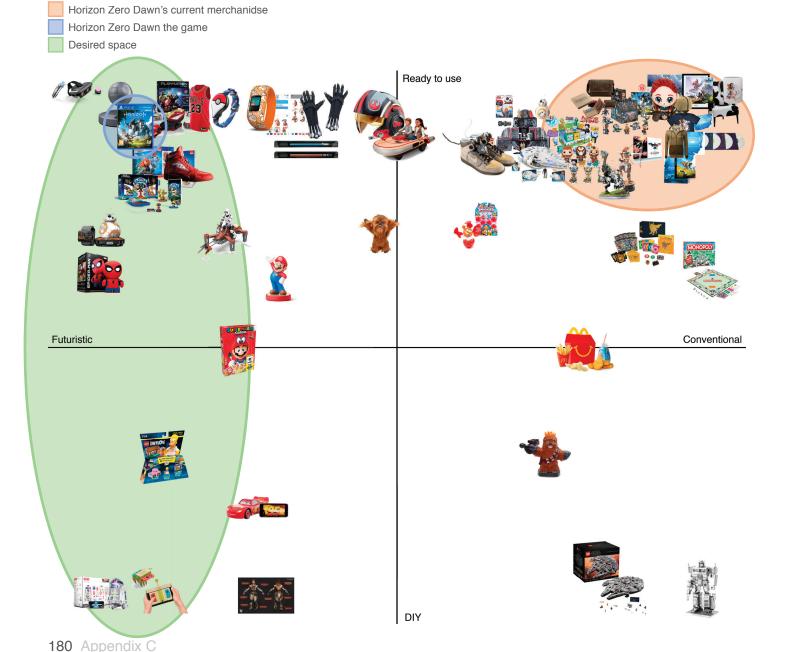
APPENDIX C - Market Analysis

Futuristic/Conventional Vs. Ready to use/DIY

For the market analysis different licensed products have been analysed. Since the number of licensed products seem endless, only the products that offer some sort of interaction or offer something that is not commonly seen in other products are included in this analysis. Generic products, such as basic apparel and mugs, have not been included. The full range of included products, as well as an explanation of every product, can be found in Appendix B.

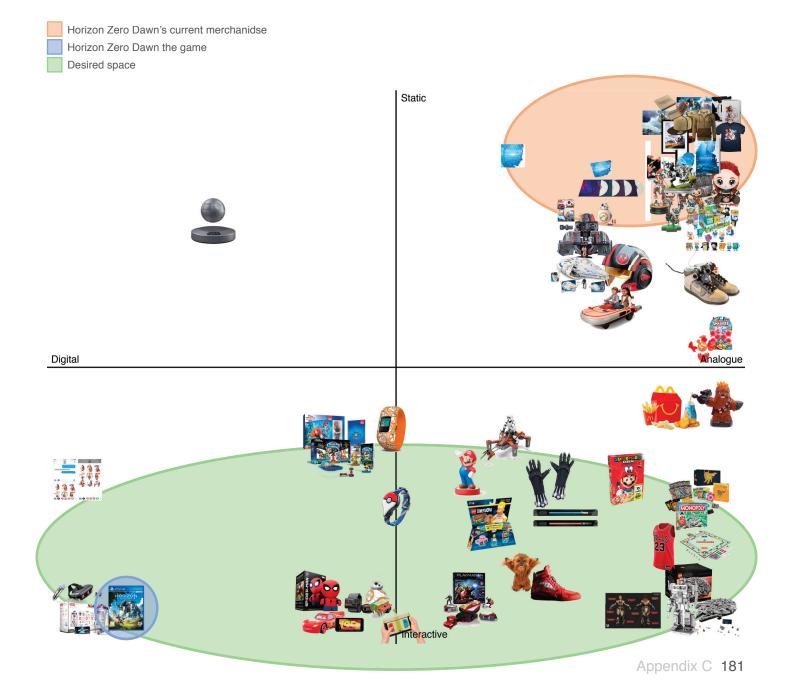
These products have been placed in various perceptual maps together with Horizon Zero Dawn and its merchandise, which makes it possible to indicate a space of opportunity. A bigger version of the perceptual maps, without the indication areas, can be found in Appendix D.

The first perceptual map plots the products on a scale of futuristic to conventional versus ready to use versus do-it-yourself. As visualised, Horizon Zero Dawn's current merchandise is mainly positioned in the conventional and ready to use corner, whereas the game gives a futuristic feel. Therefore, the desired future merchandise is located at the futuristic side of the map. Although the game is ready to use, both ends of the spectrum (ready to use and DIY) can offer interesting product solutions. Of course, the game itself is ready to use, but finishing the game is quite a DIY job.



Digital/Analogue Vs. Static/Interactive

In the second map digital and analogue are plotted against static and interactive. Most of Horizon Zero Dawn's current merchandise is perceived quite static and analogue, whereas the game is at the opposite of the spectrum; digital and interactive. In order to translate Horizon Zero Dawn rightfully, more than just a static product is needed. Therefore, the desired space is indicated to be on the interactive side of the spectrum. Both digital and analogue solutions can be explored.

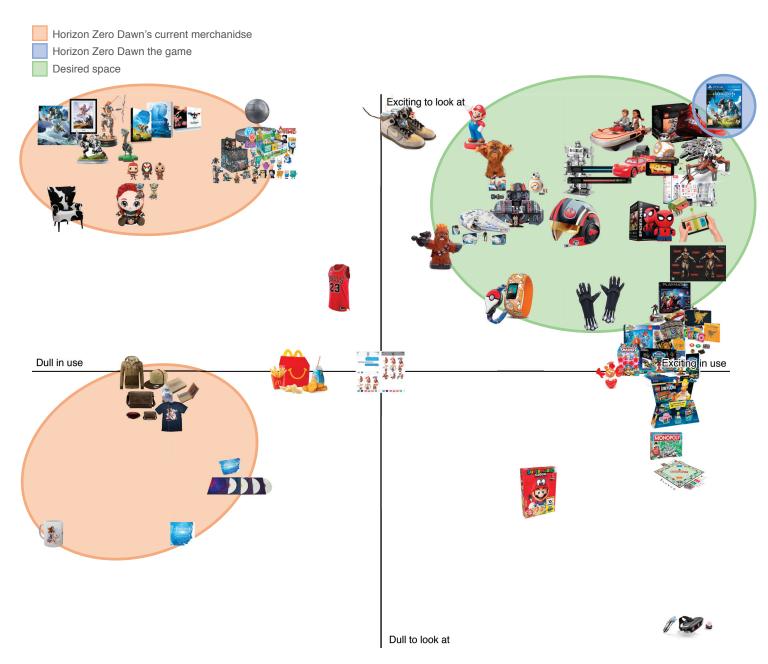


Dull/Futuristic in use Vs. Dull/Futuristic to look at

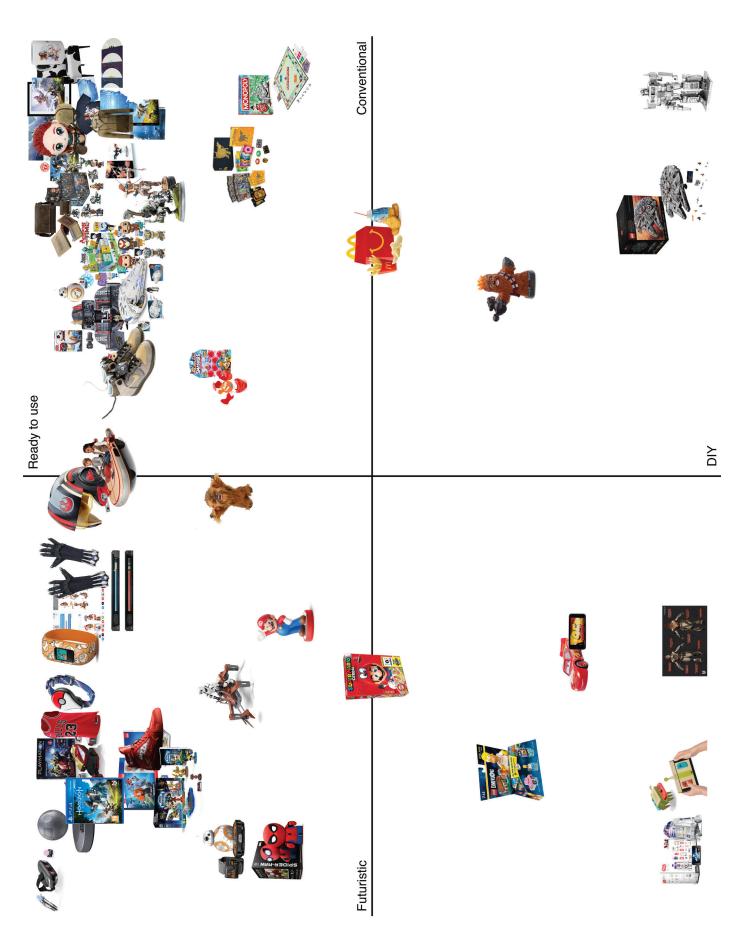
The final perceptual map plots use against look, focussing on the product's excitement. Although a lot of Horizon Zero Dawn's current merchandise is exciting to look at, most of it is dull in use. This mainly has to do with most products being static, as can be seen in the previous perceptual map.

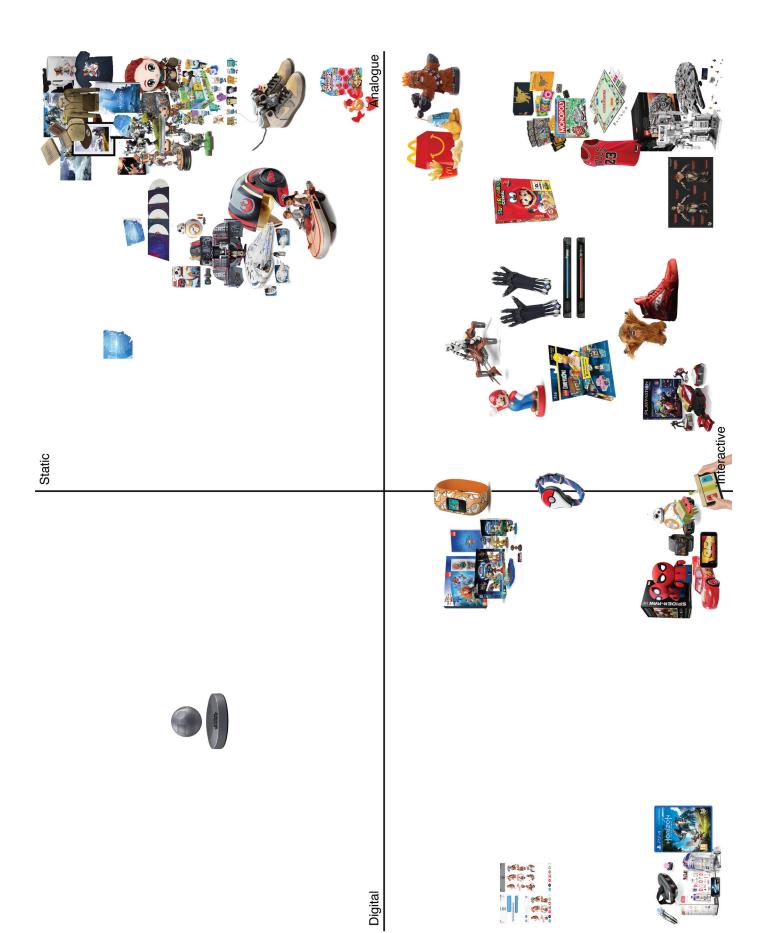
The game on the other hand is both exciting to look at as exciting in use, something which Horizon Zero Dawn's future merchandise should also be. Therefore, the top right corner is indicated to be the desired space.

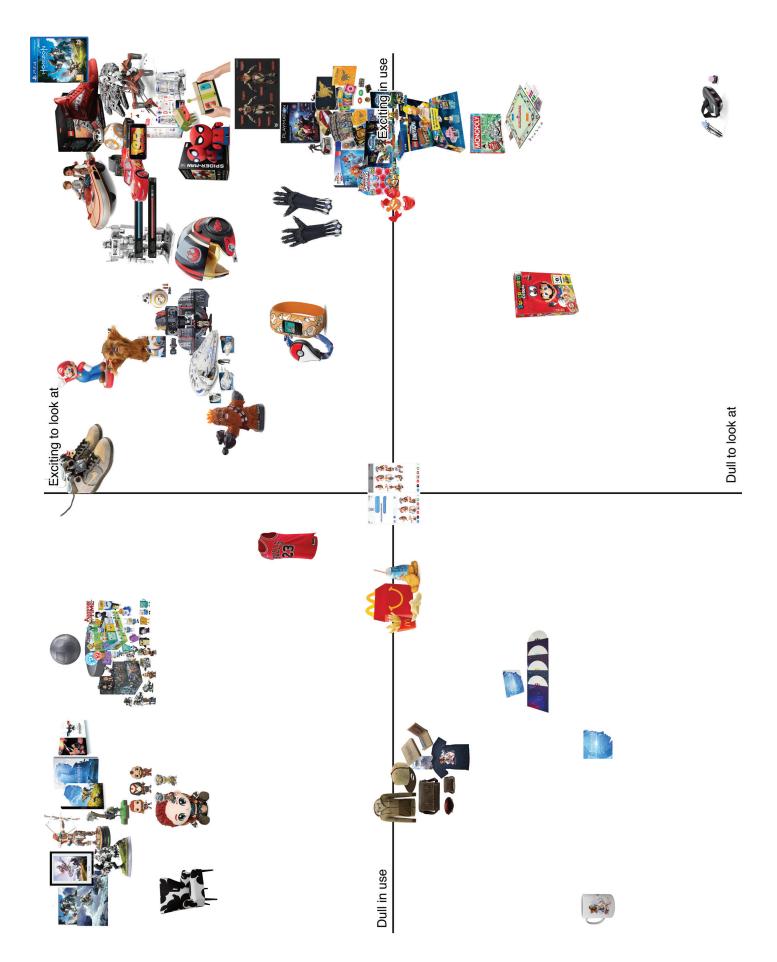
In conclusion, in order to compete with the current merchandise market, Horizon Zero Dawn's future merchandise should be futuristic, interactive, exciting to look at, and exciting in use.



APPENDIX D - Perceptual Maps







APPENDIX E - SWOT Analysis

Guerrilla

A SWOT analysis has also been done for Guerrilla and Sony Interactive entertainment, since these companies have other strengths, which can be valuable for the project. The opportunities and threats are mainly similar as these are derived from the trend analysis.

The most idea-inspiring strengths and opportunities will be used to generate search areas.

Dutch pride

Big and experienced game studio

Award winning studio

Experienced in VR

Risk taker (with HZD)

Non-independent studio

Only develops for PlayStation

Generic merchandise portfolio

Currently not that involved in online play

Non-independent studio

More disposable income

Age compression

Millennials and 'kidults'

Geoengineering

Clean, safe and sustainable products

Self-care

Micro donations

Voice-activation

Augmented reality

Virtual reality

Physical products

Mobile games

Furniture

Licensing

Collectible toys

Blind bags

Unboxing experience

Toys for adults

Board games and

Construction toys

Remote controlled toys

Action figures

Interactive play

Connectivity Animatronics

Toy-to-life

Peripherals

Pet play

Toys that teach

puzzles

Better known studios and game franchises

Privacy

Concerns about

technology

Film franchises

Othere open world RPG games

Mobile games

Sony Interactive Entertainment

Market leader

Big and experienced electronics company

Rich history

Experienced in VR

Many great PlayStation exclusive games

Handhelds and home consoles

Specs

Motion controller

Innovates in more than just gaming devices

High-quality graphics

Versatile social features

Focus on online play

No online compatibility (yet) with same games on other systems

Most features require a PlayStation Network connection

No backwards compatibility on PS4

Non-free-to-play multiplayer requires a PS Plus subscription

More disposable income

Age compression

Millennials and 'kidults'

Geoengineering

Clean, safe and sustainable products

Self-care

Micro donations

Voice-activation

Augmented reality

Virtual reality

Physical products

Mobile gemes

Mobile games

Furniture

Licensing

Collectible toys

Blind bags

Unboxing experience

Toys for adults

Board games and puzzles

Construction toys

Remote controlled toys

Action figures

Interactive play

Connectivity

Animatronics

Toy-to-life

Peripherals

Pet play

Toys that teach

Concerns about technology

Privacy

Strong competitors

Popular games exclusive to other consoles

Mobile games

Hybrid devices (such as the Nintendo Switch)

APPENDIX F - Interviews

About Horizon Zero Dawn

In order to find Horizon Zero Dawn's strengths, seven different people have been interviewd. All of the participants were aged between 20 and 35 and had played and enjoyed Horizon Zero Dawn.

Words that highlighted the strengths of Horizon Zero Dawn have been filtered from each interview and are placed in a word cloud. The size of the word indicates how many of the participants have mentioned it – bigger words are mentioned by more participants.

The words derived from this interview, together with the positive points highlighted in various reviews (see Internal Analysis) are used to determine Horizon Zero Dawn's strengths, which then will be used for a SWOT analysis.

Asked questions:

Have you played Horizon Zero Dawn?
What do you like about Horizon Zero Dawn?
What don't you like about Horizon Zero Dawn?
How does Horizon Zero Dawn make you feel?
What are the themes of Horizon Zero Dawn according to you?
Compared to other games, what makes Horizon Zero Dawn stand out?



About Merchandise

Furthermore, the participants have also been asked about merchandise. This will be used to get a broad overview of people's opinion about merchandise. Again, a word cloud is made to highlight the words that are named often – bigger words are mentioned by more participants.

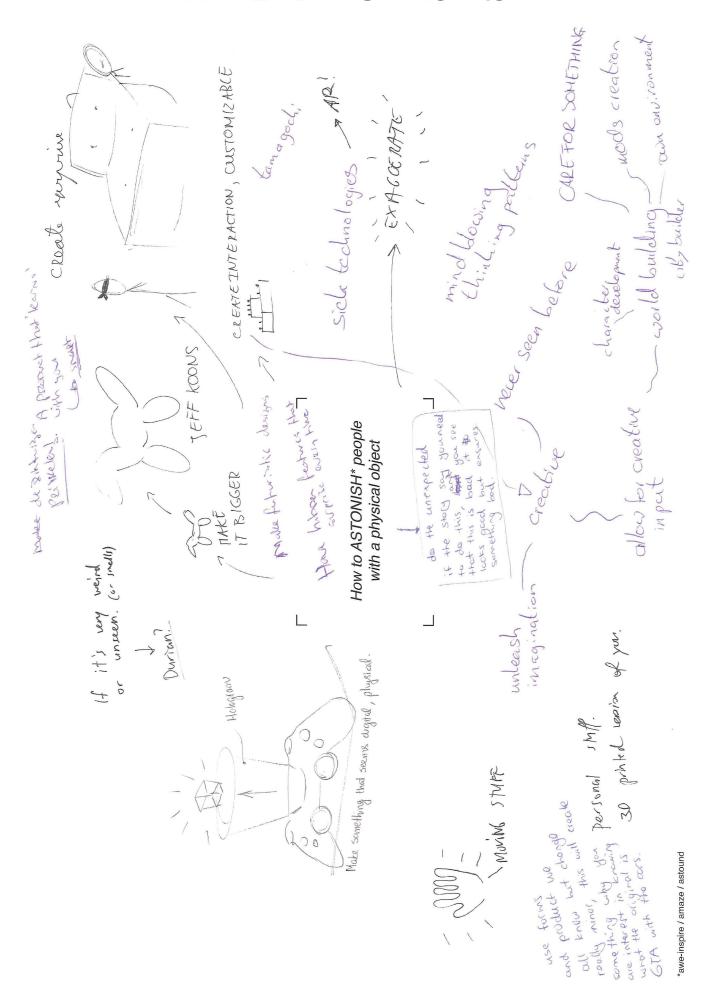
A picture of the current merchandise was shown during the last question. Furthermore, some examples of other merchandise were placed on the table, so participants could use examples when needed. This resulted in more in-depth answers.

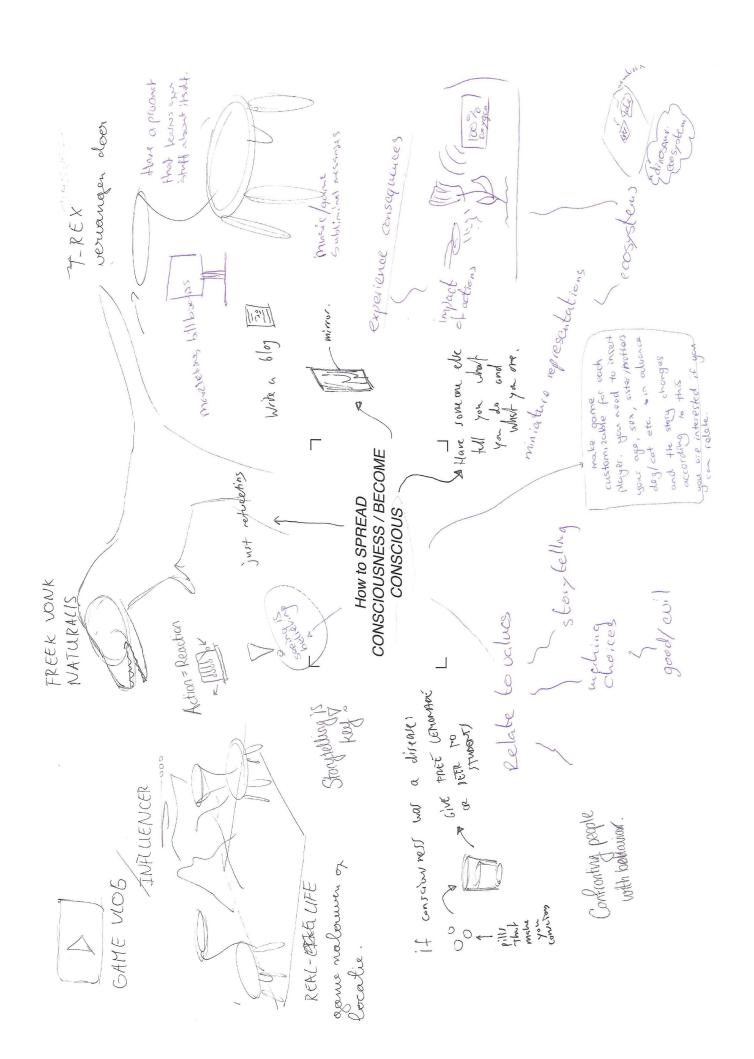
Asked questions:

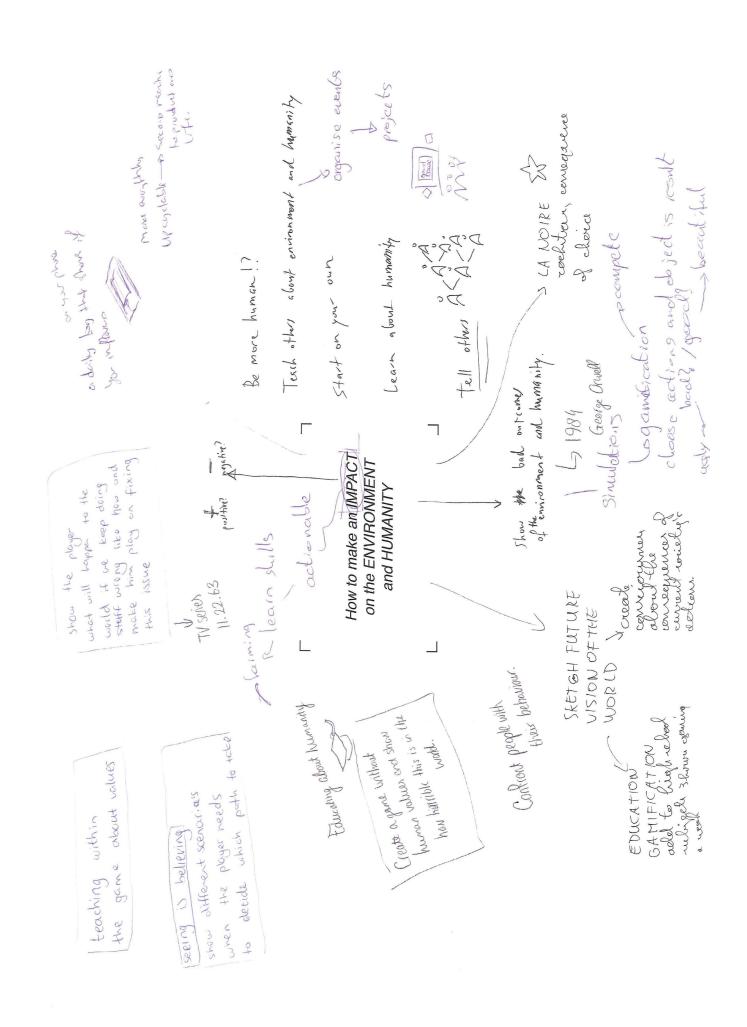
Do you like merchandise?
What kind of merchandise do you own?
What do you like about merchandise?
What would you like to see in merchandise?
What do you think about Horizon Zero Dawn's current merchandise?

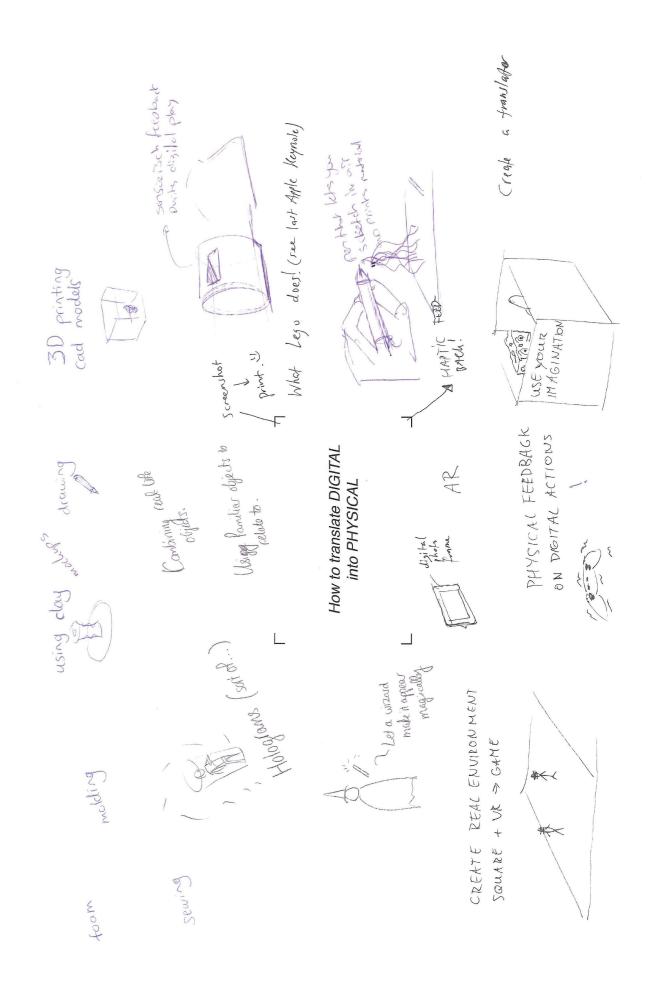


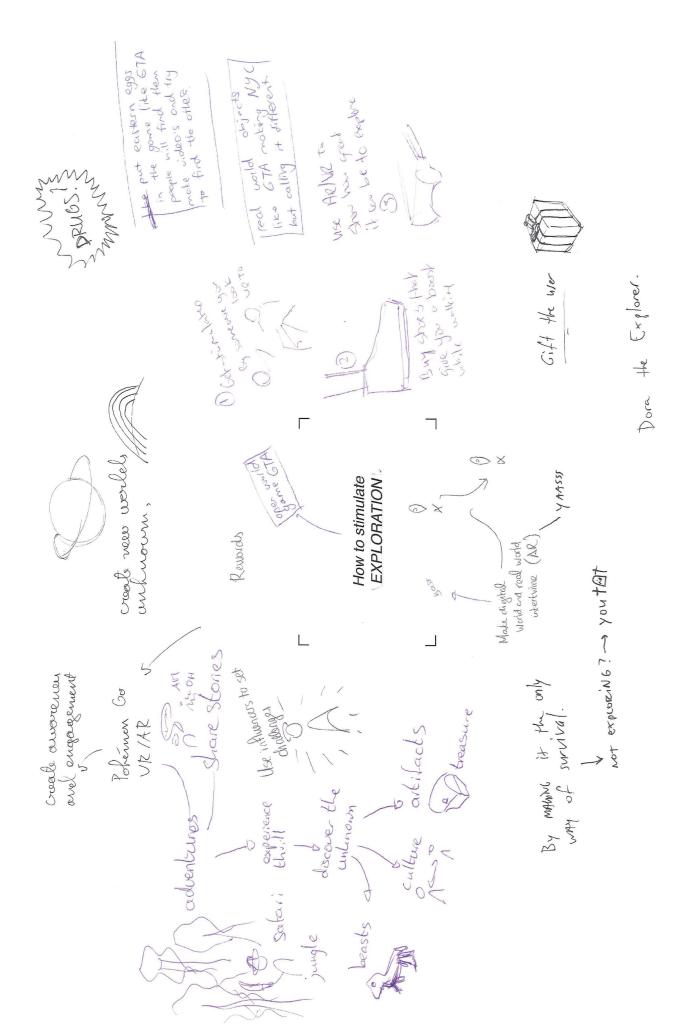
APPENDIX G - How to...

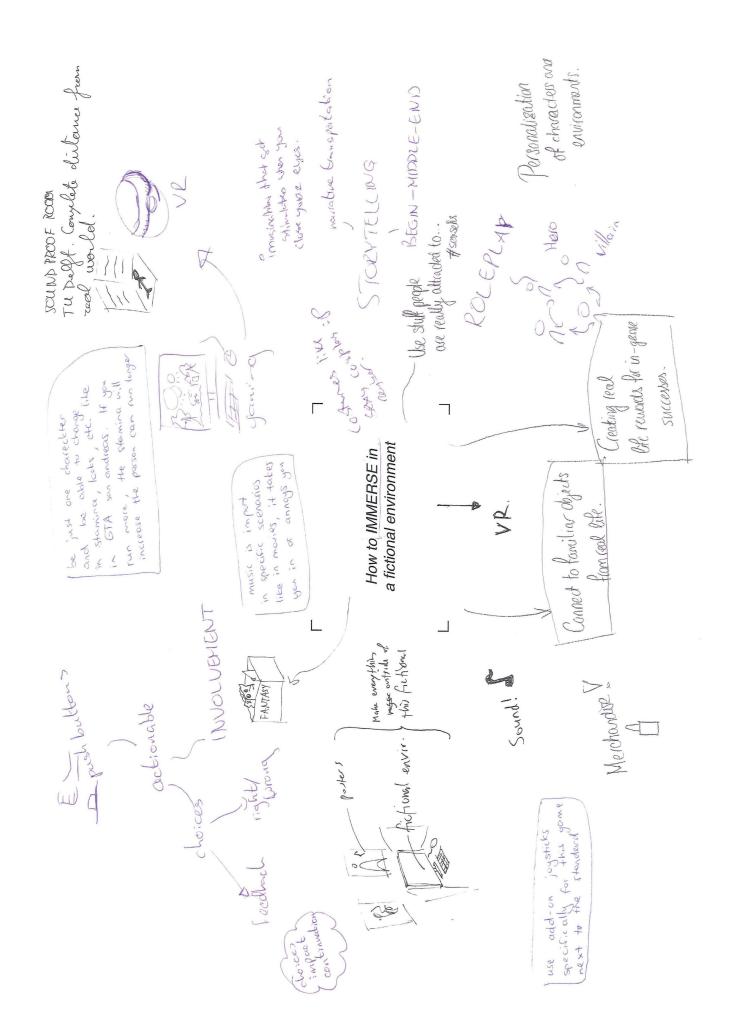












APPENDIX H - Morphological Chart

	А	В	С	D
Positioning	Standing straight	Hanging	Floating	Leaning
O D Shape	Traditional	(Mason) jar	Robot	PlayStation (support)
Visuals	Illustration/ art	Live stream	Slideshow	Video
- Lights	Full light	Spot	Disco light	From within
Motion	Animation	Life	Moving figures	S Wind
((q)) Sensors	Humidity	Light	Time	Camera
Props	Figurine(s)	Miniature buildings	Cave (Cauldron)	Cloud

E	F	G	Н
Supporting	Supported	Moving	Upside down
Unconventional	Furniture	Square	Round
Photo	Animation	Videogame	None
Grow light	Coloured light	Stroboscope	None
Radio controlled	Vibration	Sound	None
Motion	Pressure	Heat	None
Driftwood	Rocks	Practicalities	None

APPENDIX I - List of Requirements

Requirements

- The product needs to be attractive to the target group.
 - The product needs to be attraractive to 25 to 30-year-old people.
 - The product needs to be attractive to Horizon Zero Dawn players.
 - The product needs to be attractive to merchandise collectors.
- The product needs to be well fitting within the search area.
 - The user needs to be able to interact with the product (more than once).
 - The product needs to have a focus on nature or culture.
- The product needs to fit within the design brief.
 - The product needs to have a positive impact on the environment / humanity or spread awareness about (one of) those matters (without it feeling forced or far-fetched).
 - The product needs to maintain IP awareness.
 - The product needs to spread IP awareness
 - The product needs to extend Horizon Zero Dawn's experience and themes.
- The product needs to reflect the interaction vision.
 - The product needs to awe-inspire.
 - The product needs to be immersive or strengthen the immersion of Horizon Zero Dawn.
 - The product needs to make the user conscious about topics that are both relevant to Horizon Zero Dawn and real life.
- The product needs to be desirable
 - The product needs to be considered cool.
 - The product needs to have a premium look and feel.
 - The product needs to be well fitting within its environment.
 - The product needs to spark the interest of both Horizon Zero Dawn players and those that are unfamiliar with Horizon Zero Dawn.
- The product needs to stay below €400.

Wishes

- The product should look cool.
- The product should make the owner feel cool or trendy.
- The product should be a conversation starter.
- The product should be interactive with Horizon Zero Dawn.
- The product should be easy to use.
- The product should have collectable value.
- The product should be re-usable.
- The product should be environmental friendly.
- The product should have the "Instagram" factor.
- The product should attract people that are unfamiliar with Horizon Zero Dawn.

APPENDIX J - 1:1 Orthographic Views



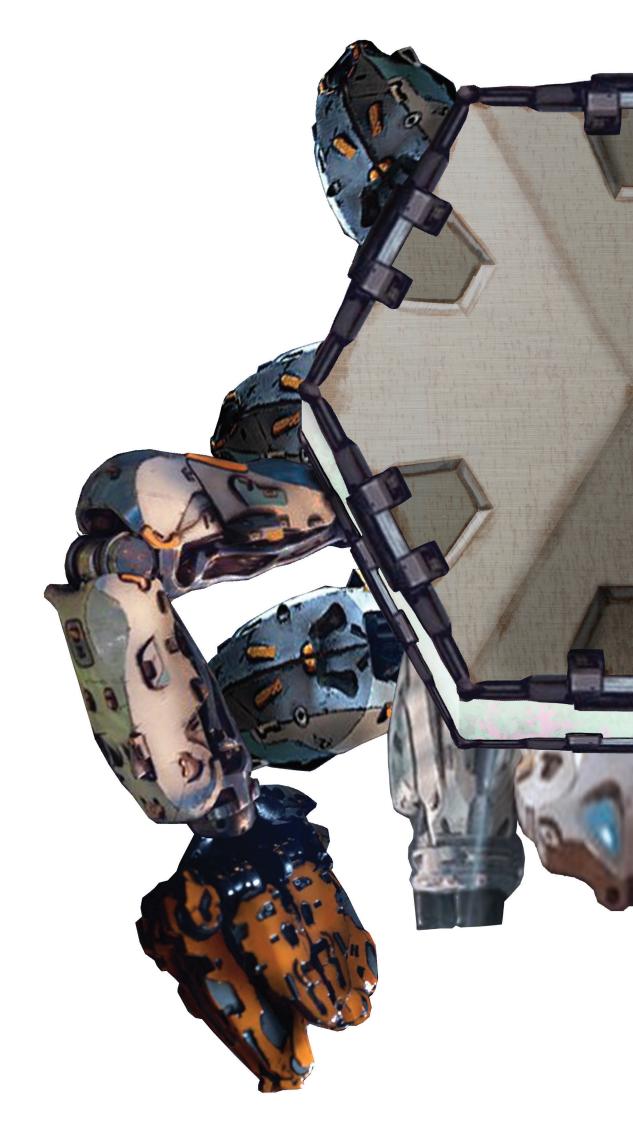


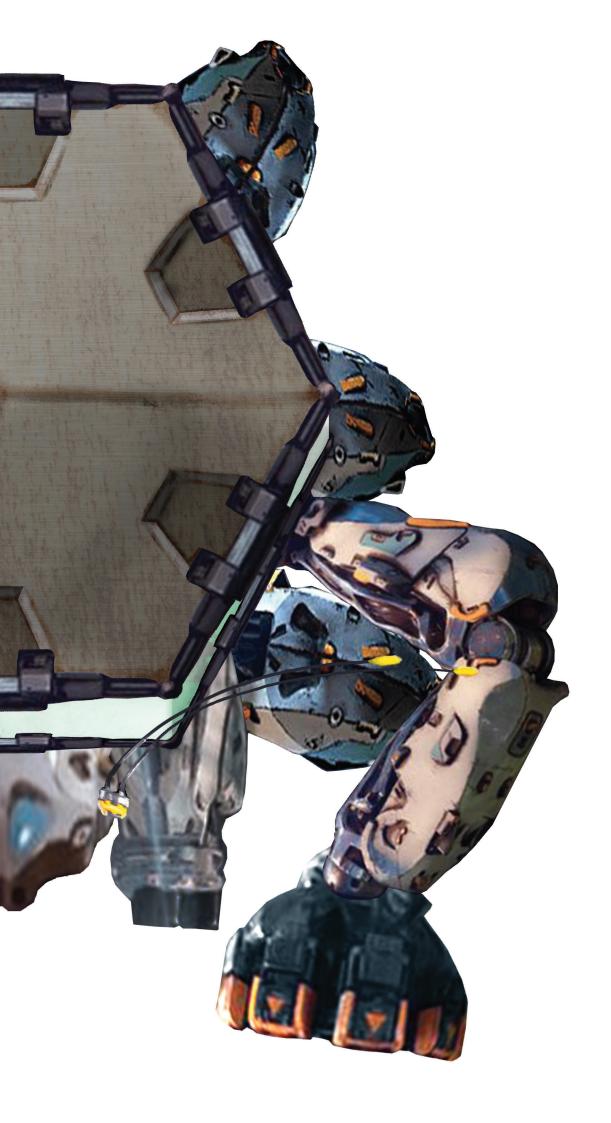












APPENDIX K - User Test















































Overgrowth of Concept 2











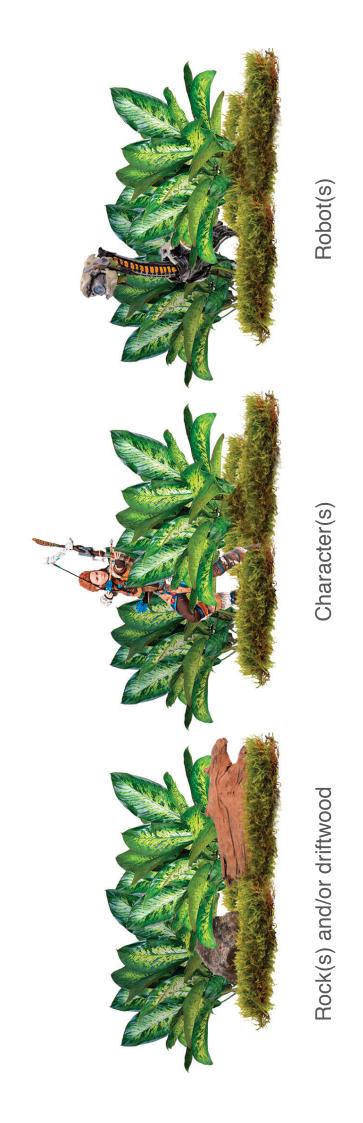


















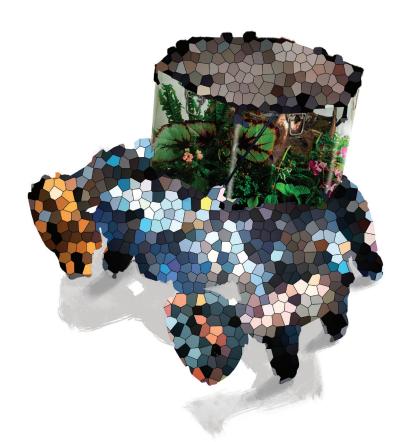
Shell Walker Options



No base



Static



Stylized/abstract base



Extra



base



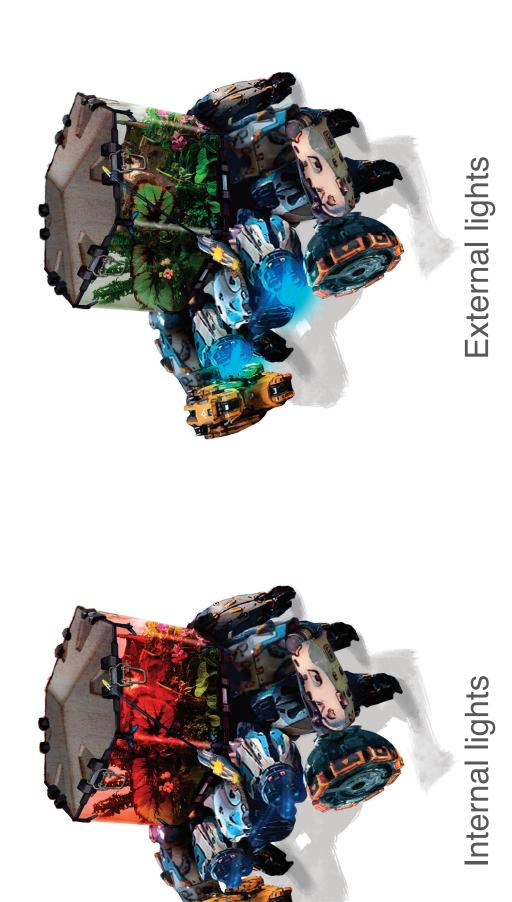
Dynamic base

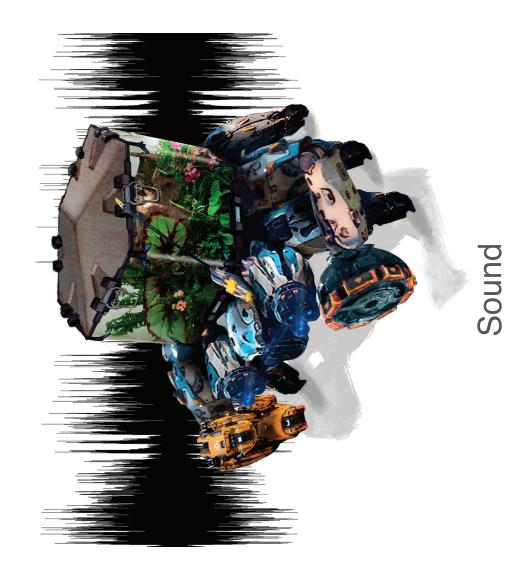


base



Colourless







Appendix L - Concept 2.2







Appendix M - Unboxing Experience Inspiration Board























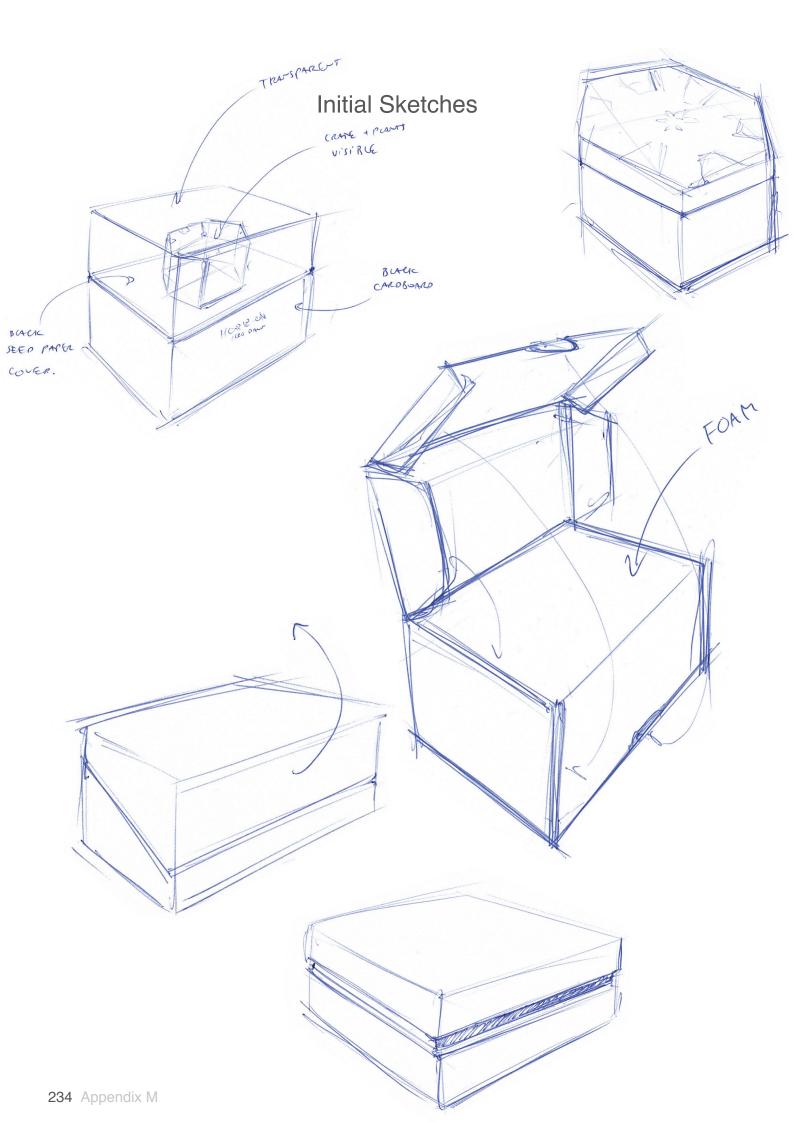


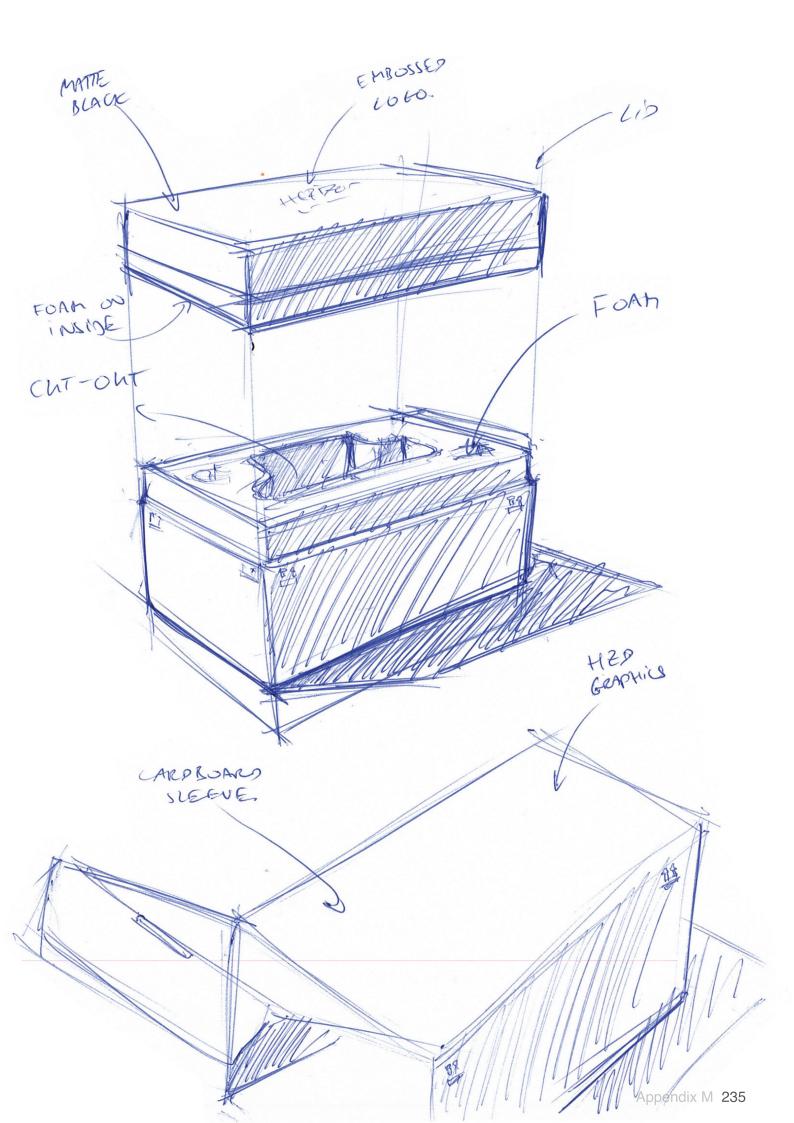












Appendix N - Store Research

Plant Stores

[1] FILYA INDOOR GARDEN

Fluwelen Burgwal 1F 2511 CH, The Hague https://www.filyaindoorgarden.com/

FILYA is a store that sells indoor plants. When presenting my concepts, they mentioned that, according to them, self-sufficient ecosystems were a bit too "trendy" for the people in the Hague, it still needs to become popular. Furthermore, my concepts were too specific for them to sell, currently they are not selling any enclosed ecosystems.

To me, the store also felt too traditional, and too focused on one specific product category (in-door plants) that I myself do not see my concepts end up on the shelves of this store. However, the owner of the store did see a lot of potential for game stores and referred me to Tabletop Kingdom^[8].

[2] NICHE Flowershop

Nieuwe Binnenweg 235A 3021 GC, Rotterdam www.nicherotterdam.nl/

Niche is a small independent plant store located in Rotterdam. They were very excited about my concepts but would not sell them in their store. Their store is too small, which makes them very selective about what they will and will not present and sell in their store. My concepts did not fit that image. They were, however, very willing to promote the products as they thought that their audience would be interested in them. Furthermore, they thought the products would fit well in de Bijenkorf – a bigger store that is open to new and innovative products and startups.

[3] Stek de Stadstuinwinkel

Nieuwe Binnenweg 195B 3021 GA, Rotterdam https://www.stekrotterdam.nl/

Stek is another small independent plant store in Rotterdam, mainly focused on indoor plants. Although they genuinely liked my concepts, they were not very eager to have them in their store. They mainly sell plants that can grow very big (which I noticed very clearly after they mentioned it) and because of that they have never sold enclosed ecosystems (as the glass CONTAINer contains the plants and keeps them from growing big).

Design Stores

[4] evernow

Goudsingel 206 3011 KD, Rotterdam https://evernow.nl/

evernow is a trendy design store and one of the stores that sells Spruitje,'s ecosystems. Although they really liked my concepts, they did not think it was something they would sell. They have a select audience that visit the store, and that audience will probably not buy a Horizon Zero Dawn product. They could use it as a showpiece to lure people to their store, but those people would look at the showpiece and end up buying something else (a more basic ecosystem for instance), and that would make them feel like they are making advantage of Horizon Zero Dawn's popularity, something they do not want.

They did mention de Bijenkorf (just like NICHE Flowershop^[2]), of which they thought it would probably be the perfect store to sell my concepts. De Bijenkorf does a lot with the "shop in shop" phenomenon, where other independent shops or stands are situated inside de Bijenkorf. They advised to create a whole "store" experience within the "shop in shop", where both my concepts and the game could be sold. Although this might still only be interesting for a select audience, de Bijenkorf has many visitors a day. If only 0.5% of de Bijenkorf's visitors buys a product, still quite a lot of products will be sold, but if only 0.5% of evernow's visitors would buy the product there would a problem.

[5] Lasas en Loekov

Grote Marktstraat 16a 2511 BJ, The Hague https://www.lasasenloekov.nl

Lasas en Loekov is a furniture shop in the Hague. When walking in, the first thing I saw were dozens of Spruitje, products. Unfortunately, the person who decides what will and will not be sold in the shop was not present, but the person who helped me was quite interested in the project's outcome. I personally do not see my concepts being sold in Lasas en Loekov, the in-store vibe did not seem to resonate with my concepts.

[6] WAUW Warenhuis

Piet Heinstraat 51a 2518 CB, The Hague https://www.wauwwarenhuis.nl/

When I first walked in WAUW Warenhuis, it seemd like a "live, love, laugh" kind of store, one that sells those cliché gadgets or furniture. I quickly walked out, but during my visit at Collectura^[9], WAUW Warenhuis was recommended as a potential candidate, so I headed back. However, although the owner of the shop was not present, one of the fellow workers was quite certain that my concepts do not fit their store but did see a lot of potential in game stores.

Game & Merchandise Stores

[7]
Gameshop
Schoolstraat 31
2511 AW, The Hague
https://www.gameshop.nl/

Gameshop is a store that sells a lot of merchandise and new and old videogames. To me they mentioned that the concepts would probably be too expensive to end up in their store, and recommended to try Concrete^[11], where they sell art toys. They did, however, genuinely like the concepts and saw a lot of potential in them.

[8]
Tabletop Kingdom
Korte Houtstraat 13
2511 CC, The Hague
tabletopkingdom.nl/

Tabletop Kingdom was recommended by FILYA INDOOR GARDEN^[1]. The store mainly sells board games and had very little merchandise. Although they will most likely sell the upcoming Horizon Zero Dawn board game, selling merchandise was not something they were planning on doing much.

[9]
Collectura
Piet Heinstraat 113
2518 CE, The Hague
www.collectura.com/nl/

Collectura sells collectible items in almost every category, including merchandise. About my concept they mentioned that they did not know if it would sell, but they were very willing to place it in their store to see if it will. They would probably make a deal with the supplier to not make it too big of as risk for themselves, but overall, they were very willing to sell all three concepts.

[10] Stripwinkel Yendor Korte Hoogstraat 16 3011 GL, Rotterdam https://www.yendor.nl/winkel/

Although Yendor is mainly a seller of comics, they also had guite a lot of merchandise for sale in their store (which were mostly focused on comics). This already made me doubtful, since Horizon Zero Dawn does not (yet?) have any comics, and therefore selling Horizon Zero Dawn merchandise in this specific store might seem like an odd fit. However, one of the workers in the store did mention that they do sell game merchandise once in a while, but he was uncertain about the potential of my concepts for Yendor. And I agree, my concepts might be a bit too specific for a store that is specific in other things. I do, however, believe that Yendor could be convinced in selling my concepts (although all of this is purely hypothetical for now, as none of the concepts are confirmed to be produced).

Concept Stores

[11]
Concrete
Papestraat 17
2513 AV, The Hague
https://concrete.nl/

Concrete is a concept store of high-end street wear and art toys. As a concept store they are very open for new and innovative products, and as expected, the owner of the store was very enthusiastic about my concepts (especially the Shell Walker Ecosystem). He was quite clear in saying that he did find the product to be fitting for the store, however, he did prefer it separated from Horizon Zero Dawn (as he is not familiar with the game). So maybe Concrete is not the best concept store to sell my concepts, but it does show that concept stores show a lot of potential to sell the Horizon Zero Dawn themed ecosystems.

Furthermore, the owner of Concrete mentioned that their current art toys (mainly BE@RBRICKS) do not sell well. According to him it is not fitting for the Dutch market. Dutch people do not see the point of art toys. He also mentioned that most art toys are being sold online, Concrete is one of the few physical stores in the Netherlands that sells art toys, while there are multiple online shops that sell both art toys and high-end action figures.

He went on saying that plant stores are often very narrow minded and not very innovative. He did not expect any plant stores to be willing to sell my concepts but would rather expect to see it in a game store. Comic Con would be great place to sell this kind of products as well.

He ended the conversation by saying that he hoped to see me again with a production model.





