Aesthetic Analysis

Metroid Prime and Star Citizen were chosen as examples of aesthetic and futuristic interfaces that are designed to immerse the users in the narrative of the story. But they also balance their aesthetics with true functionality, in that both are designed for real-time high-speed interaction. They relate to the OpenROV in that the OpenROV cockpit’s goal is to immerse the user and draw them into imagining the worlds they could explore with its aesthetics, while still being highly functional, and relaying high density information to the user.
Metroid Prime

Video game design is always at a tension between aesthetics vs usability; games are inherently incentivized to synthesize both functionality and aesthetics in order to create an ambience and immerse the player in a narrative, while still needing to be functional. The context and framing of the UI is based around the fiction of the HUD in Samus Aran’s helmet, which provides a diegetic framework that is consistent in the narrative the game is trying to convey. Core functionality is simple and consistent; persistent statuses are fixtures in the HUD, and contextual AR menus pop up as needed. The UI is designed to provide the core functionality to the user, add to the immersiveness in its aesthetic delivery, but otherwise get out of the way. However there are many aesthetic embellishments (patterns, textures, non-functional gauges) that while adding to the mood and feel of the interface do nothing for the usability, if anything hurt it. The user flow of the interface lives within the main HUD, and menus are pulled up within this same helmet frame. Many point to this interface as an inspiration for many modern diegetic first person shooter interfaces (Dead Space, Halo4, etc.). I find the interface to be both functional and immersive for the narrative, but a bit noisy. Its layout is clearly based on the input constraints of the game controller, but everything is intuitive and easy to navigate to.
Analysis 1

Examples

01 – Main HUD-based UI Interface
The primary interface is based around the helmet HUD of the character. All core informational UI elements (status, map, etc.) are persistent transparent overlays. Various diegetic elements (frame of helmet, gradient, various effects and transitions) are used to provide context and create an ambience.

02 – Menu Interface
The menu interface uses a tabular two column format, with main components in the left column, which bring up sub selections on the right. Notice the curvature of the menu, used to create depth and to match the distortion of being inside a helmet. Control information is always provided at the bottom of the screen.

03 – Map Interface
This sub menu takes an existing item on the interface and blows it up into greater detail. A 3D map is presented, with Strong contrasting colors are used to indicate points of interest. Note that these menus are presented as an overlay onto the persistent HUD, thus playing into the narrative of the interface existing within the game world.
Metroid Prime

Objective 1: Immerse player in narrative through embedding UI into the world and fiction of the game

Objective 2: Simple and clear hierarchies for visual statuses and controls key to game mechanics (i.e. bold and persistent display of core statuses, temporary statuses or separate sub menus for other things)

Objective 3: Consistency of UI in narrative of interface (all in HUD)

What do you think their objectives were?
What was the need for this UI?
Metroid Prime

Gamers use this interface. They use it for going on an adventure, solving puzzles, fighting aliens, and exploring mysterious landscapes. It is their suit and visor through which they view and interact with the world. The UI is manipulated using a game controller (Nintendo Gamecube or Wii), and is thus designed around a limited set of direct interactions that the user can make. Rather than mouse and keyboard, you have joysticks and a limited set of buttons. The interface is designed for immersing just the user, no affordances are made for external viewers, but they might be drawn in by the aesthetics and at a glance understand what they are seeing.
Analysis 1

Color Palette

01 – Future blue
R - 118%
G - 185%
B - 255%

02 - Gold
R - 255%
G - 148%
B - 10%

03 – Dark Blue
R - 45%
G - 68%
B - 82%

03 – Indicator Green
R - 0%
G - 157%
B - 12%

Label
The blue is pervasive throughout the interface is used as the main color type. Other colors are used for contrasting or in menus, or the green I used for high contrast indicators. The gold in the menus was probably chosen to match the color of Samus’s suit, rather than usability.
Color

Metroid Prime

Why do you think they chose these colors? Are they functional or aesthetic decisions? When are they functional and when are they aesthetic? How does fit within a brand or does it stand alone? They chose these colors to fit within an aesthetic, as well as to provide functionality.

The heavy use of the gradients of aqua makes things look holographic and futuristic, which is clearly the aesthetic they are shooting for. Its predominant use is helps highlight the contrast of the other colors used; and there is a consistent palette of contrasted colors for indicating a grade of visual importance.
Analysis 1

Metroid Prime

Typography

**Type Inventory:**
There seems to be only one type face used. It only comes in 3 sizes. The variations represent titles, body/menu items, detail items. This is consistent across the UI. The exact font used could not be found, but it was close to [Vipnagorgialla](http://www.fontsquirrel.com/fonts/vipnagorgialla)
Metroid Prime

Why do you think the designers chose this typeface(s)? Is this successful or unsuccessful? Are they functional or aesthetic decisions? What would you do differently?

I think the designers chose this typeface for both aesthetics and technical constraints. Its geometric monospaced glyphs give it a futuristic computer/interfacey look, but also probably make it easier for the game console to render. Since the typeface characters are similarly shaped, it is aesthetically balanced, but not as readable.

I would use a lighter weight typeface that is more readable and that has proper kerning. It would still be sans serif, and slightly geometric, but not as heavily as this typeface.
Name of UI Example 1

Assets
Metroid Prime

The imagery chosen was specific to fitting and creating the world in which the player is exploring and a part of. The interface and translucent overlays played to the science fiction aspects, and darkness is used to bring mystery. The interface is a thin glowing technology shield that protects the player from the harsh environment. The imagery used is both functional and aesthetic; it serves all the core information the user needs in a quick and mostly unobtrusive manner, but the aesthetic flourishes are strong and consistent which help immerse the user in the fictional world.
Star Citizen

Write a comparison that weighs usability vs. aesthetics. When is the designer taking design liberties for aesthetic reasons? How does the design layout help you or the user navigate successfully or unsuccessfully? Was its success or failure due to aesthetics or technology or something else? Is the overall appearance beautiful to you? Why?

The interface is heavily more focused on usability versus aesthetics, but that being said it is very aesthetic. The interface is designed around the diegetic mindset of making the interface exist within the world and narrative (it is a HUD projected into the cockpit), but is very much functional and has much less visual fluff the Metroid Prime. The layout is quite busy, but only because there are many many things that need to displayed. Given how much information is displayed, it is very clean, balanced and pleasing to look at. Real estate is appropriately split up, and it creates clear hierarchies and groupings between different components. It is mostly consistent in its design language. If there were actually space ships like these, I wouldn’t be surprised if the interface looked somewhat like this.
01 - Cockpit
The focus is on providing the user as much of the surrounding information without blocking them. Immersion is created by the rendering of the physical cockpit. The interface is all transparent HUD, thus maintaining as much visual information of the environment as possible.

02 - Context
The interface is designed around the user controlling and actuating a space ship for dogfighting in space. The game itself is expanding and has goals of creating a persistent MMORPG like universe with an economy and more, but right now the main focus is in the basic battle mechanics. Twitch reflexes and situational awareness are paramount.

03 - Interface Layout
The diagram shows the main components of the HUD interface layout, and how they are grouped. Left is self, right is enemy. Center and bottom provide statuses.
Name of UI Example 2

Objective 1: Clear and functional interface

Objective 2: Immersion through full diegetic design

Objective 3: Everything you need but focus when you need it

Objective 4: Make it feel like an actual real spaceship
Name of UI Example 2

Who uses this? How do they use it? How if at all does it change their behavior or the behavior of whoever is around them? What is the need for this? Are there workarounds? What time of day do they use it? Anything else?

Space simulation and flight enthusiasts play this game. They interface with either a mouse and keyboard, but ideally with a joystick and throttle stick setup with many keys to control each of the many things that can and need to be actuated. The need for this is to have an immersive sci-fi space epic universe that people can lose themselves in. People will play this game whenever they have free time.
The colors indicate the state, from blue = neutral to green = friendly, to damaged and critical/hostile. This color language is consistent throughout the interface.
Star Citizen

Why do you think they chose these colors? Are they functional or aesthetic decisions? When are they functional and when are they aesthetic? How does it fit within a brand or does it stand alone?

The future is blue, and it also contrasts well against the dark black of space. We associate blue to be cool and collected, and the progression of blue to red is a scale as severity/intensity is an intuitive color mapping. The very heavy use of the light blue is probably aesthetic; actual HUD in fighter jets use green, since studies have shown the human eye is most sensitive to it, and it does well in darkness. However blue is the color of the future (according to sci-fi movies), thus the interface is blue. The brighter/translucent nature of the palette is mostly an aesthetic choice, that plays into the diegetic narrative of how the fictional interface works.
Typography

**Star Citizen**

**Type Inventory:**
How many fonts are there?
How many sizes are there within those fonts?
What do those variations represent? (*body copy, headline, time, indicators, etc.*)
Is this consistent across the UI? (If not why is it broken?)

There is only one font in the UI. There appear to be two sizes of the font, however the HUD interface is warped to give the perspective of a projected HUD, thus it isn’t completely clear if there are just 2 or 3. Line weight and ALL CAPS are used to distinguish type, and darker vs lighter shades of the same color direct focus.
The larger type represents group numbers, velocity, and score. The smaller type represents everything else.
This is consistent across the entire UI. The size seems to be chosen on what was the smallest but still clear and legible size. There is greater variation in the color, shading, CAPS, and line weight to discern between labels, data, and indicators.

The font closest to the UI font is Electrolize.
Star Citizen

Why do you think the designers chose this typeface(s)? Is this successful or unsuccessful? Are they functional or aesthetic decisions? What would you do differently?

The typeface was chosen for equal line weight so it could be tiny but still sharp and legible against a contrasted background. It is successful in the symmetrical geometric typeface matches the aesthetic of existing vector projected HUDs of fighter jets, and the imagined aesthetic of a futuristic engineered spacecraft. However due to the highly similar geometric constraint of characters, its not as readable. Words turn into blocks, and you have to focus and strain a bit to read them. The typeface is both aesthetic and functional, but a less similar character typeface might make it more readable; but it might require the font size to be larger, thus taking up more real estate on a pixel squeezed screen.
**Analysis 2**

**Assets**

**Star Citizen**

- **Powered**
  - CF-17 Ball Turret
  - 1500 rounds remaining for each gun
  - Energy weapon at 67% of full power

- **Unpowered**
  - TN-14 Neutron Gun
  - 100%

- **Destroyed**
  - 4 missiles, one of which is armed

- **Group 2**
  - These weapons are in Group 1

- **Group 3**
  - Missiles
    - Missiles (can’t be assigned to a weapon group)
  - Countermeasures
    - Countermeasures (can’t be assigned to a weapon group)

**HEAT LEVEL** (the more red, the hotter)

**Power buttons toggle power on and off.**

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**Interface Aesthetics**

Spring 2015

Elisabeth Prescott & Kimiko Ryokai
Star Citizen

Why do you think they chose this imagery? Are they functional or aesthetic decisions?

A lot of the imagery are token tropes from sci-fi; asteroid fields, dramatic lighting against a planet, zooming through a floating metropolis. The imagery is very much aesthetic, it matches what people have come to expect from a spacecraft cockpit, but it strives to be as functional as possible given the narrative and fiction that it is trying to convey. The physical cockpits and viewports changing from spacecraft to spacecraft fit within a diegetic philosophy. The HUD distortion does not improve functionality, but is aesthetic and strives to place the player into the seat and perspective of the cockpit (you can even look back at yourself).