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Abstract

The Legend of Pictograms is a system of pictograms designed to take the place of verbal instruction for the game The Legend of Zelda: The Wind Waker. The system consists of icons including characters, items, places, dungeon bosses, and things such as progress markers, and of short instructional images that instruct the player in various ways. The objective of The Legend of Pictograms is to increase the relevancy of console gaming, while expanding the audience to younger children that are not yet able to read. By removing all verbal instruction, console gaming is being brought closer to mobile gaming, therefore keeping it relevant to other forms of gaming such as apps. Much research was done on pictograms and pictogram theory, as this was the center of my project and it needed to be functional and understandable. Because the system is supposed to replace verbal instruction, it needed to be able to be read quickly and needed to be identified as both part of the game, and as a separate interface. Because of this, the system is made up of small icons in a limited, flat color palette with partial strokes to both match the graphics of the game and set it apart. The system was then designed and put into context on top of screenshots of the game. Some of the most original parts of the new system were the progress markers and character/dungeon boss/place icons, which did not exist in the original system of the game. The main menu screen was also redone and applied to the pictograms. Overall, the system seems effective in replacing verbal instruction and could be applied to other types of games in the future.

Key Words:
Pictograms
Game Design
Console Gaming
Pictogram
Instruction
Presentation/Project Summary

For my master thesis project, I made a comprehensive, instructive system of pictograms for the Nintendo Gamecube game The Legend of Zelda: The Wind Waker designed to take the place of all verbal instruction, including characters, tasks and progress markers.

The Legend of Zelda is an action-adventure video game series created by Japanese game designers Shigeru Miyamoto and Takashi Tezuka, and developed and published by Nintendo (wikipedia.org). It’s gameplay consists of a mixture of action, adventure, and puzzle solving (zelda.wikia.com). The Legend of Zelda: The Wind Waker is a 30+ hour game. It was released in the USA in 2003 for the Nintendo Gamecube. In January 2012, Nintendo announced a remake of The Wind Waker for the Wii U to be released on September 20, 2013 in the United States (cdn.overclock.net).

The Legend of Zelda: The Wind Waker features cel-shaded based graphics, designed to “extend Zelda’s reach to all ages” (Miyamoto, wikipedia.org) which brings me to the core idea of my project; to truly find a way to extend Zelda to all ages. Zelda games (and most of Nintendo’s games) are unique among many other types of console gaming because Nintendo targets young adults and older children with their gaming instead of adults (the original gaming audience, since this age group grew up with games)(zeldawiki.org).

My main design questions for this project were “how can I design my project in a way that will keep console videogames relevant compared to other forms of gaming?” and “how can I broaden the audience of console videogames, while keeping them relevant?”

After considering these questions, I began work on my pictogram system. I decided to base my pictogram system on a series of icons, progress markers and short visual instructions along with outside elements. I researched by watching the game being played through in its entirety on youtube, and listing everything of importance in the game, then sketching the items, places, characters and actions. I also included out-of-game content like controller buttons. Each important task, character, place and item has it’s own pictogram which is designed to resemble said thing in the most simplistic and easily-recognizable way possible.
Presentation/Project Summary

I have also redesigned the game interface and start menu to match the rest of the system. Much of the new design retains elements from the original game, but these elements have been altered to fit into the new system. Following this text, are multiple images of the game interface (pages 9-12), start menu (page 10) the gaming controller and buttons (not shown individually, but seen on the upper right corner of every game interface image) and some of the pictograms themselves (pages 7-8). For the game interface itself, all the individual elements present in the original game were reframed to match the new style of the pictogram system, including the health meter (upper left corner) magic meter, (below the health meter) an added progress meter, (below the magic meter) and a new space for procured items located directly beneath the progress meter. Dungeon navigation (bottom left corner) and rupees (bottom right corner) were also remodelled.
Character Icons, From left to right, top to bottom: Aryll, Link, Medli, Ganondorf, Nohansen Daphnes Hyrule, Great Deku Tree, Tetra, Princess Zelda, Tingle, Makar, Fado
Place Icons, from left to right, top to bottom: Forsaken Fortress, Dragon Roost Island, Outset Island, Windfall Island, Forest Haven, Tower of the Gods, Hyrule, Tetra's Pirate Ship
General Interface Example

General Interface Example
Start Menu Revamp

Playing a Song on the Wind Waker
Procuring an Item

Meeting a New Character
Learning an Action

Procuring Another Item

All image sources listed in Citations Section
Research and Conclusions

Pictograms are a language all their own. They are used to replace verbal instruction or language when information needs to be processed quickly. They are used in many different situations, from road signs to instruction manuals to things as big as the Olympic Games. Pictograms must be used in a consistent manner and appearance to be recognized as a cohesive system. They should be simple in appearance, and rely on familiarity to be effective. This means that the more a person is exposed to a system of pictograms, the more easily they are recognized and interpreted naturally and quickly.

Repetition is a good way to both introduce an image, and instill a meaning in it, and has been used as a tool in this project.

Though pictograms were researched, the main research in this project was the flow and look of this specific game. It was played through by myself several times and watched in its entirety on youtube. It was then analyzed in the areas of aesthetics, gameplay, length, content and other things. The Legend of Zelda: The Wind Waker relies on a heavy narrative to drive the story forward, so this aspect of play needed to be preserved when the game was altered with pictograms. The gameplay is based on puzzle-solving and adventure, and is dependent on a large, over-arching quest that is completed at the conclusion of the game. The Wind Waker relies on bright colors with a partial stroke in some areas and a cartoonish feel. The game was intended to broaden the audience of Zelda, and reach all ages. The bright colors and sweet looks of the game do not take away from the adult content, however, as this specific Zelda is one of the most serious in the series, alongside The Legend of Zelda: Twilight Princess and The Legend of Zelda: Majora’s Mask.

When trying to figure out the format for the instructive pictograms, (as opposed to the simple icons) I thought back to my decision to widen the target audience of the game, and thought about what the new target audience would be exposed to. One such thing that was brought into the pictogram system was the appearance and notations of cartoons. The movement pictograms especially were notated in the same manner many cartoons are. For example, the moving portion of throwing a pot was shown by having a pot appear to move down while increasing in opacity, therefore showing movement in much the same way cartoons do. This decision was based solely on widening to a younger audience. Personal experience and taste also played a large part in the research of this project.
Research and Conclusions

Pictograms can reach a wider audience than verbal instruction because they can be learned quickly, are easily recognized, and can be used by non-readers, something verbal instruction cannot do. Applying a pictogram system to full-length gaming is definitely a way to reach a larger audience, while at the same time altering gameplay enough to be exciting, but not changing the fundamental feeling of console gaming that has been recognized and loved since the 1980’s.
Project Result/Analysis

The project result seems pretty obvious to me. It’s a series of pictograms. More in depth, however is the information behind the result, and whether or not I think it achieved what was intended from the beginning. On my end, I can say that I have achieved what I set out to from the start of the project. However, I have not tested this system in game with a real audience, so I can only go from information I have received in different ways than real feedback. Does the style of the icons match the game, yet stand out? Yes. Do the pictograms resemble their respective items, characters or places without being too different from each other? Yes. And most importantly, do the pictograms resemble EACH OTHER enough to form a system? I think so, yes. But all of this needs to be confirmed by having the pictogram system in game. Until then, I can only speculate on my end and deem it successful that way.
Reflections

Design Issue:
One of the core design issues in this project was creating a system that would update console gaming while making it new, exciting, and available to a larger audience than before. I needed to do this in a way that didn’t change the fundamentals of the game, but still changed it enough to make it interesting, while achieving the most important part of the project: the playability for younger children. Nintendo targets children as their main audience for their games, so it only made sense to take this further.

Another design issue was the actual design of the pictograms and system itself. The system should be just that, a SYSTEM. It needed to flow and fit together almost seamlessly. The pictograms had to be instructive, yet not boring, and had to be unique, yet still fit into the rest of the game. This resulted in a limited color scheme with similar-sized icons and similar-shaped icons. They all are made with muted colors and partial strokes, and are almost always tilted at a regular angle such as 90 degrees, 60 degrees, 30 degrees etc. to fit into the uniformity.

The most important design issue, however, was the making of a pictogram system that would replace verbal instruction. This took a lot of pictogram research, because there is a lot of theory that goes into making pictograms. The colors, size, shape, look etc. all have an important part to play in the message they convey. This meant that the pictograms had to reflect the feeling of the game and also be distinct enough to be recognized as an authority. I felt that the basic structure of the game shouldn’t change too much, because the structure of Wind Waker is pretty streamlined and works well already. This does not mean that games with this pictogram system will remain unchanged in the future, however. Currently in games, information is given in a way that is very direct and easy to access (usually in dialogue told DIRECTLY to the player). This works because of the ease of gathering useful information. If the way information is received (pictograms) is changed, that means the gameplay will have to alter as well, in order to accommodate this. The way games are played now is passively getting information. If they are switched to pictograms, I REALLY feel that the games would need to be made more “player active,” meaning that the player would have to actively search out information in order to understand it. That means instead of being told they are the “Hero of Winds,” the player will have to FIND THIS OUT themselves by playing through that information in game. It would be a complete, structural gameplay overhaul.
Reflections

Societal and Ethical/Technological and Ecological/Economical
My project is not a project that is based on ecological practices. It is solely technological, as gaming is not going anywhere and since that is the case, it is probably a good idea to make it at its best whenever possible. Technology will only improve and the trend in the world currently seems to be getting farther and farther away from printed material in its traditional form. Things like magazines can now be seen in mobile forms (kindles, Ipad/Iphone/Ipod) books, and almost everything can be done on a cellular phone now, such as buying groceries and bus tickets. Apps are the new children’s books and toys, and even traditional drawing has started to be replaced by drawing apps and tablets, (making traditional art a form of crafts, almost). It only makes sense that gaming will also trend in this direction; away from its traditional form, becoming more interactive and intuitive. This, however, does not mean that ALL written instructions will disappear in the future; it just means that it will be come a lesser part and more integrated into other forms of instruction or interaction. For example, a passenger on public transit may not know how to find their destination without a label/destination name, and this is something that may never change, but it doesn’t mean that pictograms can’t generally replace the long list of how to purchase a bus ticket on a ticket machine. I do not consider labels part of written instruction. They are not long or detailed enough to be included into this category, and can easily be integrated into pictogram systems.

Part of this reflection has been allocated to discuss societal and ethical concerns or parts of this project. My short thoughts on this topic during the course of this project were mostly pointed in the directions of necessity and supply/demand for something that doesn’t really need to exist. Design is one of the most wasteful professions, because all we really do is design more things that will be made and thrown away, so is it necessarily right to make a product that will only increase the demand for consumerism? Maybe not, but this demand will not be going anywhere, so why not make a project that will make it easier, better, and more efficient? Designers, like everyone else, need jobs, and it is their job to make things easier and more intuitive for other people, among other things. My system does just that for gaming, as well as keeping it up to date with the culture of society as of right now, meaning, essentially, moving on from words and written material in their traditional format onto something new.
Reflections

Relevance to Stakeholders:
I feel this project was very relevant to certain stakeholders; mainly game companies and programmers/indie game developers that want to make a different type of game in the future. My pictogram system was designed to make console gaming or full-length gaming more like mobile gaming (apps), in the sense that the game/system of instruction can be quickly learned and doesn’t need a lot of explanation or experience to be understood. Console gaming has remained much the same for a decade or so, and I feel that my project has the potential to update it and bring it into the present. Mobile gaming (apps) are becoming increasingly popular, and have many different formats. The one thing they lack, however, is real content and length, which is the area in which console gaming excels. The gap is beginning to be bridged now, though, from the app side, so console gaming and computer gaming needs to keep up and begin adapting as well.

This project is also relevant to the gamers themselves (including parents of new gamers) The older generation of gamers may think it is cool to see something new and different, and will want their children to game, just like they did when they themselves were children. I know I want my children to game, as I see it as a wonderful form of opening the mind and experiencing new things. A lot of old Nintendo games have a lot of nostalgia for me, and it would be a shame to not let it continue to the next generation. This new style of gaming may be a way to get children into it at an early age, keeping their interests more easily than if the games were riddles with long dialogues.

Even though gaming is not a necessity for human life, it has been around for many years and is only increasing in demand. It will not go away any time in the near future, and this project is just a way to improve something that is so regularly used.
Reflections

Process, Methods and Learning Results:
I used a method that was heavily based on watching/analyzing gameplay and previous experience for this project. I also researched a bit of pictogram theory and did a lot of sketching based on aesthetics, colors and icons. I wanted my pictograms to both blend into the game aesthetics and stand out as a form of instruction.

I began sketching based on in-game aesthetics and personal preference, and ended up with a style that included muted, limited, flat colors, partial stroke, and simple shapes. I built up my system by sketching multiple examples of each type of icon, and then picking the best solution, then continuing on with the icons until they were complete. The learning results from this project were mostly that of pictogram design and creating a non-verbal system of instruction that communicated both within itself and with its surroundings and context. Pictogram design is quite complex, and it took a lot of manipulating to get the system to feel cohesive and instructive without being overly long and too slow to comprehend.

Pictogram theory states that information needs to be easily taken-in and understood quickly, so I kept this in mind when working on my project. Some of the challenges I faced were quite difficult in the beginning. One of the most difficult choices I had to make was how much detail I could add with the characters to make them recognizable but still fit into the rest of the system. This was particularly difficult with the temple bosses, as many of them are very large and most players wouldn’t recognize their faces. What I decided to do was to include the faces, and any other (simplified) recognizable features that would set the boss apart from the others.

From this, I think I have learned what the emphasize in an icon when trying to make things easily distinguishable; colors, shapes, and notable features are very important to pay attention to.

Some of the questions I have thought of during this project were “how does one recognize characters and items in games?” and “is it important to have the pictograms fit into a system, sometimes at the cost of recognizability?”
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