Project P

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Heuristic Evaluation

One of the most popular streaming platforms available to the public today is that of HBO GO, an organization that has been producing visual content for users for 20 plus years with no signs of slowing down. And due to all their success with their cable channels and probably due to business necessities of having to move their platform to more new age and user friendly arenas they decided to develop an interface for the very popular PlayStation 4. Unfortunately what they have developed for the user is not the most friendly, even if it does have some bright spots. This paper will be used to break that down, both the beneficial and the unhelpful and hopefully through a few tweaks be able to develop a design that is both more usable and appreciated by consumers.

Firstly the good, as you can see in the Figure 1.1 below this interface has very good structure. Especially when if you use the design definition of Larry Constantine and Lucy Lockwood (Constantine. 2006.), "Design should organize […] in meaningful and useful ways based on clear consistent models […] putting related things together and separating unrelated things. Clearly you can see that effort was put in to group the actual programs in a grid fashion, with their different menus layered across the screen. This makes it obvious to the user in how to scroll and to know if they are going towards a menu or looking through more shows. Much like when consumers used to go to video stores, such as Blockbuster, they would see shelves (grid rows) of movies/shows to choose from and they could scan in any direction, much like they can on this interface.

When discussing the pro's of the HBO Go interface one cannot exclude the effort put in by the designers to use mapping as a design tool to better the experience of the user. Having each series/movie/playlist represented as a tile on the screen let's

the user know what they are about to access purely based off visuals. It has an image representing the content, as well as the title and even some small information such as "Just Added" or "The Final Season" to give the users just a fraction of information about what they may be walking in to with that show as well as news surrounding it. This is a much better way to represent the content they offer to the user rather than let's say just displaying a text based list of all the content on the screen.

Another thing that this interface does well in regards to design heuristics is in the form of perceptibility. When navigating through the interface, there is clear feedback given to the user after every action that makes their Gulf of Evaluation shallow, and gives them the ability to quickly understand what has happened and restart the cycle putting them ever quicker in the Gulf of Execution phase (where the problems with their interface begin). You can tell when designing this portion of the interface that HBO viewed the user in a processor type method due to it's contrasting blue highlight that is overlaid over the currently selected item. In Figure 1.1 below that would be the show "Barry" that is selected.

 Designing for the most novice of users often times presents many challenges to a user, seeing as they don't have the background knowledge to use an interface to it's potential things must be easy enough for them to process. The designers of this application clearly took notice, and decided to make this interface very easy to use for all types of users by way of the Simplicity design heuristic. According to Ronald Mace founder and director of the Center for Universal Design, when discussing the incorporation of simplicity in an interface he had this to share (Mace):

> "Use of the design is easy to understand regardless of the user's experience, knowledge, language skills or current concentration level"

You can see this in the HBO Go interface due to the lack of options presented to the user, and how they dictate different selection items. It would be simple for the user to understand navigating from show to show and accessing some of the menu items.

HBO designers also did their due diligence when adding in consistency to their user interface. As you can tell with a quick comparison between Figure 1.1 and Figure 1.2 they stuck with the same grid like structure across all of their different views on the

interface. Having the same look and feel made it easier to understand from page to page that when selecting a tile that it would take you to that particular show.

Earlier we mentioned that the designers took a more processor type view of the user when designing their interface, here is where we'll detail why they should have incorporated both the predictor and participant models and how that could have been beneficial.

For all the good that HBO did when designing their respective interface there were a few holes presented, that hopefully after the redesign process can be corrected. Some issues being unintended consequences of other design heuristics, while there were others that looked like plain oversight.

Starting with the unintentional issues, the HBO Go interface really didn't do well in terms of discoverability. As mentioned in the lectures by Dr. Joyner "there often exists a tension between discoverability and simplicity" and as was previously noted earlier they took an approach to make the interface as simple as possible in hopes of reducing the learning curve for novice users. Unfortunately they went too far with that approach as it is challenging for the user to find the other content that their platform offers. Looking at Figure 1.1 it's pretty telling, that if the user doesn't find anything on the initial screen and has no prior understanding of where the other options are, makes for a steeper learning curve. So while the interface has an initial low starting point on the learning curve it quickly grows exponentially once the user tries to explore past the main page.

Another heuristic that the aforementioned interface failed to address while designing is flexibility, users of this application have almost no say as to what is shown to them and where. Much like how traditional cable works, the main screen shows what the company itself thinks is relevant and not particularly what the user might believe is relevant. A lot of the times the shows and movies shown could be entirely against the user's tastes, which is against the principle of flexible. And while it may be equitable in what it shows to users, in today's world of individuality, there should be some level of personalization offered to users that they could update what's shown.

A third issue with the design of this interface is the lack of documentation or help available to the user. Maybe due to the simple design the creators of the interface thought that they wouldn't need to offer any kind of documentation on how to best leverage the interface. Not even an introductory lesson for the first time a user logged on to the interface, which is unusual compared to other applications on the market today.
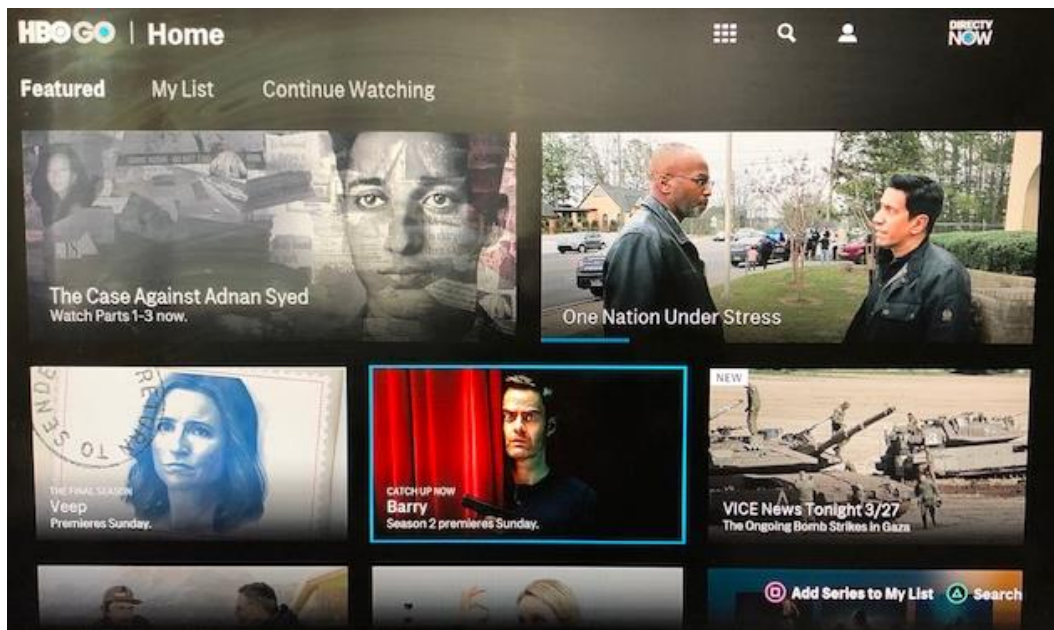

Figure 1.1: A screenshot of the main dropoff point for the users.
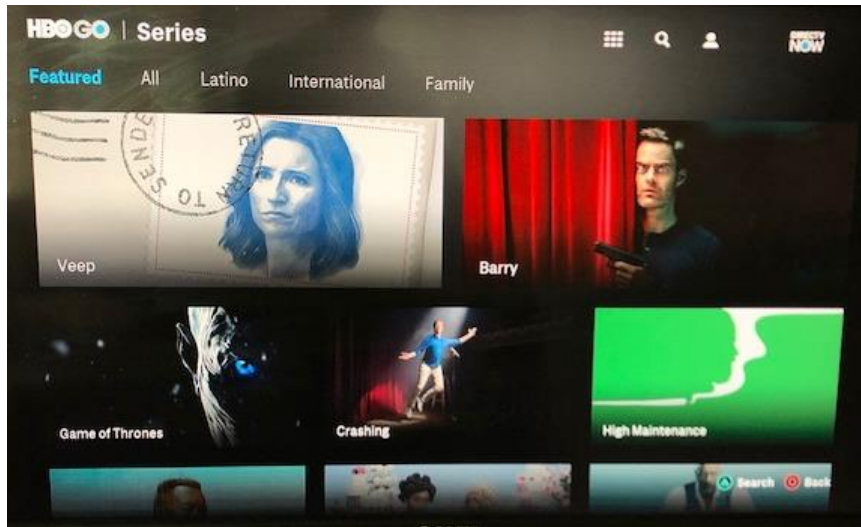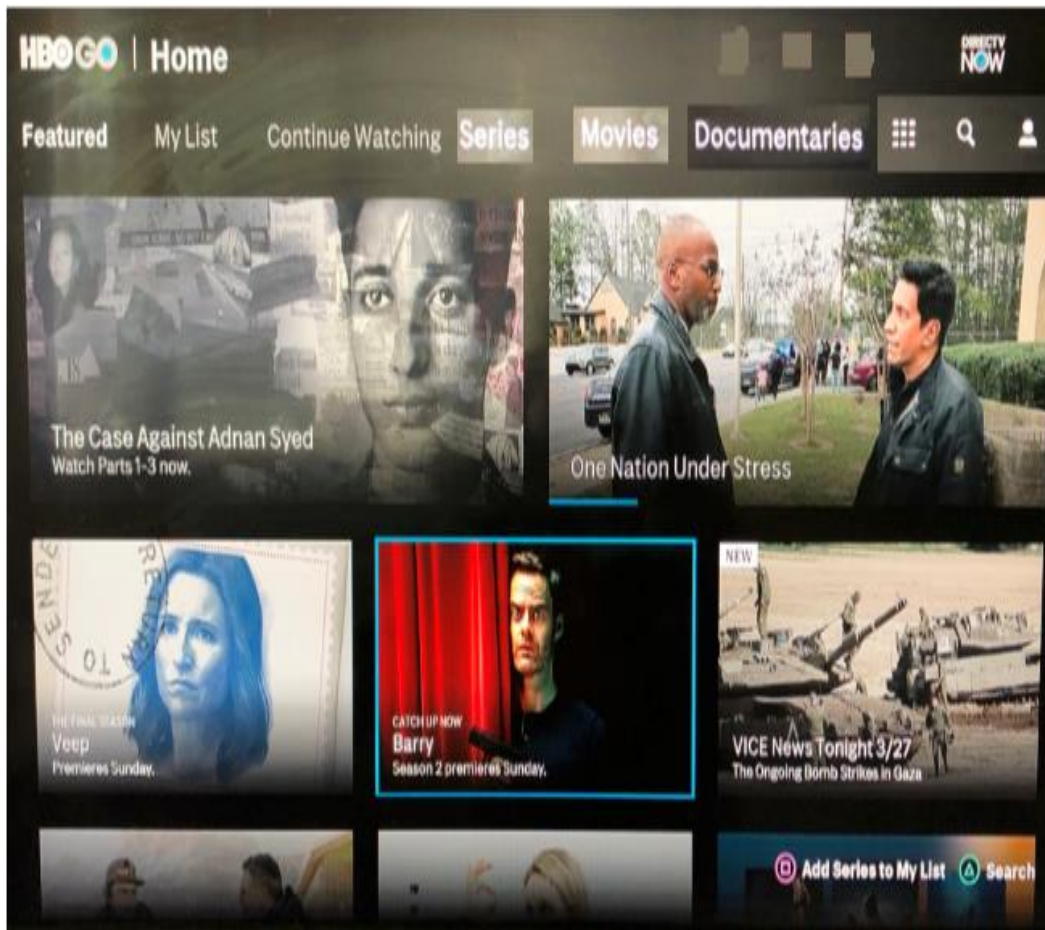
Figure 1.2: This is the series page that users can navigate too, showing a similar look and feel as most other pages they offer.
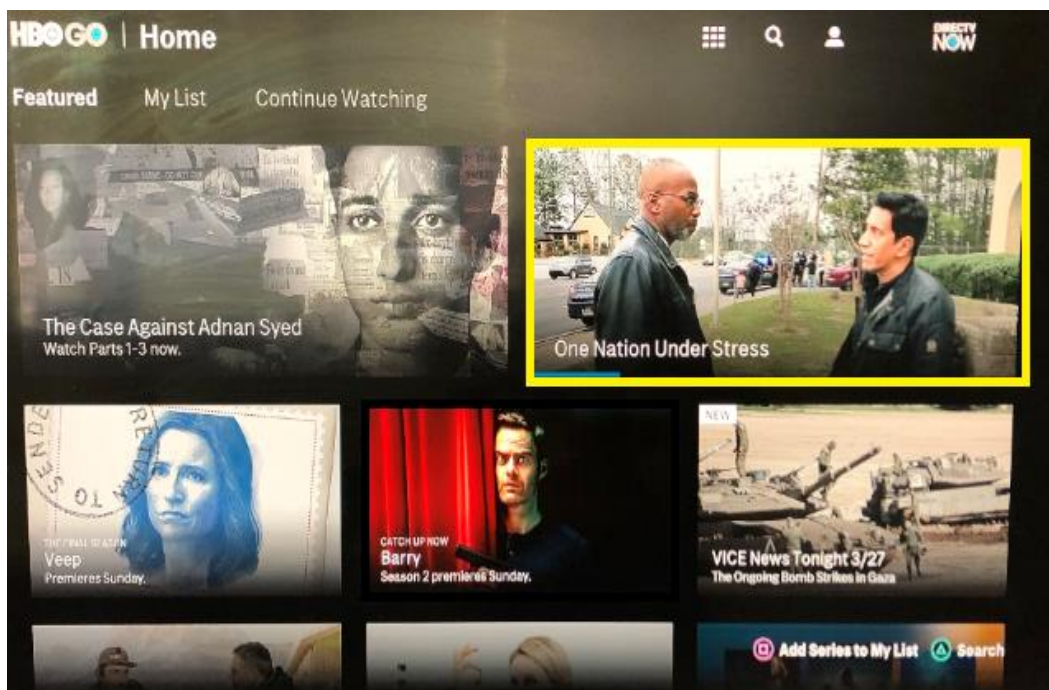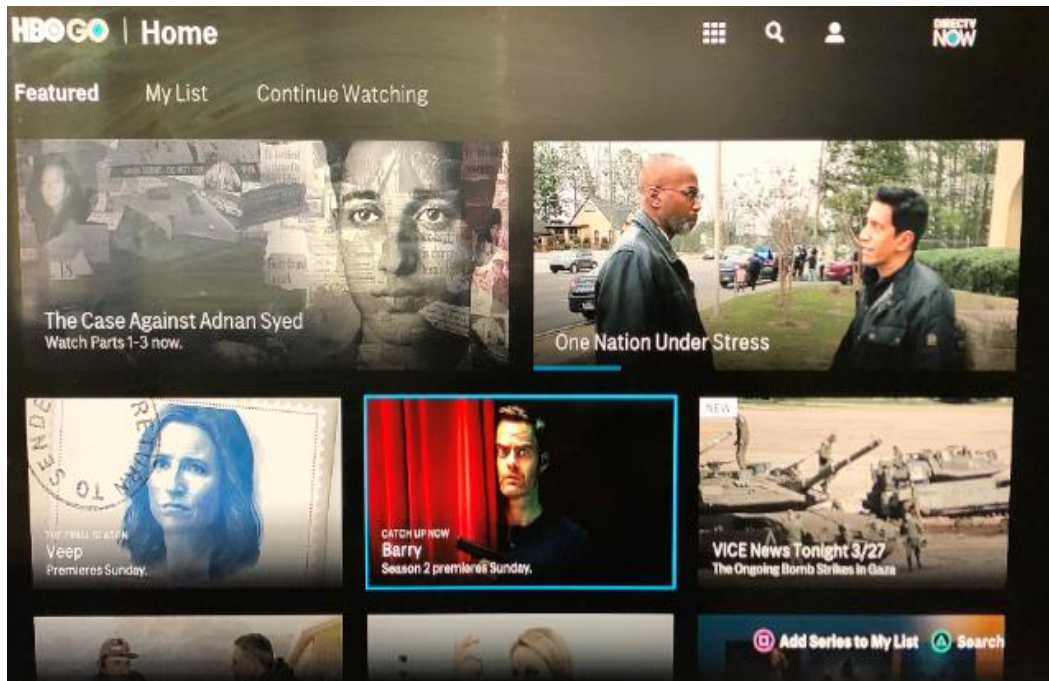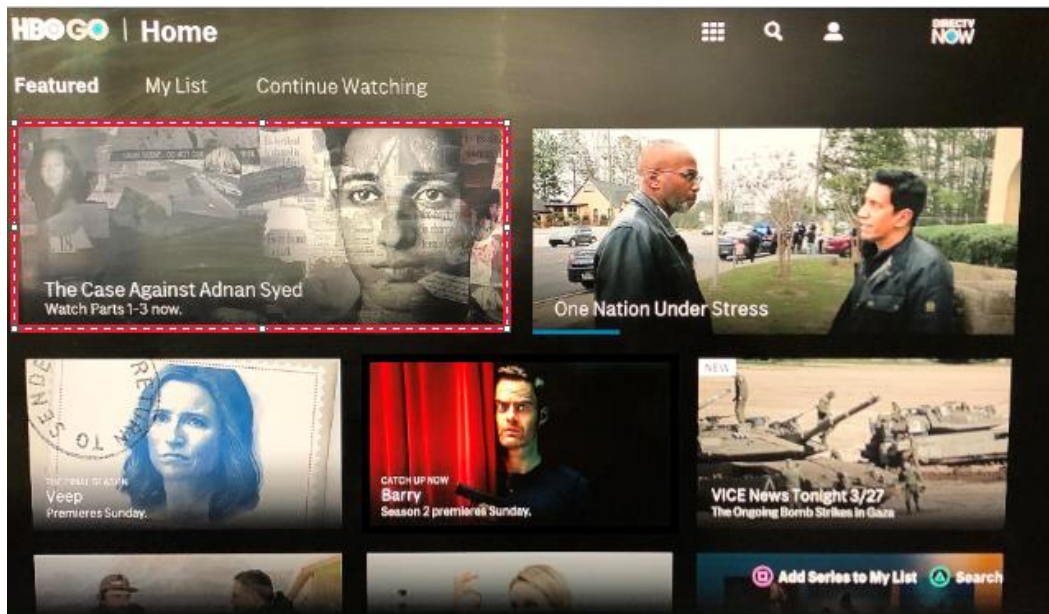
Interface Redesign

Visual Representation of Redesign

Slide 1 shows the redesign of the main screen, where the miniature menu that was off to the top right has been brought down to the level of the other and expanded out to have more options.

Interface redesign portion that depicts how each different category of content would have a different color selector outline. Blue for Tv Shows, Yellow for movies, and Red for documentaries.

The above is the redesign of the categorical featured page that helped to improve the structure of the page.

Textual Description of Customization Feature Redesign

There would be a grid type menu, where users would have the ability to input which column they would like to set as what, where they had a checklist of genres and other typical filtering categories. This would translate into a change on the Featured Screen, that is typically the drop off point for most logins.

Interface Justification

Hopefully the newly redesigned interface above didn't need much of a justification as to why things were moved to the places that they were. In case it's not though, some of the ideas and their additions to the interface will be described below to show how it fixed the above criticisms. As well as add in some things that maybe weren't critiques from above but that could be seen as an improvement to already other design heuristics that HBO Go designers incorporated.

Lack of documentation and the steep learnability curve of the HBO Go interface, were a major critique of the application. Having the exponential curve means that it would be more difficult for users to feel and become experienced, and ultimately that means that there are a bunch of users who are not knowledgeable enough to be able to leverage the application to it's fullest. Therefore to add in this design tool into the interface, a decision was made to add in a "Help" menu item accessible on most pages that allows users to search for relevant FAQ's etc. Another improvement to the critique of lack of documentation is the addition of a brief tutorial for the initial login on the device. As you can see in the mock ups above, there is the option for them to opt out of the tutorial but for those who decide to stay in, the developed tutorial will show them around the application and how to do certain features that are often most requested. In order to avoid expert blind spot, the design team will post Prototype Evaluations allow the participants the ability to ask how to do certain things that they couldn't figure out. And based off of that one to one instructions

will be documented and represented as such. Therefore the designer's familiarity with the application won't lead to them creating a tutorial that skips certain steps.

Another critique from the earlier evaluation is that the application wasn't the most flexible, and that the designers could have spent more time investigating ways to allow for more individual preferences. The designers had incorporated default accelerators on the main page that showed new releases and movies that were getting taken off the platform soon. What it failed to do is have those accelerators be able to be set to individual desires. That is why there is a menu option to allow users to customize their home page, and the accelerators that are there. Whether that be a hot key to the action Genre, or that you only want to see the most Recent Releases on the start screen. With these changes we believe that it could cover both the universal design principles in that it "accommodates a wide range of individual preferences", as well as Nielsen's heuristics by adding in accelerators for expert users.

Discoverability was something that this interface didn't do the best job at, and was something that needed to be improved during the redesign effort. And a main reason for that was due to the simplistic approach that the designers used in their initial implementation. Once on the main screen, it is not clear to the user on how they can go and find all the shows and movies offered as the options shown are only the ones that are a part of the "Featured Section", other than that the only clear thing for the user to do is to "Continue Watching". It is also a problem that in a smaller menu bar shown higher at the top that is represented by small squares, but to novice users and due to the fact that it's higher up and smaller makes it less discoverable. That is why in the redesign effort it was paramount that we expand the menu and put it on the same line as the "Featured" and the "Continue Watching". This decision would make it easier for the users to get to the other content HBO offers which is ultimately what the users are there for. And although this change makes the interface less simple, it's a necessary sacrifice that reduces the distance in the gulf of execution for the users trying to see all of HBO's shows.

Although structure was a design heuristic that clearly the designers of this application adhered to, there were a couple of small changes that could better the design of this interface, even if the user doesn't really notice. And these simple

changes wouldn't be hard to implement at all from a development perspective so there was no reason to not address them. That structure change would only include the main "Featured" page, and would be structuring the playlists and shows/movies under respective headers. According to Constantine and Lockwood there is a necessity to "differentiat[e] dissimilar things and making similar things resemble one another", when discussing structure. Grouping them together under headers would give the users plenty of feedback as to what they were about to enter into as well, so it would also go hand in hand with that design principle as well. These structure changes would also only take place when the user has not yet set up their own personalized "Feature" page, as it would be difficult to keep those rules in place while the user is customizing their own page.

Perceptibility was another thing that was done pretty well by the designers at HBO. But with just a couple of minute tweaks this application could really thrive and present the users with a much simpler experience. Currently the application has the light blue highlight around the content that the users cursor is currently poised to select. Which is very noticeable way to indicate to the user what they would be selecting, but to further enhance this there should be different colors surrounding the different types of content the users might be selecting. The users don't always know whether a title of something is going to be a movie or television show. So rather than make them select something and only then be able to tell if they are about to watch a full feature length movie, the color coordinated selector would make it apparent to them of what they are about to see. Obviously it would take some time for the users to get used to using this utility, the anticipated enhancement to the interface has a high ceiling on reducing unnecessary steps to accomplishing the users goal.

Bibliography

Constantine, L. L., & Lockwood, L. A. (2006). *Software for use: A practical guide to the models and methods of usage-centered design*. Boston: Addison-Wesley.

Mace, R. *The 7 Principles of Universal Design. http://universaldesign.ie/What-is-*