Designing and Researching for Infographics

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For this independed study, I wanted to learn more about portraying different kinds of information visually. I have done a lot of work with posters, a little work with logos and icons, but had very little experience with data visualization. Information about music popularity seemed like a good thing to work with because I knew I could find a lot of verified data, and the content would have cultural significance I could try to work with.

The first step for me was to research and gather data. There were two important things that I knew I would need to research. First, I needed to learn more about infographics themselves. Second, I needed to gather data about music popularity and decide which set(s) of information would be the most interesting to portray. I started my research by looking at sites like informationisbeautiful.net and mashable infographics pages. What I got from my initial investigation of those sites was that there were a couple ways to go about things, and that I wasn't really sure what would work for my application yet without any data and without a definite idea of what the exact set of information I would be working with was going to be. I saw that there were a couple distinct

approaches to infographic design, and that they could be anywhere from photographic or relying heavily on images to almost abstract arrangements of objects, relying on colors and basic shapes to get the point across. I found that it was very important to consider the intent of the project... What kind of attitude did this information need, where would it be displayed... I found that there were a lot of different things people were doing with information. Since my research was on the web, I found a lot of interactive infographics, and a lot in tall, portrait formats. The interactive element was very interesting to me but I knew that I wanted to be designing for print, since that's a way I knew I could focus most on the static display of the information.



World's Biggest Data Breaches

Selected losses greater than 30,000 records



Though I think I got some great inspiration from my initial time searching around through infographic archives and inspiration websites, I didn't feel like I had any idea what to do with it at that point. I knew that there were a lot of things I could do and try, and a lot of things that I might want to try which seemed beyond the reach of this project, but I didn't know which things would be right to do yet. I moved on to music research.

I knew that the Billboard charts would probably be the best place to go for consistent information on about music popularity in general, so I got on my web browser and I went there. I didn't understand the way the information was potrayed on their website. There were a lot of buzzwords and a lot of fancy icons and none of it seemed to just say right out 'this song was popular for this ammount of time in this year' or 'X ammount of songs from Y genre reached the top of our charts.' I knew that Billboard had the data that I wanted to use, it was consistent and went back a long way, but I couldn't use what I found on their website. I turned to Wikipedia. It is true that Wikipedia can be innacurate sometimes, but when the source of all the information is something as precise and without opinion as the Billboard charts, I don't think there's much room for inaccuracy. On Wikipedia, there are nice, simple spreadsheets laid out about music popularity,

with all the data coming from Billboard charts. These include the top 100 singles from each year, and all the singles to reach number 1 in a year on the Billboard charts. This was information I could use.

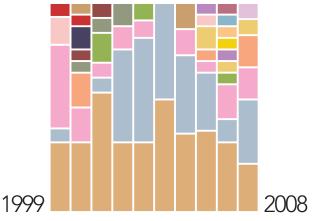
With this information I could come to some conclusions about what data I wanted to work with. I was most interested in the popularity of different genres over time, and I thought that would be a good place to start. Initially, I thought I could work out something about popularity of instruments over time by generalizing about instrumentation in different genres or even instrumentation of hit songs. As I worked, that idea proved to be a little too much for the time I had left myself after research. I still think that would be interesting to see though.

I started my work in Excel, where all my data arrangement and visualization had been done in the past. I analyzed the spreadsheets on Wikipedia to create my own spreadsheet which showed how many songs of a simple set of basic genres had reached number one on the Billboard charts for each year from 1997 to 2012. This took forever. Analyzing the Wikipedia spreadsheets was much easier than trying to figure out the information on Billboard's website, but when I didn't know about the artists or songs and had to research them indifidually, this part of the work got tedious.

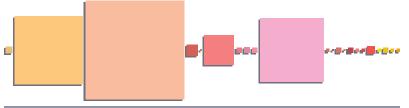
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3	0	8	1	3	0	0	0	1	0	0	1	
4	0	5	1	6	2	0	0	0	0	0	0	
5	0	6	0	3	0	0	0	3	0	0	1	
6	2	8	1	1	0	0	0	0	0	0	1	
7	0	3	4	1	0	0	0	0	0	0	0	
8	1	4	6	1	0	0	0	0	0	0	0	
9	0	7	6	0	0	0	0	0	0	0	0	
10	0	3	3	1	0	0	0	0	0	0	0	
11	0	7	5	1	1	0	0	1	0	2	0	
12	1	6	2	3	0	0	0	0	1	1	0	
13	0	3	4	2	0	1	0	2	0	1	0	
14	0	1	2	1	0	2	2	3	0	1	0	
15	0	1	4	5	0	1	1	3	0	0	1	

The next step was to start visualizing things in Illustrator, or so I thought. There were two problems that I still had, though. The first was that even though I had a lot of information, and even though I had a lot of ideas, there was still a lot that I wasn't sure how to potray, and I lot that I didn't know much about. While I was analyzing the data there were a lot of songs and genres I didn't recognize. While I was looking at infographics for inspiration, there were a lot of different forms that I think could have worked, and a lot that I just didn't know how to make. I didn't know how to make charts in Illustrator at all.

I started experimenting.

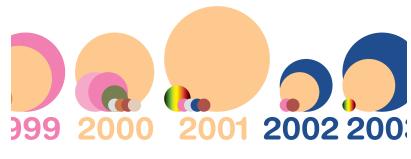


A second attempt at visualizing a few years of information. With this take, I made two major changes. First, I redid the colors to make the choices abou them consistent (they would all be sampled from album artwork) and I rethought the layout. In a lot of the more succesfull infographics I'd found online, there was an element of realism even where there were a lot of basic shapes, to tie the potrayal of the information back to the context. I went a couple different ways with that in this draft, using a square, which I thought could look like album art, and a stacked bar graph which I thought could be something like a graphic equalizer.



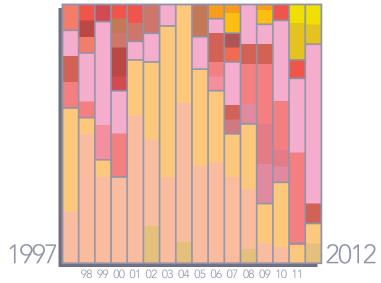
This was a first take on the idea of a chart showing the total popularity of genres over the 15 years I analyzed. This first draft looked far too much like a timeline to make sense.

While I worked on the basic colors and forms, I needed to also think about the way I wanted the final product to be laid out, and how all the little charts I'd been working on would fit together. I developed a key, and I worked to adapt the charts to fit in a big 18x24 layout, which would be good for printing big. I



My first attempt at visualizing a few years of data was just a bunch of circles at different scales laid out on a line, with some colors sampled from album artwork, and others taken from an unscientific poll of my neighbors opinions... 'What color do you think hip hop should be?'

Though I don't like the way this came out, I think for a first draft it showed me some important things, and it was especially important that one of the most interesting trends in my data (the rise and dominance of Hip Hop in the early 2000's) already showed up in this prototype and was fairly visible.



In this draft, I redid and solidified the color choices in order to group all the subgenres into blanket genres. I think this helped visibility of related trends. The blanket genres were Hip Hop, Pop, Rock, and Dance, and the basic colors for these were taken from album art. The subgenre colors were made by adding colors from album art to the color of the blanket genre they resided within.



In redoing the total popularity proportions chart, I wanted to make it look less like a timeline, make each genre more visible, and make the blanket genres visible. This spectrum idea worked

worked on some text as well, to back up the most important parts of the genre popularity chart and make sure the most interesting trends were described and explained. After a few rounds of editing this layout, what I came out with was the final product.

Trends in Music Genre Popularity

Candle in the Wind 1997, a re-written and re-recorded version of the 1973 original becomes the top single for almost three months. As of 2010, it remains the best-selling single of all time. The Notorious BIG is murdered on March 5th. Tribute songs and older tracks show up in the hit singles lists in the following month.

Many R&B singles top the charts for longer periods of time, including Destiny's Child's Bootylicious and Usher's You Remind Me. Janet Jackson's All for You remained in the Billboard Hot 100 for seven weeks. 19/2000, a track from Gorillaz debut album reached number 6 on the US singles charts.

R&B and Hip Hop continue to increase in popularity. Eminem's Lose Yourself is released, reaching number one on 24 charts worldwide, including the US Billboard Hot 100 as Eminem's first number-one hit in the US. Nelly's Hot in Herre similarly topped charts and became the artist's first number-one hit in the US. Nelly and Eminem were behind the two best selling albums of 2002.

2004 marks the peak in Hip Hop and R&B popularity. Usher's *Confessions* album was released, selling over 1.1 million copies in it's first week. Songs from *Confessions* topped the singles charts throughout the year. Several artists topped the singles charts for the first time, including Snoop Dogg with *Drop it Like It's Hot*.

Justin Timberlake's SexyBack remained the number one single in the US for seven weeks, and was his first single to reach number one. Discussing the track with MTV, Timberlake said he went for more of a rock style than R&B. Rihanna's SOS became her first US number one single. Fergie's London Bridge became her first number one single in the US, and sold more

Flo Rida's debut single <u>Low</u> was released with success worldwide. It remained at the top of the US charts for 10 weeks and was the most downloaded song of it's decade. Katy Perry's I <u>Kissed a Girl</u> was the number one US single for seven weeks. Britney Spears' <u>Womanizer</u> was her first number one single since 1999.

The Black Eyed Peas topped the singles charts for a total of 26 weeks with Boom Boom Pow and I Gotta Feeling, which was downloaded over 15 million times. Lady Gaga's debut single Just Dance reached the top of the singles charts in January 2009, after spending almost five months lower in the Billboard Hot 100.

Ke\$ha's debut single TiK ToK was reached the top of the US singles charts and stayed there for nine weeks. It continued the growing trend of synthesizers and sampled electronic sounce in popular music. Three songs from Katy Perry's Teenage Dream album topped the singles charts in the US.

Katy Perry's E.T. and Last Friday Night became the number one single in the US, making her the first female artist to have five number one singles from the same album. Lady Gaga's Born This Way was her third song to top the US singles charts, and reached number on 125 other countries. Adele's Rolling in the Deep became her first number one single in the US.

