Visualization of the Forever 27 Club

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Abstract
This visualization is the timeline of the popular musicians who died at the age of 27, often as a result of drug and alcohol abuse, violent means such as suicide or homicide. The timeline is distributed according to the cause of the death and year of death. The main goal of this visualization is to make users find their own stories through data and also to create awareness among a large user base. The inspiration of this visualization is a gramophone where the details are displayed according to the position of the pointer. The choice of this style of visualization is made to build more empathy towards the fans of these artists in order to glorify the short-lived lives of these great artists. Interfaces are designed so as to make the visualization more interactive by providing the filters such as genres and artist types, single-frame interactivity to maintain a consistent narration flow and having the detail-on-demands feature in order to reduce the cognitive load on the users.

Categories and Subject Descriptors: H.5.2 [Information interfaces and presentation (e.g., HCI)]: User Interfaces- Graphical user interfaces (GUI), Screen design (e.g. text, graphics, color), User- centered design; I.4.10 [Image Processing and Computer Vision]: Image Representation- Hierarchical, Multidimensional; I.5.2 [Pattern Recognition]: Design Methodology- Pattern analysis; J.5 [Computer Applications]: Arts and Humanities- Music.

1. Introduction

The 27 Club is a term that refers to the supposed phenomenon that musicians are more likely to die at the age of 27 than any other age. The number of musicians who have died at this age and the circumstances of many of those deaths have given rise to the idea that premature death at this age are unusually common.

There have been many different speculations about the causes of such early deaths and their possible connections. Although humans die regularly at all ages, there is a statistical spike for musicians who die at 27. Musicians often gain their first taste of fame in their early 20s and drop out of school, learn to play, get noticed and then make it big. In modern times early deaths due to natural causes is rare, so are reported more readily in the media and gain a lot of attention. Moreover, the deaths of famous artists such as Janis Joplin, Jimi Hendrix, Jim Morrison and Kurt Cobain have made the age 27 highlights more as these were the major news events of the time [1].

This visualization tries to capture the two sides of the lives of these artists highlighting their glorified years and emphasizing the causes of their death. It is an exploratory visualization where the users are given the freedom to play around and find their own insights too. The data types available for this visualization are causes of death, year of death, genre types, artist types, track records and artists. The visual encoding for these data types is not the usual styles but has a more metaphorical approach.

2. Design Space Analysis

The datasets for this visualization comprise of categorical data such as the list of the artists who died at the age of 27, cause of their death, year of their death, genre type and artist type and quantitative data such as the number of track records of each artists. Among the categorical data, year of death is an ordered set while the rest are nominal datasets.

Visualizations may incorporate a variety of media, including text, images and video, and can also be interactive, enabling stories whose telling relies as much on the reader as on the author [4]. The visualization has heavy messaging at the same time no prescribed ordering and free interactivity. Hence making it both an author-driven and reader-driven visualization.

2.1. Genre

The visualization starts with its own introduction and follows a drill down story approach [3, 10]. It follows a partitioned poster style with single frame interactivity approach after the user clicks on the introduction page. Most importantly, the graphics are chosen so as to have a connection with the narrative. The page is divided into three major sections and all the three are linked together graphically by the use of the metaphor of gramophone (structure and shape) as seen in Figure 1. One section has the vinyl disc and other one is the panel of the gramophone and summary of the visualization.
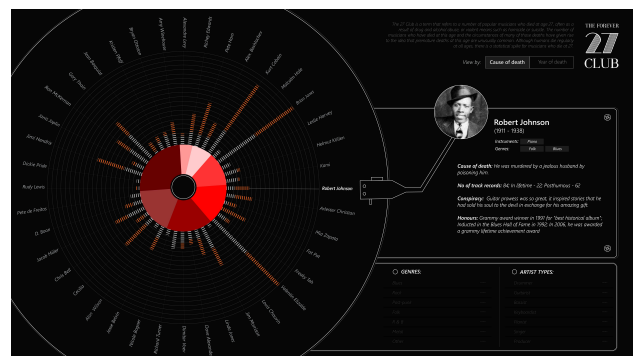

Figure 1: *Visualization using the metaphor gramophone.*

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2.2. Visual Narrative

The visual platform of the narration is very consistent even though there is no proper ordering of events. The color schemes chosen are according to the vinyl disc and consistent across all the pages. The size of the vinyl disc in the left is made huge and the particular color schemes are used in order to grab the attention of the users and points the context directly [7]. This disc contains the names of all the artists who died at the age of 27 in a circular format aligned with the bar chart structure starting from the center of the disc. These bar charts depict the number of track records of each artist when they were alive and posthumous. The color encoding of these bar graphs are made in such a way that it distinguishes the lifetime and posthumous achievements. The top right section contains the summary or synthesis of the visualization with the user option of clicking the view of the visualization. This interactivity helps in presenting the huge amount of information is a proper hierarchy.

The visualization loads with the disc rotating by default and listing the details of the artists of the right panel as and when they are aligned to the header. The details of the causes of the death and year of death gets highlighted when the user hovers over the center section of the disc which is a pie chart depicting the number of deaths in each type of causes or range of years as depicted in Figure 2 and 3. Mouse-hover provides details-on-demand on the bar graphs showing the number of tracks; clicking on the names of the artists triggers an animated rotation of the disc to the header displaying the details on the right panel [6].
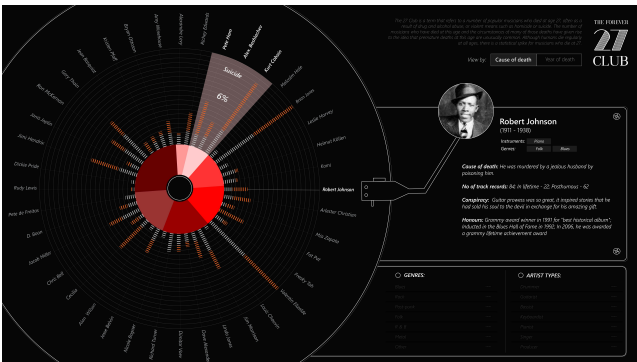

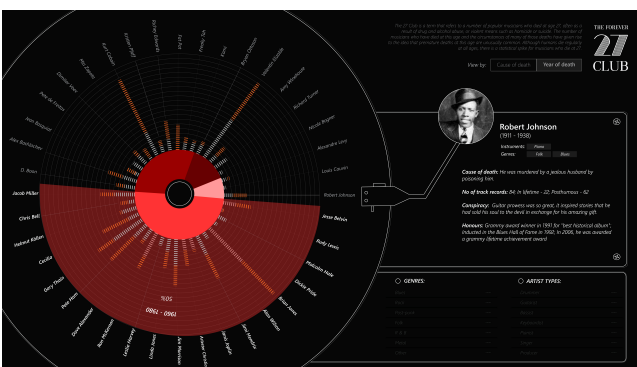**Figure 2:** *Mouse hover on the center of the disc depicting causes.*

Figure 3: *Mouse hover on the center of the disc depicting year.*

2.3. Narrative Structure

A narrative is communicated clearly through the interaction of the text in the left section with the annotation and graphic elements in the right panel enriching through multi-messaging. Panel on the right displays the names of the artists in bold with the genre,

instruments played as sub-heading making the vast quantity of information with memorable factoids. This is followed by the brief description of the death and glory of the artists.

The artists' names are arranged in a simple timeline design starting with the first artist who died at this age till the recent one. This arrangement of artists can be viewed according to their cause of death or year of death. Various other timeline designs such as a linear flow diagram, vertical flow diagram etc. were tried to fit these data [2, 8]. But in the end the metaphorical approach used for the visualisation with the stories about the artists was given more importance as it built more empathy [4, 5]. Hence, in order to reduce cognitive load on users, the simple timeline around the graphical elements was chosen.

The continuous rotation of the disc acts as a starting point for the personal experience of the data and also provides the tacit tutorial for the user. In order to make the visualization more informative and interactive, the genre and artist types are provided in the form of a checklist where the user can play around and find their own insights.

3. Conclusion

This is an event-based visualization designed in such a way so as to build empathy with the fan base as well as to create awareness among the unaware users. In this the data is not presented all at once but is constructed in a hierarchical manner with the use of annotation and animations [9]. This is an attempt to reduce the cognitive load on the users and also make it more playful. The goal of the visualization was to engage readers in finding and telling their own stories in the data [4, 5]. This Drill-Down Story visualization structure [10] presents a general theme and then allows the user to choose among particular instances of that theme to reveal additional details and backstories. This structure puts more emphasis on the reader-driven approach, letting the user dictate what stories are told and when. But it still requires significant amounts of authoring to determine the possible types of user interaction, what user stories to include, and the details included for each story.

Bringing all the elements of the visualization in one frame by giving a stepwise to the information was a challenging task. Interfaces that combine visualization construction with the specification of narrative structure, textual/graphical annotation, visual highlighting techniques, transitions, and interactive controls could have a transformative impact on the users. The user engagement, retention of the information and seamless narrative flow of the visualization are some of the metrics that still has to be quantified and tested. These parameters would help in understanding the pain points of this visualization faced by the target audience and hence build a better visualization.

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