**Graphical Interpretations of Data: East is east…..**

Visualization is the way of representation for someone who wants to communicate one’s idea clearly in a way that any human can understand just by looking at it, so basically it is one’s responsibility to communicate transparently. The first two paragraphs discuss how the count of birds to predict wind direction is visualized using the linear model graph, in my view after thinking about the question (Have a try at answering before going on? (End of the second paragraph)) I believed that east was for the negative axis and west was for the positive axis, as well as north for the negative axis and south for the positive axis, as specified by the author, but after reading the third paragraph, it is the opposite. One thing I want to mention is that visualizing is a great way to communicate but visualizing accurately and clearly is a responsibility.

Furthermore, the fourth and fifth paragraphs discuss different species of birds flying in greater numbers that we cannot classify by looking at the two graphs; what could have been done is that five different colors could have been assigned to five different species, which might have helped to determine which direction the wind is blowing based on which regions the birds are traveling to or coming from. The lead author stated in the following paragraphs that he does not want to make any changes to the graphs; thus everyone must examine the graphs from the lead author's perspective, which very few attain unless there is some text explanation that shows which directions are which axis. The solution is clearly mentioned in the second and third paragraphs of the second page of the article, if followed will be quite helpful for clear picturization.

As I mentioned in the second paragraph, bird species must be differentiated based on their species; the same point is made in the next paragraph; moreover, unit conversion or units that are understandable by everyone should be included in the graph. The paper contains graphs from univariate model fits, which are only meaningful if there is only one independent and one dependent variable, which is not the case here because we already know that the linear curve represents five different bird species. Finally, the author of the post mentions doing more analysis on this dataset; in my opinion, this should be done as soon as the dataset is publicly available so that most of the questions raised by mislabeled graphs are clarified.

**Visualizing Titanic Disaster:**

The first thing that caught my attention in this article was the presentation of a single dataset in a variety of ways, and all of the graphs, as well as the tree diagram and graphic, are extremely well made and explained in a way that contains a lot of information. When compared to the graph in the previous article, one can quickly understand the content in these just by looking at them.

The Titanic disaster was heartbreaking and painful for many families who survived the disaster as well as those who perished with the ship. The first graph paragraph discusses how Bron put in the efforts to create a ‘Sphere’ chart in the 1900s, which should be applauded. The graph contains a lot of information on how many passengers survived the tragedy and how many perished; other details include which gender survived and died, as well as the count. The graph also shows that the majority of those that survived are from first class and the third class, with fewer among the crew. The following paragraph discusses when the data was made public and what the features (columns) in the dataset were. The data originally appeared publicly in 1999 in an R package.

The next paragraph explains how the dataset is used in a modern manner by illustrating graphical methods and being used by log-linear and linear models. The dataset has a large number of factors that can be used to create ideal storytelling. There are also Mosaic-type plots, which are simply the plots that are extracted after the model is fit. Back in the day, these types of graphs were undervalued, possibly because not everyone was bright enough to grasp them another version of the Mosaic Graph is the Double decker graph, which is discussed on the next page and explains how features like Class, Gender, and Age affect the survival rate.

Then there are the Tree diagrams, which present the data in different categories. The tree Diagram displayed illustrates how variables such as class, gender, and age affect survival. The accuracy of classification trees is being improved by using various parameters like pruning and cross-validation. It is widely known that trees are among the most accurate and best classification approaches for accurately predicting a result because there are numerous nodes involved in trees that provide better Explainability.

The final visualization is an information graph, which includes a large amount of data in one graphical image. It is divided into sections, including such bar charts on top with pie charts, a map that tells where the ship sank, and bar charts at the bottom that show the death rate. Then there's a portion in the middle that talks about how the ship started sinking in the description. The lifeboat launches are located at the bottom, and this section also contains details on how many people boarded them. Overall, I believe that the majority of the information can be easily extracted by simply looking at the information graph.

**Feedback:**

My take after going over these articles is that I believe that accurate and explainable graphs are the greatest approach to presenting your thoughts clearly. It is your obligation to ensure that if you create a graph, it is visualized in such a way that anyone can understand everything by simply looking at it without you having to describe it in detail.