

Readings week 2

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- **Find a visualization not discussed in class or used in a homework and answer the following questions pertaining to that visualization. Attach the visualization as a screenshot in your submission.**

<http://www.theguardian.com/sport/datablog/ng-interactive/2015/nov/02/how-fast-is-a-race-horse-kingston-rule-goes-head-to-head-with-usain-bolt-and-a-cheetah>

- **Consider Bertin's characterization of visual variables (position, size, shape, value, color, orientation, and texture). Pick 2 of Bertin's visual variables, and discuss them in relation to your visualization.**

One visual variable used in my visualization is shape. The icons used for the various competitors in the race are their silhouet

In Carpendale's book motion is mentioned as a visual variable. Although this is not one of Bertin's original visual variables, it plays a very important role in my visualisation. From the motion of the icons you can directly see their speeds. This allows you to get a feel for the relative speeds of the various competitors.

- **Munzner proposed a nested model for visualization design and validation. Discuss/validate your visualization with respect to domain problem characterization and data/operation abstraction design.**

From the web page: "See how quickly each animal, person or thing can cover 100m, or switch to the speed comparison to compare their top speeds in kmph."

This is a short and concise problem characterization. But I think it's good. A longer explanation would not make things more clear.

As for the data operation, top speeds are processed into actual motion. This gives a feel for relative speeds that you don't get by comparing the numerical values of the top speeds.

- **Based on Cleveland and McGill's results, does your visualization embody good practices (i.e. can people accurately perform the tasks based on the encodings?)**

This visualisation embodies good practices. The encodings are simple but they are very clear.

- **Do you agree that visualization is a functional art? Explain.**

Art is not clearly defined. I consider everything with an aesthetic component to be art. Therefore I think you could call visualisation a functional art.

- **Ask yourself what the designer is trying to convey and think of three to four possible tasks this visualization should help you with. Does the visualization achieve any of your tasks? (To view an example, see Albert Cairo, pages 26-28.)**

The visualisation gives the viewer a quantitative comparison of speeds. This is done well by giving the top speeds in km/h. A qualitative comparison of speeds is given by simulating the motion. A third task is enabling the user to compare it's sprinting times with various objects, animals and usain bolt. This works well.