Hi, welcome to Module 4 of our course on ethical and equitable dataviz and today we’re going to talk about communication and distribution and the visualization of data in your data story.

So one of the things I really, really like about communication and data visualization is thinking about the night sky because the night sky is a data set that lots of us see and tell stories about and think about. And the way that we tell stories or think about how to interpret the data set in front of us depends a lot on where we stand on the Earth and what our culture is. This same set of stars can be interpreted in many, many different ways. And there are a number of different stories around the world about the same set of stars with very different interpretations. And of course, when it comes to something like a constellation or the stories we tell about the stars, there’s no one universally correct interpretation. We’re all looking at the same stars and we’re all making meaning for ourselves in our own way.

The Big Dipper is, of course, identified across many Northern Hemisphere traditions. But for example, the Alaskan Gwich’in, this is the Big Dipper is just the tail of the whole sky constellation called Yahdii, which is the word for the tailed man. There’s lots of very interesting things written online if you want to go into more depth about the way that different stars are interpreted by different people. But for our point of view, the purpose behind this illustration is that there’s no one way that’s the best for all cultures in the world to interpret, communicate or visualize a set of data. There are things called best practices for data visualization. But these are not culturally universal. Some cognitive science is is likely to be true about kind of how the human eye works, but how the human eye communicates with the human brain. It’s certainly not culturally universal. And one of the issues we have is that most of the best practices, as we read about them currently are tested or researched among people who are basically most likely university students living in Western Europe and the United States and Canada. So one of the things that we as a community are working on is developing some data, best practices based on research from other cultures and other populations. So be careful. When you’re setting up dataviz or any kind of data story communication, thinking about what culture the data came from and what culture the reader or listener or watcher is going to be centered in as well.

You need to think about things like the locus of power, the world view, the unit of analysis, and what’s assumed to be ‘normal’ because these things are different, depending on where you’re standing in the earth.

Locus of power refers to things like do you think individuals are powerful or do you think groups are powerful? World view has to do with all kinds of things, like is time linear? If you’re talking about tomorrow, do you point forwards or backwards? That’s not universal. Unit of analysis, different levels of analysis are meaningful to different cultures. We talked about that a little bit in the analysis module, but it’s important to think about in the communication and viz module as well. And then what’s assumed to be normal. If you if there’s going to be if you’re comparing two things in your databases or one thing is going to be considered the baseline or the norm. Choose that very, very carefully, because that’s one of the strongest ways to embed your world view or the status quo into your data communication.

Here’s an example that comes out of Mexico where the health care services were promoting some specialized services that were designed to meet the needs of indigenous populations in Mexico. And this is the advertisement that they did. And the visuals that they used were not in alignment at all with the cultural preferences of the indigenous population that they were trying to communicate with. The indigenous people saw this as a very sad picture because the boy is alone rather than surrounded by his family and his community. Whereas the people making it, the advertising company making this visual thought that the boy seems quite happy. That’s just one small example.

Another one is the difference between the accessibility symbols. What used to be the accessibility symbol was a wheelchair with very stiff person and right angles and not showing movement. And a new accessibility icon was developed several decades ago by people who actually use wheelchairs and need the accessibility icon and didn’t like the way that they were
being portrayed in the traditional kind of old fashioned symbol. And the new symbol is much more in alignment with the kind of traditionally abled human symbols that we see on roadsides and bathrooms where they're not shown as right angles. The human doesn't have right angles. The human is has rounded features and is actually in motion, moving forwards in motion. Small changes to an icon can make a very big difference for.