

## Diversity, Inclusion and the Motion of Planets:

### Lessons from a Simple Whirligig

By Joe Morales, Sr., MPA



Even in a complicated universe, simplicity can be an effective teaching tool. Newtonian physics, centripetal force, Circular Motion Dynamics, angular momentum and rotational velocity have nothing at all to do with diversity and inclusion, right? Well, maybe. Consider your own “social circles” and “spheres of influence”. An August 2014 report in the Washington Post highlighted the fact that America’s racial divide is supported by the statistical analysis of Robert Jones from the [Public Religion Research Institute](#). According to Jones’ findings, “...the average black person's friend network is eight percent white, but the average white person's network is only one percent black. To put it another way: Blacks have ten times as many black friends as white friends. But white Americans have an astonishing *91 times as many* white friends as black friends.” The comedian Chris Rock joked about this phenomenon in his 2009 “*Kill the Messenger*” comedy special on HBO.

Chris Rock was right but the Washington Post article points out that “There are more white people than black people in the United States, so it makes sense that the average American is going to have more white friends than black friends.” Ok. Then why am I writing about astrophysics to discuss diversity and inclusion? Perhaps a simple remedy can be found among the stars.

Have you ever spun a button on a string until it moved so fast that it actually created a buzzing noise? Anyone over the age of forty has probably done so at least once. Native Americans are said to have played with a version of the toy as far back as 500BC. It was the kind of thing kids did before television and smart phones came along. They are known as whirligigs, button spinners, buzzers or just plain old button spinners. It is a very simple toy; so simple that it can be used to teach the universal laws of physics, the speed of sound and the motion of almost every celestial body in our universe. Even now, at age 50, the idea of a universal law of physics represented in such a simple device fascinates me.

The whirligig is unequivocally primitive, especially when compared to the hyper-realistic video avatars embodied by today’s nimble-thumbed gamers around the globe. Still, as a Millersville University undergraduate in Dr. Sharnberger’s Earth Sciences class, the simplicity of a spinning button helped me understand how celestial bodies move faster in a smaller orbit and slower in a larger orbit. Recently, it has also helped me think about my work as a diversity and inclusion consultant in a different light. Stick with me for a moment. Could improving race relations be as simple as shrinking the emotional, social and physical distance between people of different races and backgrounds? Perhaps the answer is among the stars.

The planet Earth makes a trip around the Sun once every 365 days or one “Earth year”. Mercury is closest to the sun and revolves around it at a rate of once every 88 days. The cold and distant planet Neptune makes the same trip only once every 164.79 Earth years. Professional figure skaters or a playground tether ball wrapping around a pole at the end of a string demonstrate this principle. They both spin faster as their “orbit” becomes smaller...just like planets or a button spun on a string. In our solar system, closer means hotter and faster while distant means colder and slower. As a fifty-year old Earthling on Mercury I would be approaching my 211<sup>th</sup> birthday and having a hot time celebrating, while on Neptune I’d be fit and frosty at just .3 years old. It’s all relative I suppose.

People are very different and far more complex than planets or simple buttons, right? Will closer proximity to places and situations that challenge our perceptions of those who are different help warm us to inevitable societal changes? I’d like to think so. History has clearly demonstrated that remaining cold and distant will only slow the warming process. Take it from someone who’s travelled around the Sun (and many American communities) a few times. Increased contact and regular interaction among racially and socioeconomically diverse groups is good for you and everyone else on the planet. Could improving human relationships be that simple?

In 500 B.C. a child spun a button or piece of bone on a string knowing nothing about the movement of stars or planets. Human beings have since walked on the moon and sent machines to explore and report back from the distant reaches of space. Knowing what we know now about people, poverty, opportunity and education, it is foolishness to embrace



ignorance or perpetuate antiquated stereotypes. Now that we know better, we can do better.

It really is that simple.

Expand your social circles to include people who are different from you and you will be better for it. Technology and information have truly made for a smaller world. Every day of every year presents the opportunity to get closer and bask in the warmth of our shared humanity. It is, without a doubt, the kind of global warming that we should never have to fear.