# DM-GY 6063 2023F D Mid-Term Project

Thiago Hersan 2023/10/25

#### The Left Hand of Darkness by Ursula K Le Guin

The book is about shifting political and personal loyalties between two nations and their citizens in a fictitious planet called *Gethen*.

Individuals on Gethen are ambisexual, with no fixed sex; instead they go into a period of fertility once a month called *Kemmer*, where masculine or feminine traits are expressed temporarily. Relationships in *Gethen* are also dictated by *shifgrethor*, an intricate set of unspoken social rules and formal courtesy.

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Classes to create objects that represent the population of the two nations. These will change according to time and what objects that are near them.

I wanted to use a design that has a diagonal division, and some shapes that are in grids, but jittery. Changes that start with one individual will propagate through all the other individuals of a nation, and each nation has its own way of propagating change.

One nation will propagate colors in a radial way, the other in a linear way. These changes will be triggered by a click event in the top-left half.

### Challenges

I thought the distance calculations would be difficult, but the actual calculations were not bad. What was difficult was keeping track of all of the changing variables necessary to implement the effects I wanted to implement.

In the end the changes weren't so much affected by other objects around each shape, but more by time and the location of the click.

## Highlights

this.angle = PI \* this.colorAmmount;

I have a variable that goes from 0 to 1 and back to 0 whenever there's a color change. By just multiplying this counter by PI I easily added a rotation effect to my squares without having to use another counter variable, or cycle function.

## Demo

https://dm-gy-6063-2023f-d.github.io/MidTerm-Project/