JACK MURRAY
UNIVERSITY
OF CENTRAL
FLORIDA
TEXTS AND
TECHNOLOGY
JACK @ JACK AD
EMIA. COM
TWITTER:
@ JACKADEMIA

# MORE THAN JUST THE TABLE: ANALOG GAMES AS COMPUTATIONAL PLATFORMS

# ACCESSIBILITY SLIDES

#### **PLATFORMS**

- What are they?
  - Computing Hardware and Software Environments
  - Layered abstractions to facilitate creative digital production
- Contain ideological assumptions
- Interact with a Cultural Layer

## ANALOG GAMES AS PLATFORMS

- Made up of Players, Material Components, Rules
- Players Accounts for:
  - Individual interpretation and Subject Positions
  - Community and Ideocultural influences
- Material Components Account for:
  - Configuration Affordances
  - Spatial Relationships
  - Ordinality
- Rules Account for:
  - Procedures
  - Interactions

#### ANALOG GAMES AND COMPUTATION

- Deployments of random functions for PCG.
  - Random Lookup Tables
  - Unstructure for algorithmic design.
- Set Manipulation and Object Ordering

## CASE STUDY: DUNGEONS & DRAGONS

- Numerical and Indexable Components
- Algorithmic systems determine character actions.
- Dice used to generate Random numbers
- Lookup tables to generate encounters, rewards, and environments
- Easy digitization and computer automation

## CASE STUDY: MAGIC: THE GATHERING

- Cards can be manipulated algorithmically
- Cards contain commands that describe a procedural execution
  - Commands can be linked together
- M:TG uses computing data structures to process instructions
  - Integration of First-In-Last-Out Stack
- Sufficient complexity for Turing completeness.
- Players construct and execute programs
- Narrative Equity means players tell stories of games
- Histories of Individual games correspond to thematic events

# CONCLUSION AND MOVING FORWARD

- Close the design and theory gap between analog and digital games
- Analog Game platforms consist of Player-Component-Rule assemblage
- Provocations
  - What happens when analog game plataforms are adapted to function on digital platforms?
  - How can we design games that take advantage of the ability for analog games to facilitate computation?

## **CONTACT:**

Jack Murray

University of Central Florida

Texts and Technology

Email: jack@jackademia.com

Twitter: @jackademia