

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

**JACK MURRAY
UNIVERSITY OF
CENTRAL
FLORIDA**

**TEXTS AND
TECHNOLOGY**

EMAIL:

JACK@JACKADEMIA.COM

TWITTER: @JACKADEMIA

**WEB:
WWW.JACKADEMIA.COM**

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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 platforms 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

Web: www.jackademia.com

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