

# Crafting Reality

Advanced Techniques in  
Tabletop Game Prototyping



# Knowledge to be Dispensed Into Your Brains

- When you should make a physical prototype.
- What your prototype should look like vs. who it is geared towards.
- A shopping list of good prototyping tools.
- A bare-bones introduction to InDesign Data Merge for laying out cards.
- A list of great resources for expanding your prototyping skills.

**WARNING: TABLETOP GAME DESIGN TALK**

# Who Are We?

## Michael Epstein

Director, Copper Frog Games LLC

Northeastern University -  
English & Game Design alum

Tabletop Credits:

- *Tattoo! The Game of Ink*
- *Pigment* (coming to PAX East 2017)
- *Seek and Go Hyde* (unreleased)
- A dozen+ more small prototypes

## Breeze Grigas

Director, Zephyr Workshop

Becker College -  
Game Design alum

Tabletop Credits:

- *AEGIS: Combining Robot Strategy Game*
  - So. Many. Robots.
- *Wind S.A.B.E.R.S.* (unreleased)

# When Should I Make a Prototype?

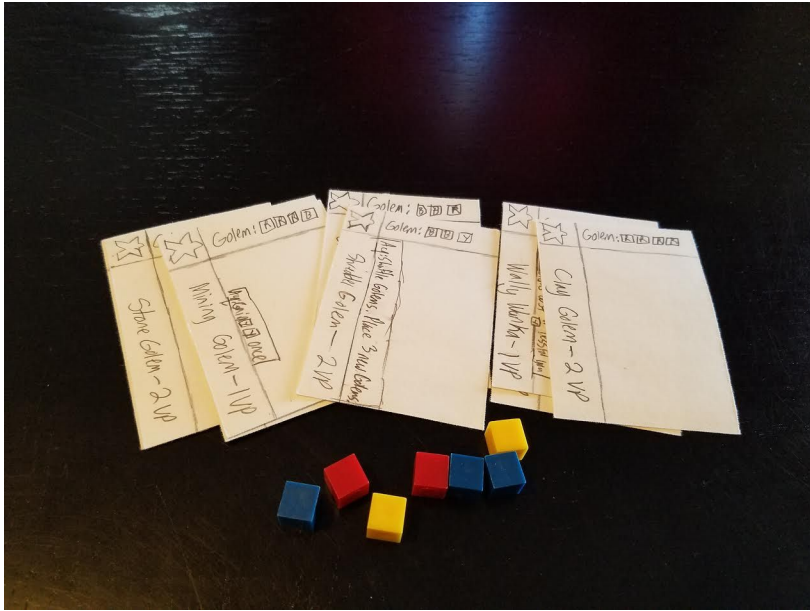
If you're thinking about making a prototype, that is the time.

- Can you get someone through a single turn of the game?
  - Playing the game will always yield more useful results than internally mulling it over
- Do you need to test a key mechanic?
  - Make a prototype that does JUST THAT, ideally not using the theme you're shooting for, and isolate that variable for testing

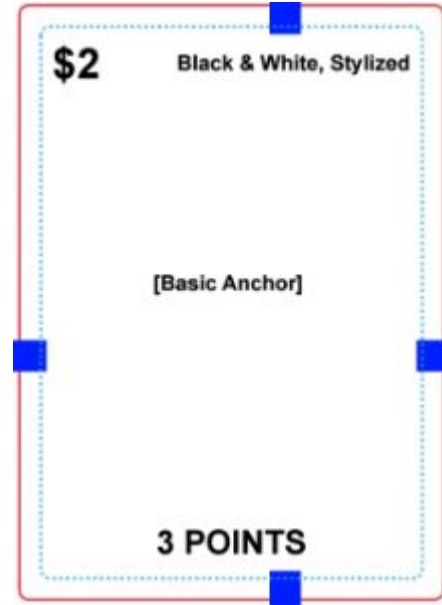
# Understand the Goal of Your Prototype

- Stage 1 : Is it to show playtesters you know?
  - It should be clear and legible.
- Stage 2A: Is it to show the public?
  - Self-publishing or crowdfunding? It should look nice.
  - Testing? Worry about usability more than aesthetics.
- Stage 2B: Is it to show to publishers?
  - It should be very refined and complete mechanically.
  - Art is not as important, as they will likely change it all later.
- Playtesters should always be questioning the *game* and not the materials.
  - If you're only getting feedback on the looks, go back to empty boxes and ugly fonts.

# First Prototypes for *Pigment & Tattoo! The Game of Ink*



Pre-perforated cardstock, plastic cubes (July 2016)



Adobe Illustrator (August 2014)

# Like an Alchemist, you can turn this Stuff into a Game

## Stage 1 / Early Prototyping Materials:

- Card Sleeves and Backwards Trading Cards
  - Allow much easier shuffling than printed paper alone
  - Come in different colors for different card types/games
  - Prevent damage to prototype cards
- Paper Cutter
  - Scissors are inaccurate and tedious to use for long periods
- Pre-Perforated Paper ([perforatedpaper.com](http://perforatedpaper.com))
  - Pros: Better-feeling than Index Cards! No cutting required! Printable!
  - Cons: Expensive, requires layout software to use effectively if printing.
- 1" Craft Punch
  - Make your own custom tokens from printed, folded, and glued cardstock!



# Like an Alchemist, You Can Turn This Stuff Into a Game

## Stage 1 / Early Prototyping Materials (continued):

- 1 cm Plastic Cubes
  - Usable as pawns, resources, and more
  - Come in multiple colors, literally by the bucketload
- Dice
  - The classic method of introducing randomness since the 24th century BCE!
  - Odds are you already have some. Looking at you, roleplayers.
- Hexagonal/Square Grid Paper
  - Never free-hand things if you don't have to
- Other Board Games
  - Full of bits and bobs that you can draw inspiration from or combine into new prototypes
  - *Mouse Trap* has cheese tokens, *Monopoly* has play money, *Bananagrams* has letter tiles...





# Like an Alchemist, You Can Turn This Stuff Into a Game

## Stage 2 / Prototyping Software:

- Adobe Photoshop
  - Raster (pixel-based) image manipulation/creation program
  - Use this for manipulating images to use as card art, or for digital painting.
- Adobe Illustrator
  - Vector (curve-based) illustration program.
  - Good for icon design.
- Adobe InDesign
  - More on this tool shortly!



**THESE ARE ALL WICKED EXPENSIVE AND OFTEN BEST LEFT TO ART AND GRAPHIC DESIGN PROFESSIONALS LATE IN THE PROTOTYPING PROCESS.**

# Like an Alchemist, You Can Turn This Stuff Into a Game

## Stage 2 / Prototyping Software (continued):

- *Tabletop Simulator* (Steam game)
  - Pros:
    - Test your prototypes digitally with cards, tokens, dice, animated minis, and more
    - Physics sandbox, not much in the way of easily programmable rules
    - Playtest with people around the world - more eyes on a project never hurts!
    - Can share builds of a game with Kickstarter backers to get them playing the game NOW
  - Cons:
    - Slow to use, since you only have 1 mouse pointer instead of 2 hands
    - Requires setting up special documents to use existing assets in-game
    - Requires a decent computer that can run it
    - Less social, and harder to get a read on what people are thinking about as they play



# Like an Alchemist, You Can Turn This Stuff Into a Game

## Stage 3 / Prototyping Services:

- **TheGameCrafter.com** *and* **PrintPlayGames.com**


- Print-On-Demand (POD) services for board and card games
- Wide range of printed products and bits, along with self-publishing sales services
- Not cost-effective for large print runs
- Quality isn't always great
  - Publishers understand they're looking at prototypes

- **DriveThruCards.com**

- POD card service
- Cheap, flat price per card (with a bulk discount for 1000 cards or more in one order)
- Allows you to sell POD or print & play PDF copies of your card games
- All they do is cards: no rulebooks or anything beyond tuckboxes.



# Making Cards in Adobe InDesign - Some Starting Tips

- Use this program *last* to lay out all the pieces you made in Photoshop and Illustrator for printing
  - Powerful text formatting and layout tools
  - Remember: You're placing and resizing the *frames* you're placing pre-made info *into*
- GREP paragraph styling is your text formatting friend. Learn its secrets.
  - `/Bolded Text/` ↗ `(/)(\w+?)(/)` -> **Bolded Text**
- Very powerful “Find and Change” feature lets you replace text with formatted text, images, and icons in-line `Gain [B]` -> `Gain` 

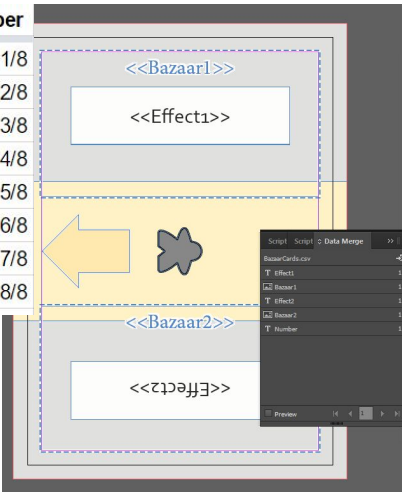
  - Use unique strings to be sure you don't accidentally break other text

- **Bow before your new god, Data Merge**

# Data Merge Primer

- Merge images and text from a spreadsheet into multiple documents/pages with the same layout
  - Perfect for mass-producing card PDFs!

Effect1	@Bazaar1	Effect2	@Bazaar2	Number
/Gain/ [B]	<a href="#">bazaar4.ai</a>	/Gain/ [R] [R]	<a href="#">bazaar1.ai</a>	1/8
/Gain/ [B]	<a href="#">bazaar4.ai</a>	/Gain/ [Y] [Y]	<a href="#">bazaar2.ai</a>	2/8
/Gain/ [B]	<a href="#">bazaar4.ai</a>	/Gain/ [R] [Y]	<a href="#">bazaar5.ai</a>	3/8
/Spend/ [A] [A], /Gain/ [B]	<a href="#">bazaar3.ai</a>	/Gain/ [R] or /Gain/ [Y]	<a href="#">bazaar5.ai</a>	4/8
/Spend/ [Y], /Gain/ [R] [R]	<a href="#">bazaar5.ai</a>	/Gain/ [Y]	<a href="#">bazaar2.ai</a>	5/8
/Spend/ [R], /Gain/ [Y] [Y]	<a href="#">bazaar5.ai</a>	/Gain/ [R]	<a href="#">bazaar1.ai</a>	6/8
/Spend/ [B], /Gain/ [R] [Y] [Y]	<a href="#">bazaar5.ai</a>	/Gain/ [Y]	<a href="#">bazaar2.ai</a>	7/8
/Spend/ [B], /Gain/ [R] [R] [Y]	<a href="#">bazaar5.ai</a>	/Gain/ [R]	<a href="#">bazaar1.ai</a>	8/8



Google Sheets, InDesign CC (January 2017)

# Data Merge Tips to Save You Headaches

- Clearly name each field in your spreadsheet to prevent later confusion
- Use @ before names of image columns to denote you're placing files with them.
- Frames can overlap, so you can even import backgrounds as part of the Data Merge. Change it once, update CSV, update all backgrounds easily!
- Maintain an organized folder structure for your images to import.
- If your images in a given frame aren't all the same size, **be sure to put a 0% opacity, no-stroke rectangle over them** so they don't stretch to fit if you don't want them all to, and are positioned correctly in-frame.
- Use PSD/AI files when data merging—lossy files merge into lossy cards.
- **Google Sheets** exports the CSV file you need perfectly; Excel, YMMV.

@Bazaar1

[bazaar4.ai](https://bazaar4.ai)

# More Resources For Your Brain

- **Daniel Solis** ( @DanielSolis )
  - Graphic Designer, Art Director, Game Designer
    - *Belle of the Ball*
    - *Kodama: The Tree Spirits*
    - *The Princess Bride: As You Wish*
  - Offers a slew of graphic design tutorial videos, many game-focused
    - Many are on GREP styles and advanced Data Merge techniques
  - Support his Patreon! [www.patreon.com/danielsolis](http://www.patreon.com/danielsolis)
- **www.game-icons.net**
  - Over 2600 free-to-use icons for any game in any genre
  - .SVG vector files for easy tweaking
  - Useful to see how designers approach certain problems in iconography





**Michael Epstein**

[linkedin.com/in/mepstein73](https://www.linkedin.com/in/mepstein73)

**Copper Frog Games LLC**

Email: [info@copperfroggames.com](mailto:info@copperfroggames.com)

Facebook: [/copperfroggames](https://www.facebook.com/copperfroggames)

Twitter: [@CopperFrogGames](https://twitter.com/CopperFrogGames)

[www.CopperFrogGames.com](http://www.CopperFrogGames.com)

*Find me at **PAX East 2017** at the **Gaming Paper** booth to buy a copy of **Pigment** and to play **Tattoo! The Game of Ink**.*



**Breeze Grigas**

[linkedin.com/in/1breeze](https://www.linkedin.com/in/1breeze)

**Zephyr Workshop**

Email: [zephyrworkshop@gmail.com](mailto:zephyrworkshop@gmail.com)

Facebook: [/projectAEGIS](https://www.facebook.com/projectAEGIS)

Twitter: [@Zephyr\\_Workshop](https://twitter.com/Zephyr_Workshop)

[www.ZephyrWorkshop.com](http://www.ZephyrWorkshop.com)

*Find me at **PAX East 2017** demoing **A.E.G.I.S.** in the tabletop freeplay area!  
We're going to **Kickstarter** soon.*