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CMS.608 / CMS.864 Game Design  
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CMS.608 - Game Design

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## **Pokémon: The Board Game**

### **The Rules**

#### **Players:**

2-3 Players

#### **Goal**

The goal is to be the first player to collect all 8 gym badges, which earns the title of Pokémon League Champion.

#### **Setup**

Place one of each type of starter face up in the center of the table.

The players roll dice to determine who will go first. The player with the highest roll goes first, and selects their starter. Continuing clockwise, the other players select a starter from the center of the table. Normal play begins when each player has a starter.

#### **Normal Play**

Players have a choice of actions on their turn:

1. Move, roll one die, move forward or backward up to the number rolled.
2. Battle Wild Pokémon, only applicable when on a colored path area. Select the top card from the deck for the current route. A Wild Pokémon Battle begins.

After the player moves, one of three possible events may occur:

1. Landed on a Gym: Players may choose to battle the gym leader
2. Landed on a Pokémon Center: Players remove all damage counters from all Pokémon in their team
3. Landed on a square with another player: The player who previously occupied the square may elect to battle with the player who landed on the square. If they do, a Player vs. Player battle begins.

After any battles have resolved, play continues clockwise.

#### **General Battle Rules**

Battles are limited to a maximum of 3 vs. 3. Each player selects in private the Pokémon which they will use in the battle, and also which Pokémon they will send out first. The winner of a battle is the last player with a remaining active Pokémon. An active Pokémon is one which has

fewer damage counters than it has health points. All damage from battles remains in effect until a player lands on a Pokémon Center, which heals their Pokémon.

Battle progression is turn based. The player who initiates the battle goes first. During each player's turn they may take one of two actions.

1. **Attack:** Select one of the attacks on the active Pokémon, and use it.
2. **Switch:** Switch the currently active Pokémon with one of the Pokémon on their bench.

### **Status Effects**

Certain moves may include status effects, which apply to either the opponent's Pokémon, or the player's Pokémon. All status effects have a duration of two the opposing player's turns. At the end of the opposing player's turn, one counter should be removed from the status effect indicator. When there are no remaining counters, the status effect is no longer effective.

### ***Exclusive Status Effects***

There are three categories of status effects. There are exclusive status effects, which are Paralyze, Confusion, Burn, and Poison. Only one of these four can be active at a time. If another type of exclusive status effect would be inflicted, it is instead simply ignored.

- **Poison:** Each time you remove a counter from poison, add a damage counter.
- **Burn:** Your attack power is reduced by 10.
- **Confusion:** Roll a dice, if it is 3 or lower, your attack succeeds. If it is 4 or higher, add one damage counter to yourself.
- **Paralyze:** Roll a dice, if it is 3 or lower, your attack succeeds. If it is 4 or higher, you are fully paralyzed, and your attack does not occur.

### ***Damage Modifiers***

The second category of status effects are damage modifiers. These status effects increase or decrease damage done or taken. These status effects can stack with exclusive status effects, accuracy modifiers, and damage modifiers of the opposite effect.

### ***Accuracy Modifiers***

The third category of status effects are accuracy modifiers. These status effects can stack with exclusive status effects, damage modifiers, and accuracy modifiers of the opposite type.

### **Gym Battles**

On a turn when a player has moved onto a Gym square, labeled with a G on the board, they may elect to battle the gym leader. Each Gym leader has a different set of Pokémon which they will use. In the case of a gym battle, the two uninvolved players flip a coin to determine who will play the role of the gym leader. The number of Pokémon allowed for use by the player is the same as the number of Pokémon the gym leader has. So, if the gym leader has 1 Pokémon, the battle will be a 1v1.

### **Gym Leaders**

#### **Brock**

Location: Pewter City  
Badge: Boulder Badge  
Pokémon: Onix

#### **Misty**

Location: Celadon City  
Badge: Cascade Badge  
Pokémon: Starmie

#### **Lt. Surge**

Location: Vermillion City  
Badge: Thunder Badge  
Pokémon: Raichu, Electrode

#### **Erika**

Location: Celadon City  
Badge: Rainbow Badge  
Pokémon: Oddish, Gloom

#### **Koga**

Location: Fuchsia City  
Badge: Soul Badge  
Pokémon: Machoke, Primeape

#### **Sabrina**

Location: Saffron City  
Badge: Marsh Badge  
Pokémon: Abra, Kadabra, Alakazam

#### **Blaine**

Location: Cinnabar Island  
Badge: Volcano Badge  
Pokémon: Rapidash, Flareon

#### **Giovanni**

Location: Viridian City  
Badge: Earth Badge  
Pokémon: Raticate, Pidgeot, Persian

If the player defeats the gym leader, they receive that badge. If they are defeated by the gym leader, the player is moved back to the Pokémon Center they most recently passed. The Gym leader's Pokémon automatically heal after each battle, so they are always at full health when a battle begins. Player Pokémon do not automatically heal, so all damage is retained after a winning battle.

If the gym leader uses an attack which knocks out the opposing player's last Pokémon, which has an effect which knocks out their last Pokémon, the gym leader is still victorious, and the player does not receive the badge, and is moved back to the last Pokémon Center they passed. If the player uses an attack which knocks out the gym leader's last Pokémon, which has an effect which knocks out their last Pokémon, the player is still victorious; they receive the badge, but are also returned to the last Pokémon Center they passed.

### **Player Vs Player Battles**

Player vs. Player battles follow all of the general battle rules. The player who was on the square is considered the initiator of the battle, and moves first. Otherwise, all of the general battle rules are followed with no modification. The losing player is moved to the last Pokémon Center which they passed.

If a player uses a move which knocks out their opponent's last active Pokémon, but has a side effect which knocks out their last active Pokémon, both players are moved to the last Pokémon Center that each player passed. They both do not have to move to the same Pokémon Center.

### **Wild Pokémon Battles**

A wild Pokémon battle begins when a player has elected to search for a wild Pokémon, and drawn a card from the route they are currently on. The rules for a wild Pokémon battle are somewhat different. The player battling the wild Pokémon may choose up to 3 of their Pokémon to use against the wild Pokémon. The player attacking the wild Pokémon is the initiator, so they attack first. They may elect to do one of three actions:

1. Attack: Select one of the moves on their Pokémon to use
2. Switch: Switch the current active Pokémon for one of the Pokémon on the bench.
3. Use Pokéball: Attempt to capture the wild Pokémon with a Pokéball.

To use a Pokéball, the player rolls a single die. The success of the capture depends on the roll and the HP of the Pokémon. If the Pokémon has 10 HP, the roll must be 5 or less. If the Pokémon has 20 HP, the roll must be 4 or less. If the Pokémon has 30 HP, the roll must be 3 or less. If the Pokémon has 40 HP, the roll must be 2 or less. If the Pokémon has 50 HP, the roll must be 1. If the Pokémon has 60 HP or more, the Pokéball is ineffective and cannot capture it. If the wild Pokémon is knocked out during the battle, it is shuffled into the stack from which it was drawn.

If the player captures a Pokémon, and has more than 6 Pokémon in total, they must select one of the Pokémon to release into the wild. The released Pokémon is returned to its original stack. If the player elects to release their starter, it is removed from the game.

## Evolution

Certain badges unlock the power inside your Pokémon, allowing them to evolve to the next stage. To evolve a Pokémon from stage 1 to stage 2, you must first win the Cascade badge. To evolve a Pokémon from stage 2 to stage 3, you must first win the Soul Badge.

Evolution can only occur when you have won any type of battle. However, the type of battle has an effect on the chance your Pokémon will begin to evolve.

After winning a battle against another player or a gym leader, you may elect to evolve a Pokémon. The Pokémon must have been a participant in the battle, being on the bench is sufficient, and must be active. To attempt to evolve, roll a die. If the roll is 4 or less, the Pokémon was successfully evolved, and can move to the next stage. The player replaces the Pokémon which was evolved with the next evolution stage. If the Pokémon being evolved was a wild Pokémon, the lower stage is shuffled into the stack for the route it was captured on. Otherwise, if it is a starter, it is removed from the game, or if it is an evolved form, it is returned to the evolution stack. If the roll is 4 or more, the evolution failed and nothing happens.

After winning a battle against a wild Pokémon, the roll of the die must be 2 or less for successful evolution. All other evolution rules are the same.

## Play testing

We spent a lot of time trying to balance our board game. The original Pokémon game was not very balanced, since it was clear that there were certain Pokémon were much stronger than others. In our game, we tried to minimize the feeling of inevitability in our game as much as possible, while still keeping a large part of the game dependent on the strategic aspect. We did not want two Pokémon of approximately equivalent levels to be totally mismatched against one another, even though there were clear advantages one Pokémon would have.

Much of the play testing time was devoted to observing test battles and seeing how they were handled. Our first iteration occurred before any of the other parts of the game were decided, since we knew battling was going to be the most frequent action in the game. We heeded Denis Dyack's words to think of the action that players are going to be doing the most in the game and making sure that the ac-

tion alone is fun. In the first iteration, we tested two low-tier Pokémon versus each other. Very quickly, we realized that the outcome was highly deterministic, assuming that each player operated in accordance with the winning strategy. One of the ways that we could introduce some uncertainty into the battling mechanics was adding randomness to the moves.

Our initial thoughts were to have randomness in terms of accuracy, so a stronger move would do more damage, but also be more difficult to pull off. This seemed to be a decent solution, since there were slight chances that Pokémon could overcome type disadvantages, so that there was not a single situation where a win was inevitable. We also used one of the 400 Project Rules in our preliminary balancing: "Balance Units Starting with the Middle of the Pack" (Rule 18). In having second-tier Pokémon battle, we noted that it was extremely tough to create variety in the moves, without introducing status effects.

We still weren't satisfied with this rule set for combat, since all the meaning was through a random element in the game, and the player couldn't make any meaningful strategic choices. To address this problem, we added status effects in our next iteration. We gave each Pokémon a second move that caused a status effect, such as burn or paralyze. The status effects also had a chance of hitting the opponent. This did add meaning to combat. With a second move that served a new purpose, the player now had the choice of which move to use in battle. This added significantly to meaningful play. "Meaningful play in a game emerges from the relationship between player action and system outcome."

In our next iteration, we decided to play test a three vs. three battle. After playing, we decided to remove a lot of the random elements from the Pokémon's moves, after deciding that chance was playing too large a part in combat. This did not cause meaningful play to suffer, but it did cause the meaning to "shift around" a little bit. A player's choice of three Pokémon to send into battle was now very meaningful. Before choosing his Pokémon, a player had to balance his Pokémon to be able to fight

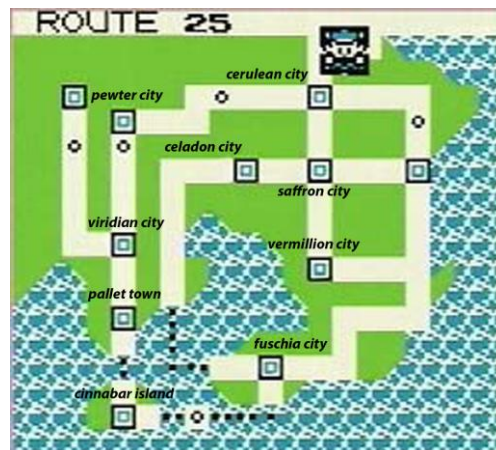
anything. He also had to try to read and judge his opponent, and guess which Pokémon will be used against him. Swapping Pokémon was also a meaningful decision for players to make: Is it worth losing a turn to get a new Pokémon into the fight? After this iteration, we were satisfied with combat enough to move on to the next phase: developing a complete list of Pokémon and testing them for balance against each other.

In the next two iterations, we had our Pokémon list created, so we started to test those. Immediately, we ran into, again, problems of deterministic outcomes in low-tier Pokémon. Our solution to the problem was to have the lower-bound cap of damage to be 10, i.e. even with type disadvantages, a Pokémon could never do below 10 damage. After that, we tested tier-three Pokémon battling, since the most variation in strategies would arise at those levels. Except for some minor tweaking to the attack powers and hit points, overall, we were satisfied with the balance. We kept the feel of the original Pokémon in that there were some rarer, clearly more powerful Pokémon, but in most battles between similar Pokémon levels there was not a sure win. We did not have enough time to test every single 1v1 battle, but we tested battles against the Gym Leaders (since that was more the core of the game than player-versus-player battling) to see if those were balanced well.

## **Board Design**

As the main goal of any game is or should be to cultivate meaningful play for those involved, the main goal of the design of the (physical) playing space for this game (read: the game board) is also to cultivate meaningful play. Our group has taken steps to create a game board simple enough that the board itself does not detract from the overall game play experience, and effort has been made to maintain the key qualities of exploration and the environmental representation of the original game space (The world of the original Pokémon game boy games).





With this in mind the design of our board began with a significant influence, the original Pokémon game map. When creating meaningful play from an already established game and world, great care must be taken to disturb or disrupt the players notions of the game space as little as possible (400 Rules Project).

The first decisions regarding the board design came up in discussion of the design of the game mechanics. The decision that the goal of the game would be to collect the eight gym badges placed emphasis on the eight cities containing Pokémon gyms and gym leaders. As a result of this game goal the game board features these eight cities and the paths between them. The game board does not include the possibility of traveling on victory road to challenge the elite four or lavender town, the eight cities included in the game board represent the large portion of the game boy Pokémon world allowing players familiarity with the game board from their previous Pokémon experience.

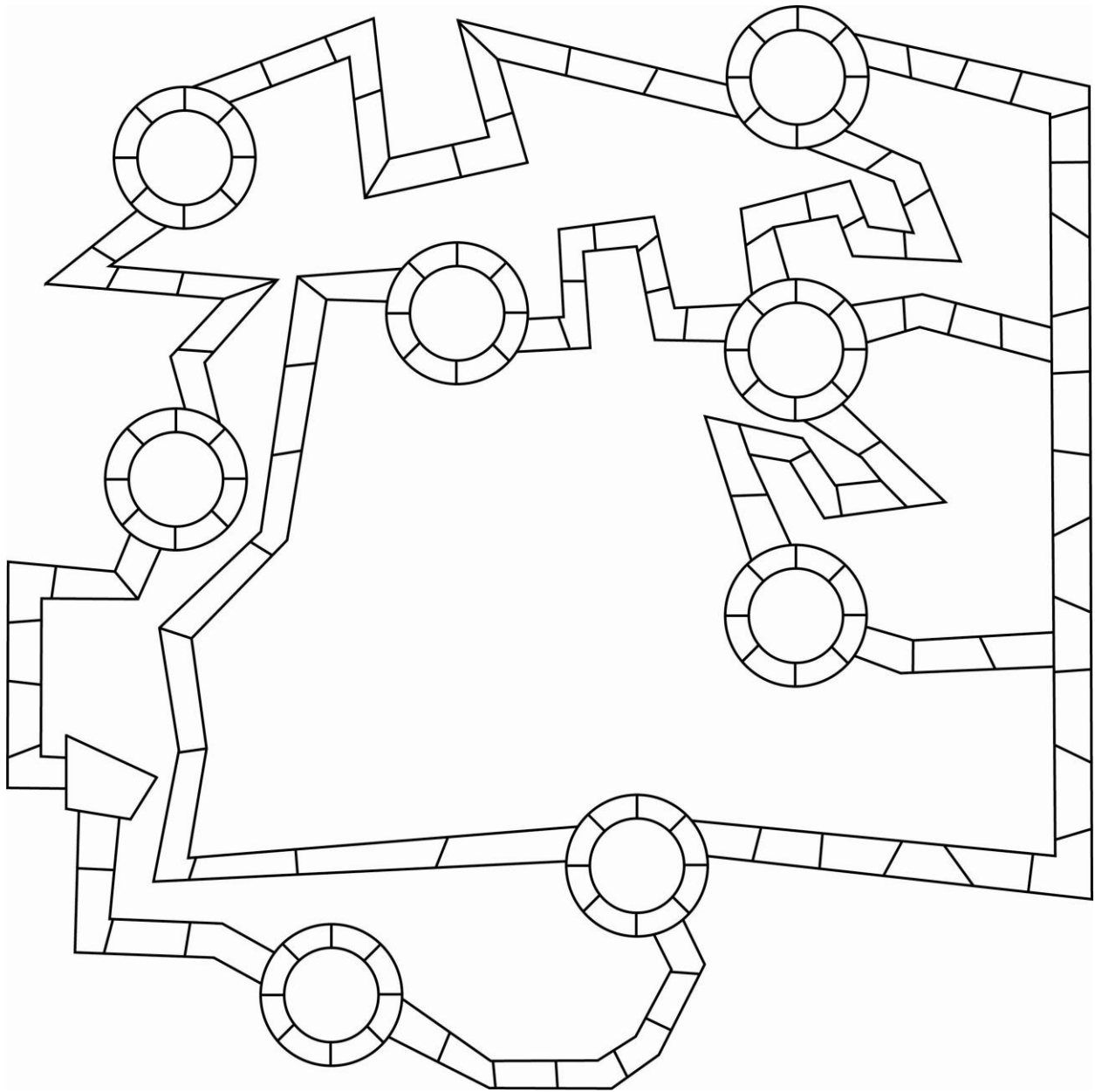
Initially two board formats were deliberated on, a path board format in which the players were guided between the cities by a printed pathway (similar to The Game of Life) or a gridded board in which a grid was overlaid across the entire map, allowing players to travel in between cities in any manner they please. It was eventually decided that the path format best helped to guide the player though the game. While the idea of a gridded board promoted player exploration, it did not maintain the paths be-

tween cities and established order of travel of the original and thus created a break from the game fantasy world.



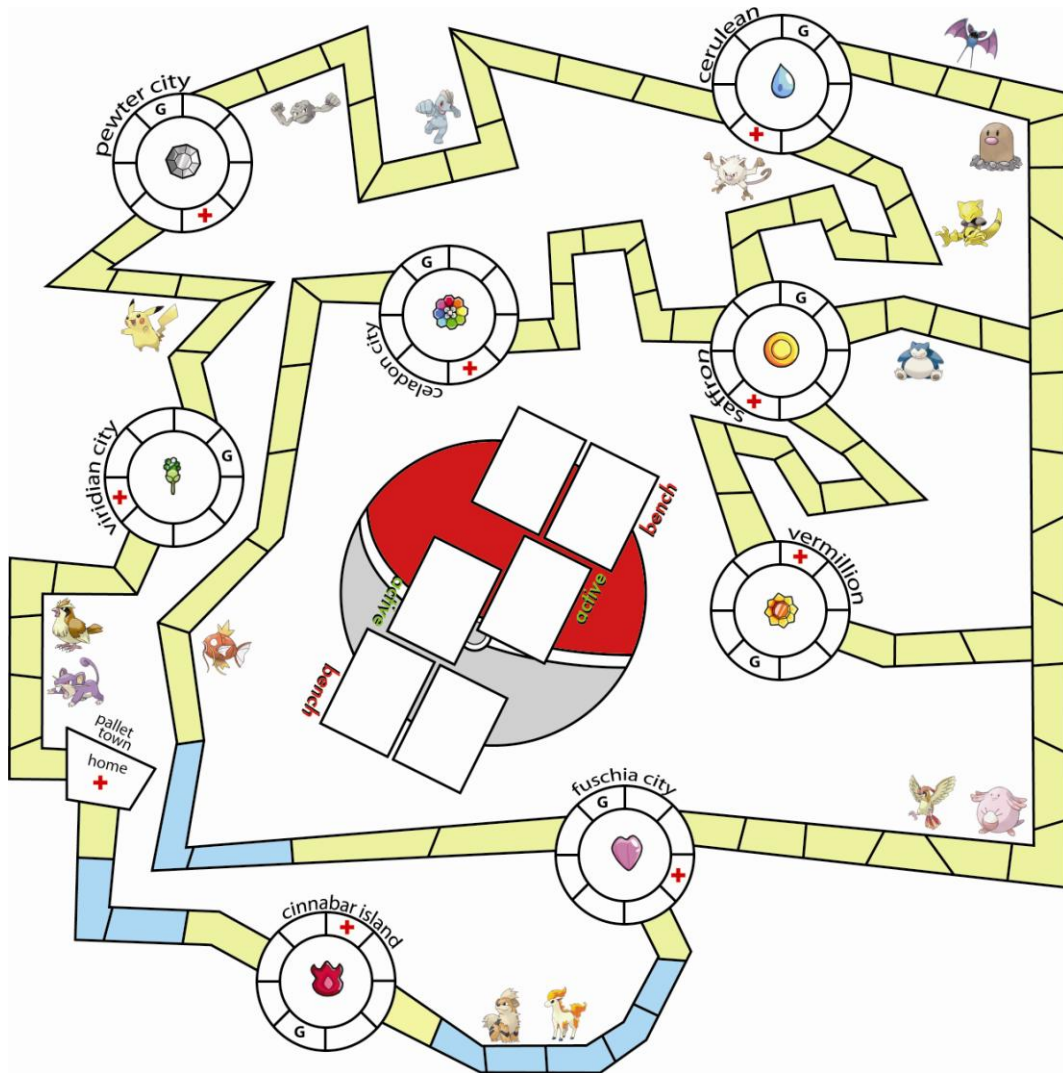
The cities on the board were made circles to distinguish them from the paths between cities. Each city has a poke center space (represented by a red cross) and a gym space, represented by the letter G. These spaces represent two buildings contained in each city of the original game. The paths between cities were generally made to be at least six spaces long, so that no player could travel between any two cities in less than two roles. This decision was made to increase the likelihood that players may encounter and be able to fight or catch wild Pokémon, as they will be forced to land in the pathways where wild Pokémon reside when traveling between cities.

The inclusion of “chance” spaces along the path came up as a possible method of introducing an element of randomness to play (by providing a potion card that could be used to heal in battle, etc.). This idea, however, was removed from the concept boards when the movement mechanic was finalized to allow the players to move in any direction for the number of spaces rolled on the die for their movement. As Salen and Zimmerman mention in *Rules of Play: Breaking the Rules* designers should be mindful of situations that could arise allowing players to cheat or play against the spirit of the game. Our group felt that the player’s freedom of movement in any direction made it too easy for players to deliberately land on “chance” spaces. This made the “chance” element less random and in turn less fun, so “chance” spaces were removed.



Aesthetic improvements were made to the prototype board in the final stages of development. The cities were first labeled with their respective names. City names from the original game were used allowing ease of communication between players regarding location (should they choose to communicate) and deepening the attachment to the original game. Coloring the squares easily distinguishes the paths from the background of the board. The color of the squares represents the type of terrain at that location on the game board, yellow indicating a road or wild grass, light blue indicating an ocean, and

brown indicating a cave. At the center of each city circle an image of the badge to be earned in that city is displayed. These images remind the players of the importance of earning badges as well as providing pleasant imagery. Two additional functional elements have also been included in the board graphics: Images of various Pokémon along the paths on the map, and a Pokémon stadium in the central area of board.



The images of the Pokémon along the paths again increase the attachment to the original game as the original artwork is used, but functionally inform the players which Pokémon are unique or most likely to be encountered in a given area. The stadium in the center of the board heralds the key

Pokémon graphic in the Pokéball but provides a functional arena for player battles to take place. The stadium includes spots for players to place their Pokémon cards and takes the main playing mechanic and literally places it at the center of the game. The aesthetic improvements not only make the board look better, but serve functional purposes for the player as well as providing familiar imagery that players can connect to and stimulate imagination and increase the overall level of fun experienced during the game

A functional improvement that could eventually be included in the board would be some sort of status indicator added to the stadium to aid players in tracking status attacks such as burn or paralyze. This idea was not fully developed and refined in time to be printed on the final board included in this iteration of the game. The board artwork could also continue to be improved, and specifically the city circles could either be colored or enhanced with some type of artwork rather than the color white.