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## Clash Royale, A Casual Deck-Building Battle Arena for Parents and Kids to Battle and Build

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### Abstract

Clash Royale is a casual mobile deck-building battle arena game. The mashup of these genres has created a game with appeal to different kinds of players, and also promotes productive interactions between different kinds of players, making for interesting family game play for “hard core” players and those less so. The distinguishing characteristics of this game that make it appropriate for family play include a broadly appealing aesthetic, a combination of synchronous and asynchronous game components, consistent challenge and significant social components. These components become the basis for productive mentoring, collaboration, communication and challenging decision-making. These components will be demonstrated in real time.

### Clash Royale On Ramp

Clash Royale is a casual mobile deck-building battle arena game, launched by Supercell (creators of the top App Store game, Clash of Clans). The number of genres included in the description may make Clash Royale sound like a disastrous mashup, but Supercell has combined these genres in an interesting, and more importantly accessible way. While it isn’t the kind of game typically associated with family play (e.g. Chiong, 2009), it does bear some resemblance to Overwatch, a collaborative real time battle arena which was designed in part to appeal to families (Starkey, 2016).

The game soft launched (as many mobile games do) in Australia, Canada and a few other English speaking small markets. It was during this time that we discovered it, read the early reports online, and wanted to participate in the soft launch. “We” in this case is a father (Eric) and 12-year-old son (Oren). We made accounts in these other countries and quickly came to enjoy the the game due to the clever mixing of deck building and real-time battle.

The combo of deck building and battle arena works in part because deck building games often include some element of battle, it just isn’t real time. In Pokemon or the digital Hearthstone, the player collects cards with different traits, assembles complimentary cards into a deck and then players battle in turn

against another player or AI. In Clash Royale you also build decks of characters (Figure 1a). You slowly collect gold and get characters (cards) randomly from chests that you receive from winning battles. In any one battle you can only take eight different characters into battle. So you must curate the characters to make sure that they have the necessary skill balance. Each character has a set of traits like ground/air damage, and hit points that are familiar to players of this genre (Figure 1b).

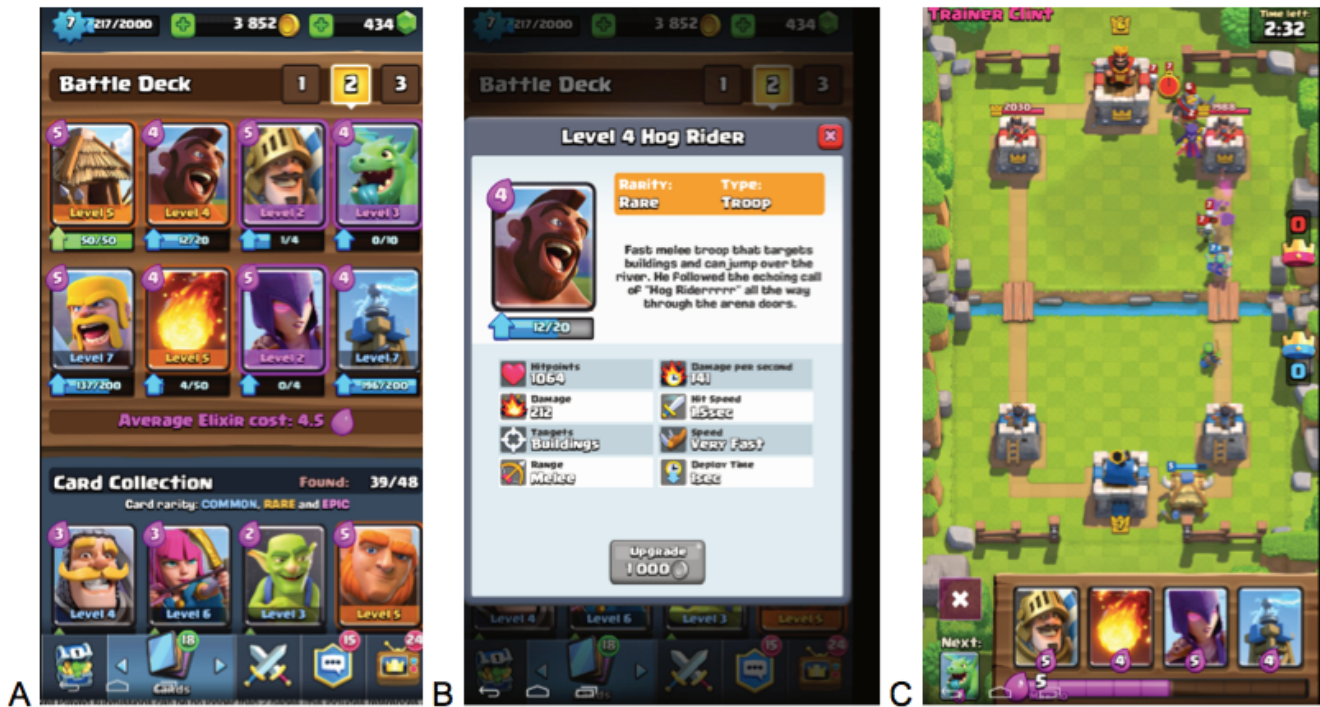


Figure 1. (a) The eight characters in the battle deck along with the other characters that can be selected from along the bottom (b) the stats for an individual character and a (c) real time battle showing the characters eligible to be placed (bottom) and the playing field (top).

However, the battle unfolds in real time as you place characters on the playing field (Figure 1c), they move and battle each other. The exact timing and placement is key in defending your towers from your enemy and knocking out your opponent's towers. You are limited in your pace of placement by "elixir" which accumulates at a set rate (bottom of Figure 1c). Winning battles provides chests which contain rewards like new characters, and advancement also leads to additional tower hit points and new types of characters which are unlocked at higher levels.

There are two forms of advancing in the game. Trophies are awarded for battles that are won. But they are also subtracted for battles that are lost. Having more trophies places you in a higher tier that is associated with better rewards. Therefore, losing trophies similarly leads to worse rewards. There are also experience points which can only go up and provide more hit points for the towers which are being defended.

While there are elements to Clash Royale that are shared across a variety of games that make for worthwhile family interactions between parents and their tween/teen children, such as in game dialog, bonding over game specific jargon, and discussion of strategy, there are several characteristics that stand out for Clash Royale that make it fill this niche particularly well.

- Broadly appealing aesthetic – The game provides a cartoon aesthetic that still doesn't feel too young.
- Combination of synchronous and asynchronous game components – This in turn provides opportunities for playing together in real time, but also for staying connected even when that opportunity is scarce.
- Consistent challenge – Advancing in the game does not change the dynamics, it just gets more challenging. This makes communication across players at different levels fairly easy.
- Significant social components – Social components include chat, leadership, viewing battles, friendly battles and card donations.

How these play out in the game are elaborated in the next section.

### Two is a Crowd and Three is Company

Father and son started to play the game quite a lot in soft launch, which meant talking about it at meals. This caused 9-year-old sister/daughter (Maya) to invoke a dinner rule that Clash Royale was not to be talked about during dinner. She stated that it was annoying that we were always talking about it so much. This rule lasted about a month until the game launched in the United States, at which point Maya said, "Fine I'll play, but you need to teach me how."

Maya quickly was drawn into the group, originally at the periphery and quickly moving to the middle (Lave & Wenger 1991). The game is well-balanced (and following the continual rebalancing is another source of discussion), which means that progress is steady for all, and everyone feels appropriately challenged. For Maya playing and participating was clearly as important as winning, if not more important. A string of defeats that would depress and frustrate father and son, is hardly noticed by Maya, who seeks consultation during many of the real-time battles. "Which one should I put out next?", she asks as Oren looks over her shoulder or to the game projected onto the family TV. Maya seeks advice on deck curation, playing the role of apprentice (Stevens, Satwicz & McCarthy 2008). But she will just as often realign her decks herself.

Unlike her father and brother who are extremely analytical in their approach, Maya (who is analytical in other parts of her life) curates her deck as much based on whimsy or as a mirror of her opponents. These attitudes are further reflected in how seriously each player takes defeat. Dealing with defeat in a game that is designed to punish players who slip (rewards are lower for lower tiers) is very challenging if one takes the game seriously, and leads to interesting conversations about both defeat and addiction. It is very easy to say "just one more battle to get back to where I was" following a defeat. And much harder to put the game down. While the notion of addiction in video game play is quite controversial (e.g. Kuss, 2013), the game does have components that make it easy to get hooked on play. There is a constant (albeit diminished) reward for continued play.

Maya also plays the role of self-appointed unofficial Clan Cop. In Clash Royale you can create groups of up to 50 players who are in the same "clan". Members of the clan (yes, this should clearly be called something else) can interact in several ways, including chat. In our clan clean language is one of the stated rules, which means that Maya is the one to patrol and report any foul language (which is rather scarce, as most of the players in our clan seem to be young kids). Though conversation can slip into

other languages (the clan has quite a number of French players at the moment), which makes it harder to patrol but presents a language learning opportunity.

The game has other aspects that promote interaction throughout the day for the Oren, who keeps his phone with him in school. But the success of this game lies in its ability to appeal to each of the family members, with differential expertise and participation, and allows for interesting interactions between the different dyads amongst us. There are several activities that the game enables to make these dyads work effectively:

- *Socializing* – Chatting in the clan chat allows for groupwide discussion and for sharing of great victories and defeats.
- *Assisting* – Players can request cards from each other, and donate extras that they have. Donating is incentivized through gold and experience point rewards.
- *Collaborating* – (or Compete) Clan members can request friendly battles from each other and test out new decks and strategies with each other. While any clan members can battle with each other, friendly battles can often be coordinated.
- *Advising* – This is the most important for promoting family interactions. Advice comes around both deck building and real-time strategy. For deck building, advice can be asynchronous and deliberative, bolstered by data. Past experience, competitor's decks and Internet research can all be brought into discussion. For real-time battles, advice usually comes over the shoulder and in a rush of suggestions. There is far less time for discussion, but much more immediate feedback on results.

The opportunities for advice are what initially promoted the copious dinner conversation, which annoyed Maya. But it now provides a way for all of us to interact around the game. What Maya misses in opportunities to dole out advice, she gets back with opportunities to interact by getting advice. Her leadership then comes from her role as Clan Cop in the social dimension. For Oren, he primarily dispenses the advice, being the highest level in the family. He enjoys giving both deck-building and real-time advice (though often about two seconds too late). He also has the most friends in the Clan. Managing those relationships becomes another challenge at times. His authority comes through promotions (ranks within the group), and the opportunity to judge and jury complementing Maya's policing.

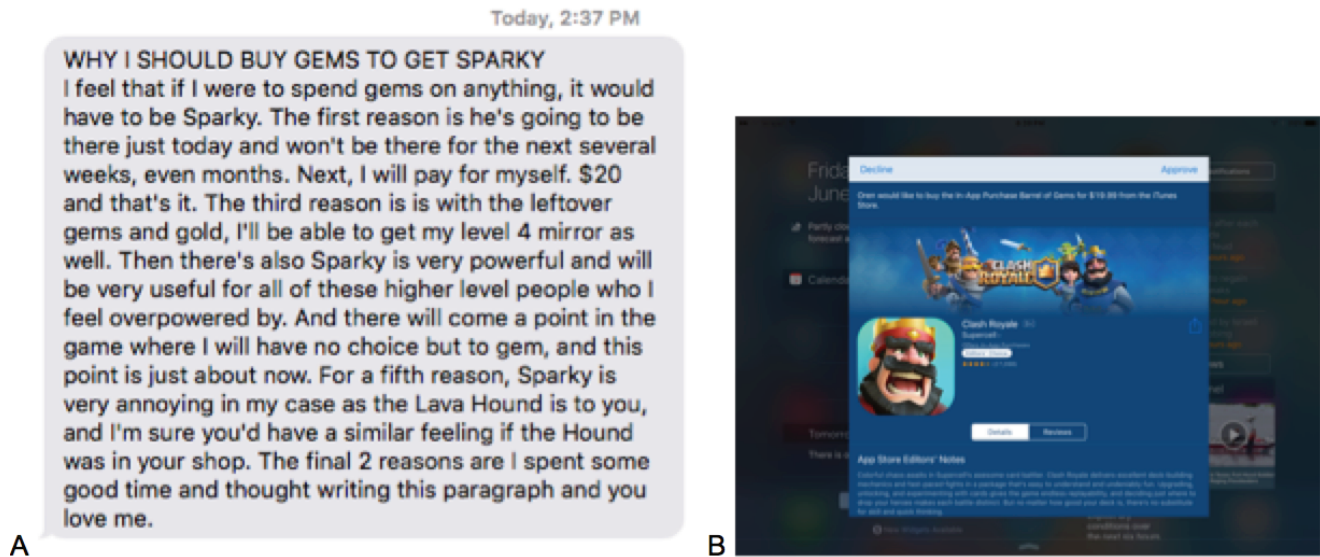


Figure 2. (a) A persuasive essay on in app purchases (b) the request for an in app purchase.

Clash Royale has one glaring challenge for use in a family. It follows the “free to play” paradigm of many mobile games. The app itself is free, but there is a lot of waiting around, and that can be accelerated by in app purchases. We have had a no in app purchases policy. But the pressure from this particular game – from seeing similar level players with better cards – is very high in this game. The challenge is turning this pressure into a learning experience – how to budget free resources, and how to write a persuasive essay (Figure 2a) about why you should break the no in app purchases rule (Figure 2b).

In the conference presentation we will show the game dynamics, and family dynamics that emerge from the modes of real time and asynchronous interaction that the game facilitates to demonstrate design principles for differential participation.

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