

How the Composition of a Playing Card Deck Contributes to the Diversity of its Rules

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Playing cards might be one of the most famous card games in the world. Four suits with thirteen cards in each, make up the globally well-known standard 52-card deck. With its long history of nearly six centuries, there are thousands of different rules based on the deck till today. These rules of playing with the cards also make it one of the most flexible games in the world. In this critique, as the title suggests, I'm going to talk about how the composition of a deck contributes to this kind of flexibility and diversity.

There are four suits in a deck, which are clubs, diamonds, hearts and spades. There are also 5-, 6-, and 8-suit decks, and some other 4-suit decks like Italian, Spanish and German ones, but the French 4-suit derivation is the most known and used one.¹ In each suit, there are 13 cards, which are Ace, 2~10, Jack, Queen, King. These make up the standard 52-card deck. There might be two additional joker cards in some rules. There are several factors that contribute to the flexibility of playing cards.

1. Randomness

There are $52! \approx 8 \times 10^{67}$ arrangements of the cards.² With so many possibilities, there might be no two completely same games in the history. In fact, in almost all playing card games, it's necessary to shuffle the deck before the game start.

In some modern card games like Pokémon Trading Card Game and Gwent (these are the ones that I've played), after the players choose the card that will be used in the game, they'll need to shuffle the deck and draw several cards from it. This randomness contributes to the variety of the game, and it tests the strategical ability of decision making and handling different situations.

It's the same when it comes to the playing cards. In the games with a specified rule, players still need to face different situations. Being very familiar with the rule doesn't necessarily help the player to win the game, but the player still needs to make the decision of how to use the cards that he holds currently.

This kind of randomness, however, is kind of "limited". By saying this, I don't mean that the number of arrangements is small. In PTCG and Gwent mentioned above, the players need to choose the cards that they'll use by themselves, which makes it almost impossible for the player to predict what cards his opponent have. But in playing card games, the 52 or 54 cards are just there. A

¹ https://en.wikipedia.org/wiki/Standard_52-card_deck

² <https://knowledgenuts.com/2013/09/03/the-amazing-truth-about-a-deck-of-cards/>

player can't use a card that is not included in the whole deck, unless he is cheating. In a game using the whole deck of playing card, when a player looks at the cards he is holding, he will have a general picture of what his opponents have. This makes high-level techniques like predicting or calculating possible. Therefore, I say that the randomness in playing card games is limited.

2. Abstraction

The cards in the standard 52-card deck is abstract. The suits or the numbers have no meaning. (Well they do have meanings like the four suits represent the four seasons, but this means nothing in a game.) The meaning of an element is user-defined, or I should say, game-defined. In some rules, the cards are ranked through their numeric order, from A to K; in some other rules, Aces are the biggest cards. Even in the games whose rules are basically the same, in different regions throughout China, as far as I know, Aces or 2s can be the biggest cards. This is impossible for those games which are not abstraction, which makes it impossible for them to have multiple rules. (This is definitely not a disadvantage. I'm saying this just because I'm focusing on the diversity of the rules of playing card games.)

With this kind of abstraction, there is no need to set a background of story in advance. The playing card games can have a background or a pure game without a setting. In a playing card game which is called "Dou DiZhu" (which means "Fighting the landlord", there's also a kind of variation called "Tichu"), one of the most popular playing card games in China, two players act as peasants, while the third player acts as landlord. Each of the "peasants" have 17 cards, and the "landlord" has 20 cards, which represents that the landlord has more wealth, and the peasants are united together to fight against the landlord... You know what, I made this up. There might be some historical background in this game, but no one cares when playing the game. The abstraction of the playing cards makes it possible for the game to have no background setting, which makes it easier to have different rules.

Possibility of having no background story also means the possibility for the game to have no fixed goal. Some playing card games require players to run out their cards as soon as possible, while other games require players to compete against each other with combinations or bigger numbers. There are even games that can be played with a single player. This abstract design makes it a good media of these completely different games.

3. Two-dimensional

I believe that if the 52 cards are just "1, 2, 3, ..., 51, 52", it will become a shitty game. The design of four suits is very smart. It makes each card have two different elements, or two dimensions, thus we have four Aces and four 2s in a deck. This design makes it possible for us to have various of combinations. And this design makes the Straight Flush rarer than Full House.

This kind of two-dimensional design can be seen in many card games. The cards from UNO have a number/function and a color. Most cards from Gwent have a unit type and a number represents the power.

This can make the game more flexible. Games like Texas hold 'em ignore the difference in suits, and only focus on the combination of numbers. In games like Contract Bridge, the suits are ranked. This two-dimensional design also contributes to the diversity of the rules.

To summarize, I think that the composition of the standard 52-card deck makes the deck have more randomness, abstraction, and a two-dimensional design. And I think that it's these factors that contribute to the diversity of the rules based on the playing cards. The playing cards have a long history, and I believe that it's these factors that make it still popular till today.