The Most Beautiful Game Mechanics
by Mike Selinker

I write a column called The Most Beautiful Things (http://selinker.livejournal.com), in which I discuss the things that are more beautiful, more elegant, and more fulfilling than anything else of their type. This is a gamer’s version of that column, dedicated to the best game mechanics found in the card and board games I’ve played. These are the mechanics that only morality and respect for the legal system stops designers from stealing. Well, maybe only respect for the legal system.

What makes a game beautiful? Not sales, that’s for sure. Not awards, as if those mean anything at all. I won’t even dignify the suggestion that reviews are involved. No, those strawmen aren’t what people think of when they think of beautiful games. They think of pretty components and social interaction, and, even if they don’t put their finger on it, they think of game mechanics.

Beauty is in any of the eleven eyes of the beholder, of course. For me the test is “does this rule make me want to play this game right now?” Scrabble, as good as it is, doesn’t have any of those rules. It’s just a process, dependent solely on the ability of you and your opponents. But a beautiful mechanic makes you talk of it like it played the game for you. It’s a part of your experience—a vector for your imagination. Understanding what makes these beautiful will let you craft mechanics that are their equal, but only if you work at it. This group of ten mechanics, in chronological order, is the bar. Aim for clearing it.

Kingmaker’s noblesse oblige

In the 1974 Avalon Hill game Kingmaker, designer Andrew McNeil wanted to simulate everyone and everything central to the War of the Roses. This was a tall order indeed. A key problem he faced was that certain nobles in the game were more historically significant—and thus more powerful—than others. A lesser designer might have costed these nobles as more expensive, but McNeil took a different path. Over the course of the game, various events will occur: piracy, bad weather, plagues, and the like. If you have a powerful noble, these events might sweep him away. For example, one of the Peasant Revolt cards says “Neville to Raby, Scrope to Masham, Roos to Helmsley, Mowbray to Wressle, Archbishop of York to York, Marshal to Wakefield.” If you bet
your money on those nobles, you suddenly wonder where they’ve gone during your pivotal storming of Nottingham Castle. Kingmaker figured out that players are attracted to shiny objects: A transcendent noble such as Percy is one of the most useful nobles in the game—if he’s ever around for you to use him. But when he’s off in the hinterlands repelling the Scots, meeting in a religious diet, or dying of the plague, you will regret depending on him. So all nobles are equal, even though some are created more equal than others.

**BattleTech’s heat**

I’m a fan of mechanics that force players to make hard choices. If you do only one thing well, and you can do it all the time, you never make any choices. In FASA’s 1984 giant-robot game BattleTech, your BattleMech can do only one thing well: blow stuff up. But if you fire everything you can in a turn, your “heat level” goes up. In addition to cooking your pilot, overheating your ’Mech will fuse your weapon systems, lock up your legs, and disable your targeting screen. You’ll be a sitting duck. But of course, if you don’t fire your weapons, you’ll be just as dead. Heat made the game strategic. It also translated well to other versions beyond the tabletop game. Most notably, the BattleTech pods (giant videogame cabinets you could climb inside) flash disorienting lights when you overheat, and invariably this will be followed by your ’Mech exploding into a million pieces. And yet you still will unload everything the next time a Blackhawk goes zipping around your lumbering Atlas. A good rule can only teach you how to use it. The rest is up to you.

**Set’s set-making**

There are 81 cards in geneticist Marsha Falco’s 1990 classic Set, and they are the only 81 that can ever exist for it. Cards have four features: number (one, two, or three), color (red, green, or purple), shading (solid, striped, or open), and symbol (diamond, squiggle, or oval). Using that information, Falco built a game that is about staring at a set of cards until you can find a “set.” That’s a group of three cards for which each of those four features is either all the same or all different. That means that for every two cards in the game, there is exactly one that makes a set with them. So if you have 2-red-solid-oval and 3-red-solid-diamond, you must find the 1-red-solid-squiggle at once. But you don’t just have those two. You have ten other cards, and the sheer sensory input can be overwhelming. And you have a bunch of
other players all trying to finding that set in real time. All of this with just diamonds, ovals, and squiggles.

**Magic’s card tapping**

One of the most interesting (and patentable) dynamics of Wizards of the Coast’s 1993 sensation *Magic: The Gathering* was Richard Garfield’s concept that a trading card has an “on” and an “off” state, symbolized by the turning of the card 90 degrees clockwise. The fact that it’s called “tapping,” etymologically symbolizing the draining of energy from the card, is a nice bonus as well. I can’t remember ever seeing that concept in a card game before that; it was occasionally reserved for much more physical components, such as submerged submarines lying on their side in *Axis & Allies*. However, the state of “tappedness” conveyed hundreds of pieces of game information. Tapped cards couldn’t attack or use powers that required tapping; untapped cards couldn’t untap, an action that triggers all sorts of other actions. What really made tapping sing was the instant visual summary of a game in progress. You could tell from ten feet overhead which player had a lot of resources to attack with, and which didn’t. That made it a lot more visually appealing on the occasions when the game appeared on ESPN.

**Battle Cattle’s cow tipping rule**

In Wingnut Games’s amusing 1996 miniatures game *Battle Cattle*, you control giant armored cows that fire missiles at each other. The rule that blew me off my chair was, of all things, the Tipping Defense Number (TDN). Each cow has a Tipping Defense Number that correlates with its weight. A very heavy cow has a low TDN (3 or 4), while a very light cow has a high TDN (10 or 11). When someone rams a cow into your cow, you have to roll above your cow’s TDN to have it stay standing. However, after your cow is tipped, you have to roll below your cow’s TDN to have it get back up. One stat covers weight, gainliness, and coordination. Choosing a cow with a high TDN makes it likely it will go down, but likely you’ll get it back up again before anything bad happens. Choosing a low TDN makes your cow the Rock of Gibraltar, but getting your cow back up again is nigh impossible. That kind of symmetry is just amazing. And it occurs in a game about cows.

**xXxenophile’s popping**

In James Ernest’s mildly pornographic 1996 trading card game
XxXenophile, based on the not-at-all-mildly pornographic Phil Foglio comic book of the same name, some cards caused your opponent to lose an item of clothing. That’s pretty ballsy. But what was even cooler was that each card border sported a set of numbered symbols. Each turn, you could spin a card 180 degrees, and if the symbols along the edges of adjacent cards matched in shape, the one with the lower number of those symbols “pops” off the board. If the two sets of matching symbols also matched in number, they both popped. If you had two edges that matched symbols of two adjacent cards, you popped the cards on both sides. What I love about the popping rule is that at heart, it’s a straight numerical comparison based on like statistics, as if it were “Compare attack scores, and higher wins.” But it’s so much prettier and so much more active than that, with the spinning and the color matching and the cards leaping off the board. The system was revolutionary, both literally and figuratively. (Side note: The term “popping” also had a sexual connotation in the game, which rather hastily disappeared when these mechanics got ported to the G-rated game Girl Genius: The Works.)

Bohnanza’s hand order rule
If farming beans doesn’t sound exciting to you, you obviously haven’t played Uwe Rosenberg’s 1997 German card game Bohnanza. What makes it great is a mandate to keep your cards in the order in which you drew them. At the start of each turn, you must plant the first one or two bean cards from your hand into your precious two bean fields, each of which can contain only one variety of bean. Then you draw two cards, which you must plant or trade. Since you have only two bean fields, those two cards will overrun any beans of different varieties. So you have to get rid of unwanted beans by trading them, and other cards from your hand, before your fixed hand order makes you plant them. If you can maximize your harvests before you have to tear them up, you will be crowned the king of beans. All this pressure and interaction is caused by stopping you from doing the most natural thing: rearranging your cards in hand.

Mississippi Queen’s paddlewheels
In Werner Hodel’s 1997 game Mississippi Queen, each player helms a paddlewheeler down the Mighty Mississipp, picking up Southern belles for delivery to the delta. A boat contains two six-faceted paddlewheels: one controls speed and the other coal. You start out moving at speed 1, and you can rotate the speed wheel up or down 1 each turn. If that’s not
good enough for you, you can burn off coal to accelerate or decelerate some more. Speed is used to move or turn that number of spaces, no more and no less. However, you have a problem. Since you must move as much as your speed indicates, breaknecking down the river can cause you to not stop in time to avoid crashing into a riverbank or an island. This process is complicated by the fact that you have no idea where you’re going. When a player crosses a line on a tile, that player places the subsequent river tile in whichever direction he or she wants. Run out of river and you’re gator bait. Glory be.

**Time’s Up!’s communication breakdown**

In 1999’s *Time’s Up!*, Peter Sarrett codified the antiquated game *Celebrities* into its modern form. The goal is to have your partner(s) guess celebrity names that you’ve drawn from a pool of cards, and each one does so based on clues you provide during a short burst of time. If that were all there were to the game, it would not be a party classic. What makes it work is its limitation of communication over time. *Time’s Up!* requires everyone to remember everything that happened during round 1 of the game, when a dozen or more celebs were guessed. That’s because in round 2, you have to guess the same celebrities, except that for each, you can say only one word. So if you originally clues Brad Pitt as “that actor who was in *Ocean’s Eleven* with George Clooney,” for the next round you might just say “*Ocean’s*” or “Clooney.” One word might sound tough, but it’s a walk in the park compared to round 3, where you must clue the same celebrities with no words at all. Maybe you use your hand to indicate a big chin—even though George Clooney’s not even the guy you’re cluing. Maybe your partner will get it. Maybe.

**Dominion’s constant shuffling**

For at least a decade, game designers theorized the concept of a standalone deckbuilding game, where players made their own decks from a fixed set. But nobody made one. Something was missing from the concept and held it back. Donald X. Vaccarino realized that the key was to build the deck over the course of the game. Still, even that wouldn’t have made 2008’s *Dominion* work. The real innovation was to get the players to dump their hands at the ends of their turns. You start with a mere ten cards in your deck, draw the first five, play some, and discard the rest. On the next turn, you draw the next five, play some, discard the rest, and are out of cards. So you’re shuffling within the first
few minutes of the game, and a heck of a lot thereafter. This means that
cards that you buy will show up in your hand not too long thereafter.
Your deck builds because you’re cycling through it at rocket speed.
That’s why Dominion is the best game of the last decade.

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Games. Among the games he has co-created are Pirates of the Spanish
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