

The Gravity of Coup/Complots

<http://taogaming.wordpress.com/2013/02/10/the-gravity-of-coup/>

[Coup's](#) depth surprises me. Like Poker, there's bluffing in Coup; but there's also a surprising amount of positional play. You can get by with poor 'people-reading' skills *if* you bluff (and challenge) at the right time.

Even great reading won't win you every game, just more than your fair share. Coup reminds me of a gravitational problem ... possible to solve when there are two bodies in space, but no closed-form solution with three or more. In the early game, with lots of players, you can't calculate where things will wind up. Your goal in the early game is to make sure you don't get sucked into a deadly position and crash. But if you skirt close to disaster, that gives you momentum.

I've tortured this metaphor long enough, so let's start with the endgame. First, a note. Many game groups have different culture of what's acceptable. For this, I'm assuming a fairly neutral culture ... you win or lose this game. No grudges between games, although players are free to make close decisions based on how they view the skill of the other players (or who won recently as a tiebreaker). If you play Coup as a popularity contest, that's fine but then nothing I write matters.

Endgame

Endgames in Coup usually devolve into a lock. Without character powers, one player will win the race to 7 money and coup his opponent out of the game. (Assuming each player has one influence left). Characters complicate things, but some characters dominate another. The important thing to realize is that if you claim a character that locks your opponent, he may as well call and hope you are bluffing.

For example, with a Contessa and no money if your opponent claims Duke and gets three coins, you are boned. He'll get to 7 money before you can even pretend to have an assassin ... even if you assassinated he'd be forced to call your bluff. You may as well call the Duke claim. You've probably lost.

Let's look at the endgame matchups –

- Mirror matchups are straight races, of course.
- Captain is a great ender. Captain beats Contessa (unless she can coup) and Assassin (unless he can assassinate). Captain often beats Duke, but it depends on the exact money situation. Only the Ambassador fares well; it's a straight money race with Captain often losing a critical tempo.
- Duke will usually win the money race against a (non-Captain), as he can tax and block foreign aid. The assassin has some hope, since he only needs three.
- Assassin fares poorly against Contessa as he wastes a turn (and 3 bucks) trying to assassinate and she wins the money race.
- Other situations are straight money races.
- Ambassador fares poorly, but of course the ambassador can sacrifice a tempo and hope to switch into a lock. This is reasonable ... if you know your opponent's character. Still, the tempo is tough to overcome.

As you can see, there are good and bad matchups for every character. Contessa and Ambassador do poorly, but each have one decent (non-mirror) matchup. Captain and Duke do well. Assassin, more than most, depends on the exact money situation.

As stated before, if you get a lock you'll probably be challenged. But, if your opponent thinks they are winning the endgame, they typically won't call a bluff. Why risk it? Let's take a contrived example.

You have an Assassin versus your opponents (strongly suspected) Captain and both players have two dollars. All Dukes are (obviously) dead. Despite your good looking position, things are grim. If you claim foreign aid (or income), he's going to captain you — he's losing the money race on foreign aid and taking your money locks the game. If you claim to be immune, he's lost the money race ... he may as well call. Your hands are tied because his situation dictates that he call any bluff and/or steal your money to swing the race. The fact that you are well ahead in the money race (needing only one coin) isn't helping you.

But suppose *you captain him first*. He's going to claim immunity (if he is the captain). Now he wins if you challenge him. If you don't, he wins the money race (in his mind). So this bluff is likely to get through. Now he takes foreign aid (4), you take foreign aid (4), he takes foreign aid (6) and then you assassinate him to win. You had to bluff to win, but *your bluff had to be before things looked hopeless*.

The tricky part is if he isn't the Captain he'll think he's in a lock and challenge out of desperation. So this play depends on a good read.

A real ending depends on the actual matchup of characters and money lineup. A two-to-one character advantage is almost always decisive (unless the one character player is about to coup ...). For the most part by this point both players should have a fair amount of information.

Stable vs Dynamic / Hill vs Bowl

Backing up to three (plus) characters, your goal is to transition to a winning endgame, a "stable" lock. But the situation is dynamic. You just can't defend against 2 (or more) people, it's "dynamic." But you can put someone in a position where killing (etc) you leads to a stable situation that works against them. In those situations, people tend not to kill you (assuming they look ahead).

Consider four players (without roles), each with two influence and 7 coins. If A coups D, B could finish D, but then C could hit A or B and have a relatively strong position. Any player could be out if they "pass" a turn by taking an income. If A coups B, who then retaliates ... C could coup D and vice versa ... but C could also now stall and wait for D's shot, coupling later.

Who is winning? It's not clear that player order matters. At this point (on a 'loaded' table) a player with an Assassin has an advantage since they can kill and kill again (barring a Contessa) while a coup requires a significant reload. The point is that when the coups start the situation is a ball on a hill. You nudge it, it rolls and it could wind up anywhere. It won't be a stable situation when it's done.

Three players in the same situation is a bowl. There are really just two resolutions ... one player out, two unharmed OR three players with one influence each. If you are the first player, you have a decided advantage ... you can't pick which situation occurs, but you can be sure to be playing when the smoke clears. (If you coup B, then B coups you, C will be decisively ahead if he finishes you off.... so if you are out, someone has made a mistake).

Sometimes when the ball is on a hill you nudge it and hope, but in a bowl you should be able to see the outcomes and push only when it's favorable. (Roles will complicate this, but you get the idea).

Timing, Influence and “Sub-optimal” play

Let’s continue with the middle game.

You can’t defend against a coup. If you are perceived as winning, you get hit. But if someone else is “winning” they’ll get coup’d most of the time. How to change perception? Well, have less money/influence. If you have a few coins and someone else has 7, the player with seven is dangerous. In fact, I’ve seen a player get their seventh coin and not survive to get another turn (via a coup + assassination).

[This goes back to hills and bowls. Often you can spot when the game is about to enter one of those, and by arranging your money you may be able to put things where you get to time the first push ... either by making a decisive first push, or delaying an indecisive nudge.]

Consider — you are ‘winning’ It’s Anne’s turn, but Barry goes next and can coup. No matter what Anne does, you can reasonably challenge Anne’s claim. If you are correct, you’ve hurt another player ... but if you are wrong Barry’s coup is likely redirected and you’ve gained some information (to be sure, the table gains it with you). In that case you are still down to one influence, but someone else lost one as well. *Likely you are no worse off for challenging and being wrong.*

Alternately, you could Assassinate someone the turn before Anne. If you get called, you weaken your position. If you get a Contessa claim you can call or not, but spending your money may be enough to move the target to someone else’s back. If you succeed, you’ve stripped out an enemy influence and also planted a false belief. Just as in poker, the best bluffs are followed by a raise and pretend to have the same cards consistently.

You can also slow your rise to the top of the hill by taking a single coin instead of foreign aid (or extortion or taxes). Or taking a turn to Captain someone you expect will claim immunity. More boldly, consider assassinating someone, hoping to get a Contessa call (which you will graciously accede to). That drains some money out.

If it gives people the wrong read on your cards, so much the better.

Bluffing and The Opening, and “sub-optimal” play

Like most games, the opening and the endgame are the easiest to analyze.

What do you do? Should you bluff wily-nily? As we’ve seen, if your bluff puts you into a lock then expect to get challenged. An opening bluff won’t lock anyone, but it may put someone at a disadvantage, at which point they’ll be tempted to call.

For example, if Doug claims Duke and then gets Extorted and he has no defence, he’s in a bad spot. If he accedes to the Captain, everyone is going to steal his money. He’s going to have to make a stand sooner or later. One way (the better) is to claim immunity, but the other is to challenge.

So I don’t bluff extravagantly ... I do bluff, but under half the time. There’s a sound reason for this — bluffing risks two valuable commodities ... one influence and an action. Any challenger risks one influence. So, if I only bluff less than half the time, my expected value of getting challenged is positive, and any challenger is losing (long-term) if they routinely challenge my claims.

Note how this differs from poker ... any bluff I make adds to the pot and increases the rewards for a caller, and any caller gains the reward. But here anyone who calls has to share most of the reward (my loss of influence and an action) with the table.

Always telling the truth can win by getting called, but you become easy to read. Even the best opening hand can be beaten if people suspect what you hold. As the game goes towards the endgame, bluffs get riskier because there is more information and the game is moving more towards a zero sum game ... claiming a role when none are visible is a different bluff than when one or two are revealed. An opponent may know you are bluffing. Not to mention the fact that an opponent may feel cornered and call out of desperation.

So, a common move is to bluff on your first play, carry the bluff out for as long as you dare (“Turn 1 — Duke, Turn 2 — Duke, Turn 3 — Switch to your true role.”) Of course, if you do that too often, you’ll get called early. Sometimes you have to mix it up and start true, switch to a bluff, and switch back.

Let’s look at each role, its bluffing calculation and value in the opening.

- The Ambassador improves my position, both by letting me swap out characters and by providing information. If I see 2 of a kind I can challenge efficiently (or perfectly, if I’ve seen all three of a character). But it doesn’t hurt any specific player, and so people don’t have too much incentive to call it. Also, it doesn’t move me towards Couping someone. In our first games, a first turn ambassador almost never got challenged, although it gets called every now and then because we realize that the information is often just as valuable as a coin or two. A middle game ambassador is a precursor toward grabbing a locking character, and will get called. (I find that most people are reluctant to sit on an ambassador, preferring to swap it out ASAP. I think this is a mistake).
- The Duke’s taxation is a powerful move, but not a directed move. It hurts all your opponents. It’s not infrequent to see the first 3+ players all claim Duke and to be looking down at one. Sure, someone’s bluffing, but who?
- In contrast, a Captain’s extortion targets and the victim will have a strong incentive to challenge. But they can just claim immunity. If they do, the ‘Captain’ has incentive to challenge, but the fact that your victim has two potential claims means their claim is likely true. (I’ve used this fact to my advantage by claiming immunity from the role I don’t have as my immunity. Sometimes).
- The Assassin is exclusively a directed role. However, like Captain it’s mitigated by having a counteraction. And often an assassin will get through if a victim has two influence because they are unwilling to stake their game on a successful challenge. This is particularly true if they’d be winning, because their reward for challenge will be a quick coup. Until you assassinate, then you are essentially passive.
- The Contessa feels directed role, because it counteracts. However, just being immune to assassination doesn’t hurt the assassin any more than it hurts the rest of the players. Facts aside, most players consider it an insult to have their Assassin deflected. The Contessa is the ultimate passive role. You win as contessa by having someone challenge you, so the real point is to make the Contessa seem unbelievable.

Tips and Tricks

A brief pause for a random assortment of ideas that I’ve seen used, to various effects.

- I’ve already mentioned taking income when you could do more, but there are variants.
- Giving into extortion from player A and then claiming immunity later (without having switched roles). This enrages Player B, so I’d do it rarely as a bluff. I mainly do it when I want to drain off a bit of money, and perhaps adjust the dynamic of the table. I’ve never seen anyone do this with a Contessa (eat an assassination, then claim it later) but well timed it could be devastating.
- A similar ruse is allowing a taxation (etc) and then piping up the 2nd time it happens. Again, I usually do this when I think the timing of losing an influence will be OK.

- Sometimes call (with two influence left) a character you want your opponent to not have. Even if they have it, they'll have to shuffle it again. Particularly if you were about to get Couped anyway.
- The game changes immensely when all Dukes are visible ("DukeDeath"). Now everyone can take foreign aid. It simplifies calculations immensely.
- If you are dealt a pair on the opening, don't automatically call the first time someone else claims that. Even if you know they are bluffing. That usually reveals your pair.
- If, in the endgame, you can't imagine how you could possibly win, try considering what role(s) you'd give your opponents and assume that they have them. If that doesn't work, assume the roles and then imagine what misplay they could make with that. If that doesn't work, lie wildly and pray.

Finally, a point that deserves discussion. When someone assassinates your final character, you have two choices — bluff the Contessa or challenge the assassin. Challenging the assassin is a final play. You survive or die right then. Bluffing the Contessa puts the onus back on your challenger ... he may allow you to live even if he suspects/believes its a bluff.

However, if your opponent has an assassin (a good endgame role, to be sure) then they may have a problem if you call them on it. Now they have the luck of the draw for their final role (assuming by this point everyone has one). The problem is — you are dead. The solution — simply state that you will challenge your assassin's role before they decide and stick to it ... sometimes. [As always, the lesson is, never pay attention to what people say. Actions speak louder than words.]

Opening Combinations

An opening hand isn't a template. You can play each one a few ways. I personally treat it as three cards (the two I'm dealt and one I mentally assign myself) and go from there. At some point I'll bluff the third card (or mentally play as if I had the third card instead of what I have). As I mentioned before, you can't bluff all the time, and sometimes I bluff both cards (for a while). Often when you lose that way you lose spectacularly, but you can't win every pot/game and it plants seeds of doubt in your opponents. So, this is an incredibly wishy-washy assessment.

(If you do 'mentally deal yourself a third role' consider dealing it before you look at your cards. If you duplicate, then you don't bluff).

Thoughts on specific openings:

- Duke/Captain — I've heard several people call this the best opening hand. It is ... when you don't get assassinated. Playing it straight (taking duke and then using captain to defend and pick on the weak) leads to the assassin's knife. However, I may slowplay this by taking income, acting as if I had Something/Contessa and aiming the assassins elsewhere while avoiding a coup. And if this is the best opening hand, you should mentally pretend you've been dealt it with any excuse.
- Duke/Assassin — While not bad, I find this combination putters out. I'm tempted to ambassador right away and see what I find. Or I'll just Duke and claim immunity until I decide who to assassinate.
- Duke/Ambassador — You can play this relatively straight, gain up money then dig for the combo you want. As I mentioned before, I think it's a mistake to dig early.
- Duke/Contessa — If you want to slowplay, fine. If not, treat this as Duke/Captain ... when the (inevitable, IMO) assassination hits, you'll be well off.
- Ambassador/Anything — If nothing else, you can just start digging for roles. Feel free to keep the Ambassador for a few turns (perhaps with a Contessa until you decide what you want). You'll be building up information while not making yourself a target (in some people's eyes). This is much better in a six player game, when you may be

able to discern exactly what cards are out, and possibly even know that one role is off the table.

- Ambassador/Captain — Consider extorting early, as you've got 1/3rd of the defence. Particularly extort those who've claimed Duke. Again, this is likely to wind up as a delaying play to gather information.
- Ambassador/Assassin — This can also be played straight ... income and assassinate. An early assassin often hopes to get called to reshuffle for a character who builds up income, but the ambassador means a) you don't lose money and b) you can always reshuffle manually. Of course, an early Duke bluff (or two) builds your warchest, but then after you assassinate you'll have a bullseye on your chest.
- Ambassador/Contessa — Incredibly slow/passive cards ... solid defense. The straight play (apart from a Duke bluff) is to just build up coin, coin, coin and hope the fireworks start before you look threatening. That works well.
- Captain/Assassin — The urge to come out firing is high. This will turn the game into a dynamic hill, which will be fun and not help your chances of winning.
- Captain/Contessa — As always, this is a decent Duke/Captain bluff (probably better than Duke/Contessa, if your group tends to let Duke calls through).
- Assassin/Contessa — If you build up an early warchest, this is a great set. If you survive the first round of coups with both cards, this is a great set. If people figure out you have this, you'll lose all your money and die. So you can't play this straight forward. You want to get your first assassin/contessa claim called, so that you can switch to a rebuilding money role (or have it be late enough to not matter).

Getting a pair of identical roles is painful, to be sure. You lack flexibility. There's always the urge to quickly claim ambassador. If you think you'll get away with it, it's a reasonable play. Otherwise, the default advice of "Mentally play as if you had a 3rd card" still applies.

- Double Assassin — Good news ... you probably won't be assassinated. Bad news, you lose to most combinations. Apart from switching, you'll need to claim immunity to Captain or you'll get nowhere. Consider just building up and claiming Ambassador whenever a captain strikes. Then, when you assassinate and (hopefully) get called, you can ambassador "again" if you need to. People will assume you are hunting for your assassin role back. I'd tend to aim my assassination at someone with just one role, hoping to get called (a person with two roles will just claim contessa or let it go).
- Double Captain — Not bad, since at least you've scooped up one of the defensive cards.
- Double Contessa — The seven-duece offsuit of Coup. Either ambassador or pretend you have a good/great hand and come out firing. No half measures.
- Double Duke — I've had real trouble with this. This isn't quite an 'auto ambassador' but it's the closest.
- Double Ambassador — Quite playable, since you get to refresh. On this one, I'd be tempted to call any other early ambassador (or perhaps the second) since even if people know your hand, you'll be switching it soon.

Closing Thoughts

Coup shouldn't be a fast game, and I want to make clear that I don't think this would be fun if people took too long. But often, during opponent's turns I'm trying to decide if I'd like the endgame we can transition to, or if I'm on a hill or in a bowl. That's difficult, but it's surprisingly easy to play "Who has a good position" and to make sure it isn't you at the beginning of the dynastic toppling. A good position only matters in the end.