

# Bloodcraft for Bakas

## 3rd Edition

SS | ★ Ere ★

”It’s good, but looks... like a scientific journal...” **Twin-sensei**

”I barely say this to people, but you format well. I don’t know how much this is worth coming from a nobody like me, but I like how it looks and I like how you write.” **The Trans Agender**

”I enjoyed that it was basic enough for beginners to understand, but that even intermediate players could use it as a guide to deck building, and is a good reminder for pertinent information. Overall it’s solid, in my opinion.” **Joyverse**

”OK. For a book called Bloodcraft for Bakas, this is like... damn serious.” **Kirei Kotomine**

”It’s a good guide, from someone who actually has a brain.” **SS | Esern**

”I found it really interesting, not in the learning part, but on the self-reflective part. Yeah, I’m 100% serious, you did a good job.” **Repliku**

”I think it’s really good. I always think ‘when should I concede’ because grinding is a pain in the ass, but I didn’t know you could put it mathematically.” **Herbert Lucas**

”I expected that Bloodcraft for Bakas .pdf to be a bad troll or something but considering I never touched Bloodcraft it’s surprisingly useful. Whoever did that, thank you.” **Trottinette**

”Easily the best class guide I’ve ever read for SV.” **Wynndigo GG**

As a Bloodcraft main, I can REALLY agree with this guide. **PotatoesAndThings**

”Well, not to be nitpicky, but overall it was actually pretty good.” **Akamarured**

## Acknowledgements

Special thanks to [AbbyShores](#) for helping to proofread. His suggestions have vastly improved the quality of the guide's writing. At times, he's been more devoted to ensuring the guide reads well and is linked properly than even I have been. You should check his stream out; he's a cool dude.

I started writing this manual in November 2018, but closed it and immediately forgot about it. I'd like to thank [Deadfall84](#) for a discussion we had about guides, prompting me to both remember this manual and decide to finish it.

Thanks to contributors go out to Abeyll, Arenuphis, SS | Esern, EstrangedFox, [SS | Fury M.](#), Oni Enthusiast, Potather, Salt Blossom, Meltlilithalter, and SS | Murder for their feedback and suggestions for the guide throughout its various versions.

Finally, thanks go to Cygames for their very cute anime girls, **especially Mono**. This guide would never have existed without the above people, and their efforts and contributions are deeply appreciated.

SS | \* Ere \*

# Read Me

Other guides figuratively give you a handgun with three rounds,  
the purpose of this guide is to give you a Kalashnikov  
with three jungle-style magazines.

Ere

This manual is meant for new players with a grasp of the game's mechanics and an interest in playing Bloodcraft, its contents aim at **breadth rather than depth**. I recommend you play some games with a friend at first, since you will be spared from the [sandbagging](#) that is rampant in low ranks. If you are friendless, make some on one of the community Discords. **Don't worry about the page count; the important bits of this guide are only chapters 1 and 2.** The rest is the glossary and other extranities, and you don't need to read everything in order.

**You need cards to play a card game, and in Shadowverse you get cards from packs that cost rupies; the game's main currency. Consistently completing daily missions is the key to accumulating rupies. You can toggle whether you want missions against either the AI or real people by checking or un-checking "Solo Player missions" on the Missions screen. Play against 20 unique players in private matches, complete the story, and beat each class's AI on all Elite difficulties to earn further quick rupies.**

Just like how carpentry tools alone can't make you a carpenter, reading this guide alone can't make you an amazing player. Every expansion, people post hundreds of deck codes on various sites and servers; codes that you can try out. Many SV-relevant sites are in Japanese; if you paste a link into [Google Translate](#), it'll translate that entire page.

[My own Discord server](#)

Deck Code Sources:	Community:	Meta Analyses:
<a href="#">Altema</a> <a href="#">GameWith</a> <a href="#">Twitter</a>	<a href="#">Cygames Esports</a> <a href="#">Reddit Discord</a> <a href="#">Twitch.tv</a> <a href="#">Japan Competitive Gaming</a>	<a href="#">ManaSurge</a> <a href="#">Shadowlog</a>

For any comments or feedback about this guide, please message me on Discord.

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# Chapter 1

## Bloodcraft Decks

Proper planning and preparation prevents piss-poor performance.

Military Adage

**If you already have a deck, you can skip this chapter and go to [Section 2.1](#).**

It's been said that Shadowverse is primarily a deck-building game, which certainly can hold true with its small deck size relative to its maximum single card limit. Every decision you make in-game is based on the tools you have available, and if you ever feel consistently frustrated with your hand or deck, it can often be a result of your deck being insufficient, rather than your skill. This chapter details Bloodcraft's decks, both new and old, and discerns the expensive cards you need for them. Many decks are based around legendary cards, and at times you'll need to craft one to three sets of legendaries (read: 31,500 vials at worst) simply for a deck to be playable.

However, budget decks exist, and you can always grab a more experienced player for opinions on how to make your deck cheaper and better. The vast majority of the time, it will require you to vial some unnecessary cards, but it's always better than not to have a functioning deck in order to complete daily missions. Get a meta deck's code from a website or a friend, but once you're familiar with the game and its cards you should try to put your own decks together. This chapter, if nothing else, should at least bring up the relevant deck archetypes and suggest which Bloodcraft cards you ought to keep around.

## 1.1 What is Bloodcraft?

Bloodcraft is S+ **tier**.

Friedrich Nietzsche, probably

I have **never** found a single definition of Bloodcraft from any one person that I felt adequately covered what the focus of the class is. This is because the way Cygames has designed the class over the years has been unfocused, and often failed to provide adequate tools to any specific **archetype** in entire sets. Due to this, whenever someone tries to summarize the class in one sentence, they inevitably fall short because at least one **archetype** invalidates their statement. Unlike the rest of this guide that tries to summarize things in an artistically pithy way, I will not state the exact way Blood is meant to be played.

There are already enough people out there that believe their word or experience alone justifies something. **I'd suggest considering what they have to say while not blindly following their advice, and that even applies to this guide.** It's been my own experience that such people have an inflated sense of their own importance, and they often seek out positions that specifically designate them as a tutor or mentor. This isn't to deride everyone with those headings, but to warn of the danger of people suggesting their way is the only one, while using a position of authority to do so.

Blood can be fast, slow, risky, or safe. In lots of cases what some people claimed was the class's main mechanic, like **Vengeance** or self-damage, has gone completely ignored. A contemporary example of this is **Machina** Bloodcraft; a deck revolving around securing value over time while attempting to power up your end-game finishers. No cards in this deck rely on **Vengeance**, and only one possible inclusion<sup>1</sup> even uses it. Likewise, no cards rely on self-damage either, and the deck plays rather eerily like a blend of Swordcraft and Shadowcraft.

**So play Bloodcraft however you like<sup>2</sup>. Anyone making a definitive claim as to how the class is played is probably forgetting something.**

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<sup>1</sup>**Destructive Succubus** was played in some early variants of Steel Rebellion **Evolve/Machina**, Rebirth of Glory **Machina** precludes her and focuses on **Machina** exclusively.

<sup>2</sup>**How I like to envision the class**; make stylistic, heavy hits, while never being touched. Bloodcraft requires the knowledge of everything that can kill you at each point, and how to avoid it by margins.

## 1.2 Deck Archetypes

Every generation laughs at the old fashions,  
but follows religiously the new.

Henry David Thoreau

**Archetypes are formed by trying to maximize or exploit things; effects that cheat out things ahead of time, that provide an unstoppable high amount of damage, that grind the opponent down through attrition. If a deck doesn't have a definite goal and means of achieving it, I would dare to say it's not a playable deck.**

Below is a list of decks you'll probably find on the ladder today, as well as examples of their important cards. I will try to list important ideas behind playing them in [Section 2.2](#). You can find decklists through the links in the [Read Me](#).

### Contemporary Decks

**Unlimited: Aggro** Flood the board and try to use your hand-buff cards to make your **Storm** followers juicy. ([Unleash the Nightmare](#); [Hellblaze Demon](#); [Laura, Enraged Commander](#); [Savage Wolf](#); [Entrancing Blow](#).)

**Rotation: Evolve**<sup>3</sup> A control deck seeking to play for value in the early- to mid-game, then winning with overwhelming firepower at the end. ([Zeus, the Supreme](#); [Destructive Succubus](#); [Hnikar, Warring Thunder](#); [Yurius, Traitorous Duke](#); and [Trill, Devilish Idol](#).)

**Unlimited: Flauros**<sup>4</sup> Introduced in Omen and nerfed almost instantly, one goal is to spam [ping](#) yourself 4 times on turn 3 to bring out [Flauros](#) and use him as a beatstick to support the rest of your [aggro](#) plays. ([Flauros](#); [Ambling Wraith](#); [Disciple of Lust](#); [Bloodfed Flowerbed](#); [Restless Parish](#).)

**Rotation: Machina**<sup>5</sup> Spam [Machina](#) followers, have them die to build up value on your thick boys (and girls) and [Storm](#) the [face](#). ([Mono](#), [Garnet Rebel](#); [Gearsnake Tamer](#); [Slayn, Steelwrought Vampire](#); [Armored Bat](#); [Technolord](#).)

**Rotation: Vengeance**<sup>6</sup> Get yourself to 10 defence off your [Vengeance](#) enabling cards, and buff up [Laura, Enraged Commander](#) and [Calamity Bringer](#) a load, then send them to the [face](#). Less board-centric than the [Unlimited](#) variant. ([Hellblaze Demon](#); [Laura, Enraged Commander](#); [Calamity Bringer](#); [Furfur](#); [Lykos Berserker](#).)

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<sup>3</sup>There are near-infinitely varied Evolve/[Machina](#)/[Vengeance](#) hybrid decks out there in [Rotation](#). I listed each separately here because they can all be played as discrete [archetypes](#).

<sup>4</sup>Edgybois call this "pain" Blood.

<sup>5</sup>See footnote 2.

<sup>6</sup>Called "veggie" by those with speech impediments. Also see footnote 2.

**Unlimited: Vengeance**<sup>7</sup> Your grandfather's **Vengeance** deck with a twist. Put yourself to 10 the hard way, and then pray that you curve out into a decent board while removing your opponent's things. More board-centric than the **Rotation** variant. Usually played as a counter to **Elana** or **Roach**. (**Belphegor**; **Azazel**, the **Depraved**; **Dark Airjammer**; **Spiderweb Imp**; **Diabolic Drain**.)

Just as there are good contemporary decks, there are loads of forebears that were either highly successful or were at least played enough that they were given a definitive name. That the following decks have fallen out of favour doesn't mean you should forget about them; sometimes new cards are printed that can resurrect a style of play. You'll only really find these in **Unlimited**.

## Legacy & Low Tier Decks

**Bandersnatch** An uncommon deck that revolves around using **Bandersnatch**'s **Enhance** to cheese out big boys. (**Bandersnatch**; **Zeus**; **Spawn of the Abyss**; **Demon Key**.)

**Bloody Mary** Play **Bloody Mary** and chunk yourself hard, dealing the damage to your opponent instead. Inconsistent, and paying a load just to put Mary on the board makes winning with this deck really hard. (**Bloody Mary**; **Soul Dealer**; **Dire Bond**; **Blood Pact**; **Razory Claw**.)

**Classic Control** **Control** that can be played with a bunch of different win conditions, but always tries to hit the end-game. (**Blood Moon**; **Temptress Vampire**; **Azazel**; **Prince of Darkness**; **Diabolic Drain**.)

**Crimson Rose Queen (CRQ)** A **control** deck whose win condition is to get to the late-game and play **Crimson Rose Queen** for access to lethal with her spell **Crimson Burst**. (**Crimson Rose Queen**; **Alexandrite Demon**; **Blood Pact**; **Vampiric Kiss**; **Restless Parish**.)

**DE Bats** An **aggro** deck that revolves around flooding the board with **Forest Bats**. (**Vania**, **Vampire Princess**; **Vampiric Fortress**; **Mini Soul Devil**; **Night Horde**; **Yurius**, **Levin Duke**.)

**Darkfeast Bat (DFB)** **Ping** yourself a load of times while playing for value to get your opponent low, and then finish them with a ton of damage from **Darkfeast Bat**. Pretty much replaced **Jormungand** entirely, even though people thought **DFB** was meant to be **Jormungand** support. (**Darkfeast Bat**; **Blood-fed Flowerbed**; **Ambling Wraith**; **Demonic Ram**; **Scarlet Sabreur**.)

**Jormungand** Get **Jormungand** to die, then **ping** yourself loads for board clear and **burn**. Some people swore by it, but the core was replaced as soon as **Darkfeast Bat** came out and I've never seen **Jormungand** since. (**Jormungand**; **Nacht**; **Demonic Ram**; **Blood Pact**; **Scorpius**.)

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<sup>7</sup>See footnote 5.

**Oldblood King (OBK)** Play Oldblood King; spam Forest Bats, win. An OTK deck that sometimes has some pretty crazy burst potential. (Oldblood King; Red Talonstrike; Summon Bloodkin; Raven, Eventide Vampire; Unleash the Nightmare.)

**Phantom Cat** A long-time budget deck that runs no legendaries. Play Neutral followers and go face, then burn them down with damage from Phantom Cat and Hector's Fanfares. (Phantom Cat; Hector; Baphomet; Actress Feria; Lyrial, Celestial Archer.)

**Spawn** The deck absolutely nobody will ever stop complaining about. This deck taught me how to count to Alice. Play a bunch of neutral followers, then play Alice. Tutor Spawn of the Abyss with unnerfed Baphomet. Play Spawn. Win. Your opponent probably left two steps ago anyway. (Spawn of the Abyss; Alice, Wonderland Explorer; Goblin Leader; Baphomet; Tove.)

These lists are pretty exhaustive, but by no means can account for every variation put to a deck. With enough of an understanding, you can try to add your own ideas to an existing style of deck. For the most part they'll end up simply being memes, but can result in some very spicy techs. Running Baphomet and Uriel in a neutral DFB deck can guarantee you draw Darkfeast Bat and Bloodfed Flowerbed. Call of Cocytus and Demon Commander Laura can set up 13-15 Storm damage out of an otherwise unassuming control deck. Urd can set up Jormungand to go twice as hard. Remember that there are plenty of cards people aren't actively playing that might just need some applied cleverness to make them useful.

If you're new and your wallet's too empty to craft some of the archetype-defining legendaries, I recommend an aggro deck. You can replace costly legendaries like Laura with Imp Lancer and have a deck that's over 10k vials cheaper. Links to two lists: [17.6k vial Aggro](#) and [a 7.3k vial budget Aggro](#).

## 1.3 What To Craft

Money is only a tool. It will take you wherever you wish,  
but it will not replace you as the driver.

Ayn Rand

The next step is actually having the necessary pieces for the decks. I'll give some rules of thumb:

- Know what kind of deck you want before you start crafting things; a card isn't always good just because it looks strong on paper.
- Shop around for decklists on the sites provided in [Read Me](#). You'll notice cards like [Unleash the Nightmare](#) get used in many different decks. Others like [Evil Eye Demon](#) only see usage in one or two [archetypes](#), so think before you craft them.
- Stick to buying only the two most recent sets. Newer cards will usually be stronger due to [powercreep](#), and you can always craft older ones with spare [vials](#). It is not advised to buy packs from sets close to being rotated<sup>8</sup>.
- [Unlimited](#) is an important format, because your cards for it will likely never become obsolete and its played [archetypes](#) have been static for the most part. It's usually cheaper to play this format, since [aggro](#) is often viable here.
- **Do not craft legendaries as soon as they come out!** Learn if a deck performs well before you craft cards for it; Bloodcraft legendaries are notoriously hit-or-miss. Higher [tier](#) decks are more affordable with the introduction of temporary legendaries, but you should always look to save your [vials](#).

On the next page I have given every Bloodcraft gold and legendary card a rating between 0 and 3 pentagrams. Overall I highly recommend avoiding any card rated lower than 2★; Cygames is not known for their spectacular buffs and those cards will likely never get any stronger. Anything rated 3★ has seen solid play for a while, though you should still pay attention to making sure you're not crafting cards that are about to be rotated.

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<sup>8</sup>The sets shown at the bottom of the Shop page with [Rotation](#) packs designated are the oldest packs still in [Rotation](#).

Rating	Description	Craft?
3★	Meta and widely played cards.	Recommended.
2★	Specific to certain deck types or uncommonly run.	Usable.
1★	Fringe of playability.	Not recommended.
0★	Substantial buff or meta change needed.	Unusable.

### Legendary Ratings

- 3★ Belphegor; Calamity Bringer; Laura, Enraged Commander; Medusa, Evil-Eyed Serpent; Mono, Garnet Rebel; Slayn, Steelwrought Vampire; Valnareik, Omen of Lust; Vira, Knight Fanatic; Yurius, Traitorous Duke.
- 2★ Crimson Rose Queen; Darkfeast Bat; Milnard, Dark Fiend.
- 1★ Bloodhungry Matriarch; Bloody Mary; Carabosse; Diabolus Agito; Jormungand; Maelstrom Serpent; Nacht; Soul Dealer; Spawn of Exile; Spawn of the Abyss; Vania, Nightshade Vampire; Waltz, King of Wolves.
- 0★ Beast Dominator; Diabolus Psema; Purson; Queen Vampire; Seductress Vampire; Thunder Behemoth; Venomfang Medusa.

### Gold Ratings

- 3★ Azazel, the Depraved; Destructive Succubus; Diabolic Drain; Doublame, Duke and Dame; Emeralda, Demonic Officer; Flauros; Trill, Devilish Idol; Unleash the Nightmare; Vania, Vampire Princess.
- 2★ Dire Bond; Evil Eye Demon; Gift for Bloodkin; Lykos Berserker; Moriana, Shadow Devil; Narmaya, Ephemeral Blade; Oldblood King; Raven, Even-tide Vampire; Revelation; Righteous Devil; Vuella, One-Winged Demon.
- 1★ Azazel; Demon Commander Laura; Endearing Succubus Lilith; Girtablilu; Heartsick Demon; Phantom Cat; Relinquish Reason; Soul Dominator; Stheno; Temptress Vampire; Terror Demon; Trial of the Gorgons; Vampiric Fortress.
- 0★ Apostle of Lust; Blood Moon; Erinyes; Fulminous Demon; Furiae; Galretto, Devil of Love; Ice Blade Warfiend; Lethal Blade; Mastema; Medusa; Reach of the Archdemon; Sadistic Night.

## 1.4 Proactive & Reactive Cards

Everyone has a plan  
'til they get punched in the mouth.

Michael G. Tyson

Let's cover some card concepts to keep in mind while building and modifying decks. I've tried to sieve these down into categories for ease of comprehension, but I obviously can't cover every small detail in a guide that aims at brevity. We'll cover each category in some small detail here, using a binary nomenclature:

1. Card Advantage - Ensuring you get what you need.
  - (a) Non-specific card draw – Cards that let you draw more cards. Simply deck-thinning and praying you get options you can use.
  - (b) Specific card draw<sup>9</sup> – Things that, when played, have a maximized or guaranteed chance of putting what you want into your hand. Blood doesn't really receive these, so don't worry too much about this one.
2. Reach - Hitting their **face**, sometimes doubles as **removal**.
  - (a) Small **reach** – Things that can hit the enemy's **face** for decent damage straight from your hand regardless of whether they have followers with **Ward**.
  - (b) Large **reach** – Game closers, sometimes **archetype**-defining like **DFB**. More cards that don't care about **Ward**, but are rather high-cost and contribute lots of damage toward **lethal**.
3. Removal - Killing the opponent's things.
  - (a) Small **removal** – Costs either 2 and or 3, or is attached to a follower. Good to have when going second because of the instantaneous effect and the lack of reliance on **Evolves**. Some followers your opponents can play are necessary to remove immediately at times, and this can only be done with these cards.
  - (b) Large **removal** – Unequivocal **removal**, for followers that have life pools above what small **removal** cards can deal with, or amulets that may be the foundation of your opponent's deck.

In short, cards that do these things give you both proactive and reactive capability. This is because you're not playing the game in a vacuum. The opponent is always trying to draw more useful cards, put themselves out of **lethal** range, and play followers you can't conveniently deal with.

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<sup>9</sup>Usually referred to as a "tutor."

## 1.5 Card Inclusion & Probability

You can't always get what you want,  
But if you try sometimes  
Well, you might find  
You get what you need.

The Rolling Stones

If you've been following along through the past sections, you already have an idea which cards you need, now we need to figure out how many you need. We will go over the [mulligan](#) in [Section 2.3](#) and draw in [Section 3.2](#). This is the last step to building<sup>10</sup> your deck, prior to testing and fixing.

**0-of** Either contributes nothing to your win condition/ensuring you get to it, or does not do enough compared to similar cards available. If you're playing an [aggro](#) deck, you won't run [Temptress Vampire](#) or [Prince of Cocytus](#). If you're playing an early [Vengeance](#) deck, you won't run [Goblin](#) over [Curse-brand Vampire](#), unless you want both.

**1-of** A highly situational card. When I hit Grandmaster in [DBNE](#), I was running a single [Scarlet Sabreur](#) against the [Reanimate Shadow/aggro](#) Sword [meta](#). Don't ask me why I decided to; I tested it out and it proved to be the secret spice, used in redundancy with 2-of [Righteous Devil](#). Note that both cards have [Bane](#) and can give you life back, while having one of each in hand gives you options to better fit whatever situation you're in. There will be few cases in which you only include 1-of a card in your deck.

**2-of** Usually either late-game [bricks](#) or [tech](#) cards. Not generally usable enough that you want to always see them, but can solidify the end-game or provide an adequate response to certain matchups when considered in the [mulligan](#).

**3-of** The most important cards in your deck. You always want to see these for the early- and mid-games.

**3-of +** Sometimes you want multiple cards that do the same thing, like popping a [Razory Claw](#) on a [Mars](#) that very shortly will become a problem. If you only run 3 cheap [removal](#) spells in your entire deck, you can run into problems in very common situations.

A large part of testing is experiencing the [ladder](#) to get a feel for what the other classes are playing, and even how much each other class is getting played. Sometimes you can tailor your deck to deal well with the more popular classes at the cost of your less common matchups, and you should try to do so.

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<sup>10</sup>If you want to get into the nitty-gritty of probabilistically building your deck, check out the hypergeometric formula if you're not already acquainted with it. There are [online calculators](#) for it, and you can use it in-game to assess the probabilities of your draw mid-game.

## Chapter 2

# Playing the Game

Anything worth doing, is worth doing right.

Hunter S. Thompson

This chapter seeks to address the tangible realities you'll encounter in the game; opponents playing cards you're unfamiliar with, how to get the most bang for your buck from your **burn** and **Storm** followers, and how to stay focused on winning while avoiding ending up in a bad situation. Everything said here holds true for the most part, but that doesn't absolve you of the necessity of oversight for when things get complicated. Play the game, think hard about your choices, look back on your mistakes, and come up with your own rules of thumb.

Remember to evaluate the performance of your deck; sometimes consistent bad results are neither your fault nor just bad luck, but rather an indication that your deck is limiting your decisions. Playing this game requires double-loop learning, in which sometimes just changing the cards isn't enough. Sometimes you need to re-work how you imagine the game to be played; your mental model.

## 2.1 RTFM

There is nothing more frightful than ignorance in action.

Johann Wolfgang von Goethe

It is mandatory you familiarize yourself with cards and effects you find unfamiliar, usually followers with either the green flag (**Strike** or an effect with a trigger condition) or red skull (**Last Words**). Also be aware that some cards give leaders permanent effects, you can mouse over either the card that was played, their leader, or your own leader to read the effect.

**Be aware of what both you and your opponent are bringing to the table. It takes foresight to know what cards they may play from hand, but it only requires a functioning brain to mouse over what they have in play and understand what you're working with. Some examples of cards that are important to understand properly:**

**Mono, Garnet Rebel** Most people know that **Mono** is usually a lovely 6/6 **Storm Ward** on turns 7 or 9. What lots of people miss is that once **Evolved**, she deals 1 damage to both her player and herself at the beginning of her controller's turn. This can let people remove her more easily, or even be lethal.

**Servant of Lust** **Servant of Lust**'s **Leader Strike** applies its healing **after** damage is dealt, so he's lethal as a mere 2 **Play Point** follower even when the enemy leader is at 4 defence.

**Razory Claw, Demonic Storm** A game rule is that if both players were to die "at the same time," the player whose turn it is loses. This concept applies to cards like **Mutagenic Bolt**, and especially to Bloodcraft cards. You'll only likely be surprised by this once (when you lose because of it and swear never to do it again), but it's important to keep in mind when budgeting your defence total.

**Mask of the Black Death** A **Mask of the Black Death** with even a single remaining **Countdown** tick can absorb any amount of damage from a single source. Multiple **Masks** do not provide additional protection, e.g. taking 3 damage with one **Mask** on 3 and another on 5 will destroy the first and reduce the second to 2 **Countdown**.

**Emeralda, Demonic Officer** **Emeralda**'s **Fanfare** destroys amulets. Be careful using her against Haven, because you can end up helping them when amulets like **Enstated Seraph** and **Forgotten Sanctuary** are destroyed.

## 2.2 Deck Goals

If a man knows not to which port he sails, no wind is favorable.

Seneca the Younger

Every well-composed deck can be thought of as having a checklist of goals that aim at winning. I'll list some examples for decks from [Section 1.2](#). These are some of my personal goals in regards to such decks.<sup>1</sup> Obviously these goals aren't set in stone, make your own based on what works.

- Evolve** ✓ Get 6 [Evolves](#) spent prior to turn 10 for [Odin, Wargod Ascendant](#).
- ✓ Maximize the value of your [trades](#) with followers like [Jafnhar](#), [Hnikar](#) and [Trill](#).
  - ✓ Maximize the number of [Evolves](#) spent by using free [Evolve](#) effects to their maximum, strengthening cards like [Destructive Succubus](#) and [Zeus, the Supreme](#).
- Flauros** ✓ Get early chip damage in by [mulliganing](#) for low-cost followers.
- ✓ Look for the [Flauros Invocation](#) by turn 3 off [Prison](#) and [Parish](#), sometimes needing to save self-ping cards on turn 2.
  - ✓ Load up your [Valnareik, Omen of Lust](#) for a finishing hit.
- Machina** ✓ Draw enough [Machina](#) cards to set up [Slain, Steelwrought Vampire](#) with [Storm](#).
- ✓ Balance between having enough [Machina](#) followers die to get [Mono](#) active, but leave enough to threaten her Evolving them.
  - ✓ Look to get your best cards early by aiming for [Unleash the Nightmare](#) and [Robogoblin](#), as well as [Gearsnake Tamer](#) when going second.
- Aggro** ✓ Aim to flood the board and buff a [Storm](#) follower with [Hellblaze Demon](#) and [Entrancing Blow](#).
- ✓ Save an [Evolve](#) for [Laura](#); she does 25% of the enemy leader's defence in damage and is nearly useless without it.
  - ✓ Keep your [Vanias](#) in hand until you can combo her with [Summon Bloodkin](#) or [Unleash the Nightmare](#) for additional [reach](#).
- Vengeance** ✓ Set up [Azazel, the Depraved](#) for matchups with large burst damage, like [Elana](#). Also necessary for any of your things to work.
- ✓ Ensure you hit [Calamity Bringer](#) with [Laura's Storm](#) as a game ender.
  - ✓ Wear the opponent down via attrition cards like [Yurius](#), [Traitorous Duke](#) while keeping yourself at a healthy 10 defence.

---

<sup>1</sup>These suggestions are from my own lists, some people run different lists that put the focus on different cards.

## 2.3 A Bird in the Hand

A bird in the hand is worth two in the bush.

15<sup>th</sup> Century Proverb

Some things to consider on the **mulligan**:

**Did you go first or second?** Going first gives you the initiative, so it should be your goal to have cheap followers and to set up your board for aggressive plays. You will likely be a **Play Point** ahead of your opponent for the rest of the game, which means that if they play a **Goblin** for their first turn, you can play a follower that **Goblin** will not be able to kill and so will be able to exert more pressure. Look for followers that cost 1 or 2 **Play Points** when going first.

If you're going second, you will draw two cards instead of one, so you can **mulligan** more cards if you're looking for a specific card. It's recommended to keep a small **removal** card in order to offset the advantage the player going first has on the board. Another important idea is to keep cards with useful **Evolve** effects, since you get to **Evolve** first. This is often crucial to swinging the board back from the first player's advantage.

**Do you have any matchup-specific cards or techs?** With practice you'll find you need certain cards to deal with what a class plays, and sometimes you'll have cards that are difficult for your opponent to get rid of. Some examples are untargeted **removal** spells like **Entrancing Blow** for **Ambush** followers, followers with **Drain** against **aggro** matchups, damage mitigation like **Vira** for decks with high burst, etc.

**Do you have cards that need to be built up?** Some cards are highly desirable in or out of the hand for various reasons. Some examples from **Machina** would be **Mono**, **Garnet Rebel**, **Destructive Succubus**, and **Odin**, **Wargod Ascendant**. **Mono** and **Odin** are both very useless in the early game, and so should be dumped back into the deck instantly. **Succubus**, however, gets cheaper every time one of your followers **Evolves**, and so the earlier she's in your hand, the better, even if she starts off as a 10-cost follower.

**Are you being greedy?** It's sometimes easy to get sucked into the mindset that your hand can always be improved, and to **mulligan** on that basis. It's important to remember how low your chances of drawing the actual desired cards are though, and often far better to keep a sub-optimal hand than to risk everything looking for a card that you'll only get 28%-34% of the time.

**Consistency and safety trumps the high roll 80% of the time.**

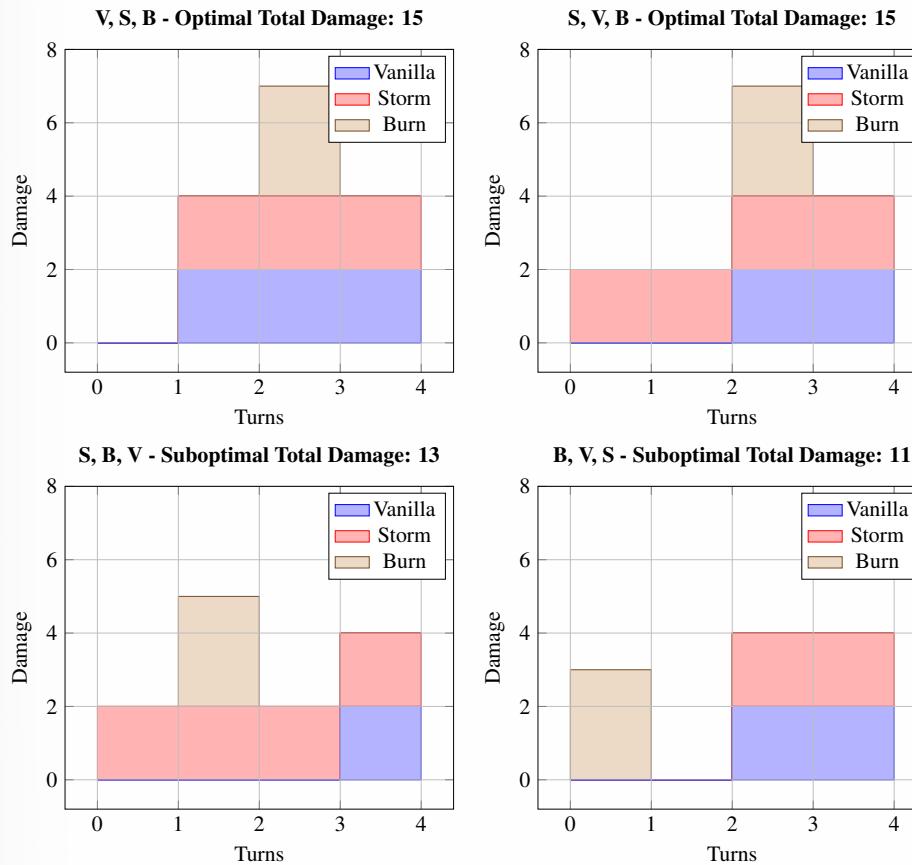
## 2.4 Vanilla, Storm, Burn

Everything in war is very simple.  
But the simplest thing is difficult.

Carl von Clausewitz

Supposing you have only a **vanilla** 2/2, a 2/1 with **Storm**, and a **burn** spell that can do 3 damage to **face** in hand, which order should you play them in if you want to deal the most consistent damage, while only being able to play one a turn?

- V** The **vanilla** follower can't attack the turn it's played, but can attack every turn afterwards while it lives. Play it first, since it has the greatest chance of dealing future damage.
- S** The **Storm** follower can attack the turn it's played, but generally has lower defense than the **vanilla** and thus lower survivability. This doesn't matter if it survives, as shown in the case of S, V, B below.
- B** The **burn** spell can only be used once, and provides no further damage. Play it last, since it doesn't set up any future damage.



## 2.5 Occam's Razory Claw

When the situation is obscure, attack.

Heinz Guderian

**Can I Win?** Once you've arrived at the mid-game, the first thought that should run through your mind every following turn is:

**"Do I have lethal? Can I win?"**

If you fail to first consider whether you can immediately win the game given the resources you have at hand, you can make a habit of a dangerous thought:

"Can I survive? How do I spend resources to ensure I do?"

**The inherent flaw with this second line of thought is that using some resources might throw away a chance to win. A spell like Razory Claw being used to clear a follower when the opponent could die from it is an obvious example.**

**Planning** You should always be keeping track of the damage you have available, including **burn** spells, followers with **Storm**, and from the followers you expect to live after your opponent's turn is done. Just because you aren't immediately playing something during your opponent's turn doesn't mean you should let that time go to waste; use it to plan out your upcoming turn.

Another instance of forethought is planning your **Evolve** uses multiple turns beforehand, usually when running an **aggro** deck. Since each **Evolved** follower that manages to hit the **face** essentially does an additional 10% of the opponent's defence, you can at times consider 2 **Evolves** a direct conversion to 4 damage, including the fact the followers become harder to remove. If you look a few turns ahead, you can easily plan out a win while your opponent is still thinking about how to deal with your board.

## 2.6 Never Do 0-2

Frugality includes all the other virtues.

Cicero

**You should try not to find yourself in a situation where your opponent has two more Evolution Points than you.**

Evolves are a very important part of the game, as such you need to understand when to use them to swing a board, when to use them in order to make your established board beyond your opponent's range of response, and when **not** to use them. Evolves are major turning-points in the game, because you can:

**Use Evolve-based removal** Lots of cards can deal damage or destroy one or multiple enemy followers on **Evolve**. Good examples would include **Metal-Blade Demon**, **Narmaya**, **Evil Eye Demon**, and **Calamity Bringer**.

**Go face** Evolving a follower buffs their attack by 2 for the most part, and since 2 damage is equivalent to 10% of a leader's defence, that last bit of burst is often able to sink someone into the **lethal** zone for **burn** spells. This part is especially important for **Aggro**-style decks due to the presence of **Laura**.

**Save your life** Evolving **Azazel, the Depraved** is a powerful damage mitigation tool for **Vengeance** decks. Against decks with huge followers or massive **burn**, you essentially force them to damage you four times in order to kill you.

**Get more tools** Followers like **Doublame**, **Duke and Dame** and the board-flood **Medusa**, **Evil-Eyed Serpent** give you specific followers when you Evolve them. This can make up for a deficit of draw, and in the case of **Doublame** it's a versatile play that can give you either a **Storm**, or a **Ward** with removal.

Preserve your Evolves, but also don't be afraid to use them. Followers like **Odin**, **Wargod Ascendant** and **Destructive Succubus** rely on you using your Evolves as much as you can, in fact. Evolves have become a focus over Steel Rebellion and Rebirth of Glory, so look for cards like **Yurius**, **Traitorous Duke** and **Hnikar** that can lighten your **Evolve** expenditures while being cost-effective.

## 2.7 Pre-Evolves

I believe luck is preparation meeting opportunity.  
If you hadn't been prepared when the opportunity came along,  
you wouldn't have been lucky.

Oprah Winfrey

A pre-**Evo**lve is when you **Evo**lve a follower in cases where you can't attack with it, in anticipation of a coming turn. There are two ways to pre-**Evo**lve; either aggressively or defensively. Since you will usually be attacking enemy followers immediately with an **Evo**led follower, these are uncommon, but there are situations when they are the 200 IQ play that makes your opponent concede.

**Defensive Pre-Evo**lve Evolving the majority of followers will increase their defence by 2, and so increase their survivability. If you understand the resources an opponent has available and the damage/removal they can muster, you can put a follower out of their range, so you are able to use it next turn. When used on a **Ward** you can force your opponent to spend more resources to remove it, or even make it impossible for them to touch you. A **Flauros** with 5 defence can't be easily **banished** and restores more of your defence than un-**Evo**led.

**Aggressive Pre-Evo**lve Even more rare than the defensive pre-**Evo**lve, this means to pre-**Evo**lve in anticipation of using another **Evo**lve on a follower with **Storm** next turn to maximize damage. Mostly used on followers with **Am-bush**, like **Vagabond Frog** or **Oldblood King**. The reasoning behind this is that you are essentially putting the 2 additional damage you'd have available on the pre-**Evo**led creature in the piggy bank, so that next turn you deal that 2 damage you'd otherwise not have had. As a Bloodcraft player, you will likely be aggressively pre-**Evo**ling **Oldblood King** in **OBK OTK** to set up **lethal**, or **Vengeance**'s **Yurius** as a simultaneous aggressive/defensive pre-**Evo**lve statwise.

**A pre-**Evo**lve is a rare tactic, but it's important to be aware of it.**

## 2.8 Play Ordering

The possible ranks higher than the actual.

Martin Heidegger

Ensuring that you play cards in the correct order is integral to not wantonly wasting your resources. While there are loads of specific examples in which you can mess up, I'll try to classify them into general categories for simplicity's sake.

**Overdraw** At times you'll be in a position to **overdraw** cards, resulting in waste and possibly losing your win conditions. **Aim to end the turn on 8 cards in hand, unless you've played cards that give you additional draw on your next turn. In that case aim for 8 minus 1 per draw source. Once you've simplified your draw down to thinking "6 + 1 + 1 = 8" you shouldn't ever overdraw without meaning to.**

**Metal-Blade Demon** Adds X cards to your currently shown hand size, where X is the number of your **Machina** followers in play before playing **Demon**.

**Blood Pact** Adds 1 card to your shown hand size, since it replaces itself.

**Prison of Pain** Adds 1, then acts as draw at the end of your turn. Aim for 7 cards.

**Vengeance Conditions** Be in **Vengeance** before you play cards that rely on it. Simple enough, but a moment's lapse of attention to this can lose a won game.

**Diabolic Drain, Followers with Drain** Can put you out of **Vengeance** if you heal above 10 off them before you finish your Venge-related plays.

**Dark General, Calamity Bringer** While **Dark General** is just a 4/3 **vanilla** follower without **Vengeance**, **Calamity Bringer** can really ruin your day, especially if you're only a little bit above 10 defence.

**Non-Vengeance Conditions** Make sure the cards glow yellow to indicate their special conditions are met for their powerful effects.

**Valnareik, Omen of Lust** Without 7 self-pings, **Valnareik** loses most of the reason to play her.

**Mono, Garnet Rebel** Ensure you've had at least 7 **Machina** followers die if you don't want to waste **Mono** as a win condition.

**Slayn, Steelwrought Vampire** **Slayn** has multiple conditions, so keep track of them all. If you want his **Storm** make sure you count to 6 **Machina** in hand, if you want **Drain** make sure you have 7 other cards in hand.

# Chapter 3

## Heuristics

Let me crunch the numbers.

Mono

In this chapter I've compiled the other sections I've written that may be pertinent to the game, but could just as easily be judged as unnecessary to include in the previous chapter dedicated to gameplay. **You don't need to read any of these sections, and at worst some of them will be an exercise in highschool maths or elementary logic.** They have been kept in this guide because they **can** be relevant to the game, and that the fundamental concepts behind them are widely applicable.

### 3.1 Expected Utility & Problems With It

People settle for a level of despair they can tolerate  
and call it happiness.

Søren Kierkegaard

**Maximizing** Any decision you make in Shadowverse will be a question of utility maximization. That means that you're always going to add cards to your deck that you think are better than other options, and you'll make plays that you think make your goal's attainment faster or more likely. In the long-term your goal is to win (strategy), but in the short-term you'll be thinking about ways to have more followers in play, how to remove your opponent's followers, and how to keep your defence up while dropping the opponent's (tactics). These choices can be impacted by the elements of randomness that are constantly present in the cards you draw, what your opponent can draw, and things like the randomly targeted effects of some cards. **If you are already familiar with expected value, please skip ahead to the next titled paragraph in this section.**

Suppose the opponent has three followers in play, one of which you can remove randomly, and the other which you can target to remove. We'll use two big followers and a small one with 4/4 and 1/1 in stats respectively as an example, but I'll just write each as a "-4U" or a "-1U" in terms of expected utility for when they are left alive. The goal is to maximize the utility you get from your **removal** by playing it in the right order, on the right targets. "R" will mean the random **removal** was used first, "T" will mean the targeted **removal** was used, a whole number will indicate a follower that's guaranteed to live after the random **removal** has been used, and a fraction will be used to represent the random **removal** when used after the targeted **removal**. The first three cases will use the targeted **removal** first, and the second three will use the random **removal** first, then the targeted. Some cases will not be included, since we axiomatically want to remove the worst utility with the targeted **removal** after the random **removal** has been used to increase our utility.

Order	4/4 (-4U)	4/4 (-4U)	1/1 (-1U)	Total Utility
T, R	T	$\frac{-4}{2}U$	$\frac{-1}{2}U$	$\frac{-5}{2}U$
	$\frac{-4}{2}U$	T	$\frac{-1}{2}U$	$\frac{-5}{2}U$
	$\frac{-4}{2}U$	$\frac{-4}{2}U$	T	-4U
R, T	R	T	-1U	-1U
	T	R	-1U	-1U
	T	-4U	R	-4U

Now we've gone over every situation involving us targeting each follower, or letting the random **removal** hit first and cleaning up the rest, we can show why the latter is better in this case using a formula for expected value on the random three cases, where  $x_i$  is the utility and  $p_i$  is the probability for an outcome  $i$ .

$$E[X] = \sum_i x_i p_i \quad (3.1)$$

The goal of using this is to see if we can beat the  $\frac{-5}{2}U$  outcome we get to choose by using the targeted **removal** first. Really this entire thing has only been a choice between which to use first, which itself is subsequent to the choice to use **removal** at all, instead of doing anything else. While the utility of each outcome changes, the probability does not, since each follower has a 1 in 3 chance to get hit. So for any  $i$ ,  $p_i = \frac{1}{3}$ .

$$E[X] = \frac{-1}{3}U + \frac{-1}{3}U + \frac{-4}{3}U \quad (3.2)$$

$$= \frac{-6}{3}U = -2U > \frac{-5}{2}U \quad (3.3)$$

We've found that it's generally better to use the random **removal** first.

**You don't need to perform this entire sequence numerically during a game. It is often just as accurate and far faster to think of each thing you want to remove in terms of "big" and "small." Once you've put it into practice a few times, you'll be able to do it unconsciously.**

**Satisficing** While the above is all well and good, Shadowverse only gives you so much time (90 seconds) to play your turn, and I'm pretty sure they don't let you take a notepad and slide rule into tournaments. In very simple situations, maximizing the utility of your play is relatively trivial. When things get complicated, you should employ a different methodology.

"Whereas economic man supposedly maximizes - selects the best alternative from among all those available to him - his cousin, the administrator, **satisfices** - looks for a course of action that is satisfactory or 'good enough.' " (Simon, 1947, p. 119)

A proper rational actor considers every possibility available and chooses the optimal one, humans have their inherent limits to both memory and how much information we can parse. You may find that you already employ what we'd call bounded rationality (Simon, 1947) in your own life; choosing a sure thing over a gamble because it "looks better" and you don't want to waste time by thinking for too long. There are many cases in which this can be sensible, a famous one is the St. Petersburg paradox, a summation of which is that a rational actor would take an essentially impossible gamble because winning would give higher expected value. I'll give an example using the equation (3.1) above; in a case where you could either be guaranteed to receive 100\$ or have a 1% chance of receiving 10,001\$, a rational actor would take the 1 in 100 chance.

$$E[X_1] = (100\$) \left( \frac{1}{1} \right) \quad E[X_2] = (10,001\$) \left( \frac{1}{100} \right) \quad (3.4)$$

$$= 100\$ \quad = 100.01\$ \quad (3.5)$$

So the risky option **should** give you more value, but 99% of the time you get nothing at all. When you choose not to gamble, you're being risk-averse. Even though the math shows you're better off chancing it, there are good reasons not to. When you win a game of Shadowverse, no matter how overwhelmingly won, you still only gain 100-150 points. You might not even get a chance to take the same gamble again.

So, the situations in which you have the room to take a chance to maximize your utility are usually when the opponent can't immediately win or when you know what their next play will be and so can play accordingly with **Play Points** to spare, etc. You should only start weighing odds when you have the freedom to make a decision. You don't have that freedom when you're a turn away from losing and your only chance is to take the gamble.

**To that end, this section's goal is to recommend that when you have the freedom to take a risk, you should find a degree of success you're happy to gamble with. You shouldn't pursue a totally risky strategy that makes you constantly regret it. A good mindset to have is that a quick decision that gives decent value is better than a painstakingly calculated one that can be ruined when you run out of time.**

## 3.2 Draw First

Probability is expectation founded upon partial knowledge.

George Boole

**During a multiple card play involving a draw card like [Blood Pact](#) or [Unleash the Nightmare](#), you should generally use the draw card first.**

Your play is dictated by the cards in your hand, and so it's always possible to draw a card that might give you better options before committing to what you originally planned to do. Obviously, there are cases where paying 2 [Play Points](#) to look for a certain card is a gamble. Your opponent sometimes has things you need to deal with immediately. That doesn't preclude the fact that if you find yourself slightly ahead, you can rapidly strengthen your position by having more options available, even if it means briefly sacrificing [tempo](#). **You may proceed to Section 3.3 if you want to skip some math.**

Since Blood's draw spells usually give you two cards at a time, and since the case of a 1-card draw is trivial, we'll go over the former. Let  $r$  be the total number of **remaining** cards in your deck, and let  $d$  be the number of **desired** cards. If you want to draw at least one of a desired card, you have a  $\frac{d}{r}$  chance of drawing it on the next card drawn, or a  $\frac{r-d}{r}$  chance of not drawing it, since that's the chance of drawing any card but a desired one. We then let  $P(\neg F)$  and  $P(\neg S)$  be the probabilities of not drawing the desired card in either the first or second draws, respectively.

$$P(\neg F) = \frac{r-d}{r}$$
$$P(\neg S) = \frac{r-1-d}{r-1}$$

$P(\neg S) = \frac{r-1-d}{r-1}$  because we've reduced the total number of cards in the deck by drawing the first card, but haven't reduced the number of cards we're looking for. The intersection of two probabilities; that they both have happened, means that we multiply them. This is the same as how rolling a certain number twice in a row on a six-sided die is a  $\frac{1}{36}$  chance, as  $\frac{1}{36} = \frac{1}{6} \times \frac{1}{6}$ . So we get the equation below as the chance of not having drawn what we needed in both the first or second draw:

$$P(\neg F \wedge \neg S) = \frac{r-d}{r} \times \frac{r-1-d}{r-1} = \frac{(r-d)(r-1-d)}{r(r-1)} \quad (3.6)$$

We now have what we need to do a proof involving the rule of subtraction (3.9), and the rule of double negation with an application of De Morgan's laws (3.8). We then substitute (3.6) in (3.10) to get (3.11). Let  $D = F \vee S$ , where  $D$  is the case we draw at least one of what we want, and  $F \vee S$  means "we drew what we wanted on either the first or second draws."

$$D = F \vee S \quad (3.7)$$

$$\neg D = \neg F \wedge \neg S \quad (3.8)$$

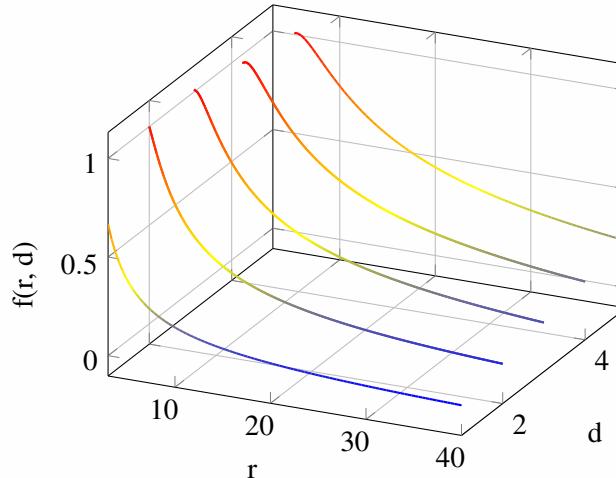
$$P(D) = 1 - P(\neg D) \quad (3.9)$$

$$P(F \vee S) = 1 - P(\neg F \wedge \neg S) \quad (3.10)$$

$$= 1 - \frac{(r-d)(r-1-d)}{r(r-1)} = f(r, d) \quad (3.11)$$

This gives us  $f(r, d)$  which we can use to model the probabilities.

### Probabilities for a 2-Card Draw



$d$	$r$	$P(D) (%)$	$d$	$r$	$P(D) (%)$	$d$	$r$	$P(D) (%)$
5	30	31.0	5	20	44.7	5	10	77.8
4	30	25.3	4	20	36.8	4	10	66.7
3	30	19.3	3	20	28.4	3	10	53.3
2	30	13.1	2	20	19.5	2	10	37.8
1	30	06.7	1	20	10.0	1	10	20.0

You can use this table to get a rough estimate during games. Note the cases of  $d > 3$ , as we discussed in [Section 1.5](#).

### 3.3 Cost Chunking

Simplicity is prerequisite for reliability.

Edsger Dijkstra

A method of memorizing information faster is to turn it into "chunks," like reducing a ten digit number like 8340275391 to a set of five numbers like 83, 40, 27, 53, and 91. There are many cases where you'll be playing two specific cards at once because of a synergy, and so you'll have to pay two costs. Performing the maths and considering both cards separately every time you consider such a play takes time and effort. It's sometimes more efficient to chunk the cards together and act as though they're a single card that has a single cost and a single set of effects.

Card 1	Card 2	Cost
Belphegor	Diabolic Drain	5
Jafnhar, Warring Flame	Hnikar, Warring Thunder	8
Mono, Garnet Rebel	Alpha Drive	7
	Mono, Garnet Rebel + Alpha Drive	9
Soul Dealer	Demon Commander Laura	7
Trill, Devilish Idol	Aza & Iza, Feline Maids Demon Song	6 7
Vania, Vampire Princesss	Summon Bloodkin Unleash the Nightmare	4 5
Vira, Knight Fanatic	Madness Revealed Blood Pact Dire Bond Enhanced Wings of Lust	4 4 5 6

Having these amalgamated costs in mind can help you plan out future turns in a **Play Point** efficient manner. A specific case using one of the above examples is keeping **Vania, Vampire Princess** in your hand for a turn 4 or 5 play including one of the cards that summons **Forest Bats**. Playing the first card a turn before the second gives your opponent the chance to remove it, either weakening your combo or entirely removing the potential for it to happen.

**It's usually the case that a synergy-based card is only played for the combination effect, so if anything you should completely disregard the actual printed cost and treat the card as if it costs its chunked value.**

## 3.4 Inevitability

The longer the battle lasts, the more force we will have to use!

Georgy Zhukov

**Inevitability is a concept by which a deck ensures a win with enough time. It means you can't lose a battle of attrition, because your chance to win the game will only increase unless your opponent is able to quickly defeat you.**

While cards that introduce such effects are at first uneconomical, they can free you up to focus on regaining **tempo** later. Some relevant things:

**Carabosse** Gives the enemy leader a permanent self-damage effect.

**Decking out** When you have 0 cards left and are made to draw a card, you lose instantly. There is no exhaustion mechanic like in Hearthstone. This will rarely be an issue for Bloodcraft, but you can beat decks like Runecraft's **Daria** with attrition to make them lose in this manner.

**Heavenly Aegis** A big follower that can't be affected by anything other than changes to its attack and defence. Can have its attack reduced by such **techs** as **Mr. Full Moon**, but can't be removed.

**Jerva of Draconic Mail** Gives the Dragoncraft leader that played him an effect that permanently deals damage to an enemy follower, or the enemy leader if no enemy follower is in play.

**Prophecy of Doom** Gives the enemy leader a permanent self-damage effect.

**Nacht** Gives both leaders permanent self-damage effects.

**Spartacus** When a Swordcraft player that's played **Spartacus** has 0 cards in their deck and is made to draw one, they win instantly.

As a Bloodcraft player, you'll likely not have to care about playing these yourself. You should, however, be aware of your limited remaining time window when your opponent has introduced inevitability. Your position will probably get weaker every turn, and you can no longer rely solely on trying to win by attrition.

**If your opponent has an inevitable win condition, you should count your remaining turns out and plan only in that time capacity. You no longer can afford to drag the game out.**

### 3.5 When to Concede

We are time's subjects,  
and time bids begone.

William Shakespeare

**The assumptions in this chapter: that you are past the point at which you get win streak bonus points, that each point gain and loss is in increments of 100, and that you are experienced enough to know when a game is lost. There are certainly cases where all these apply, and I have written this section for those cases alone.**

When playing a lot of games, it can be useful to think in terms of raw rank points gained or lost per minute. In some cases, this means conceding a game earlier than its definite conclusion (if the game is going very badly) in order to look for a more favourable matchup. We make the argument for this based on a knowledge of our deck's average points per minute and a couple assumptions that have already been stated. While the idea seems counter-intuitive, there is actually a point in the game at which it's better for your points to leave early. We'll call this the "concede threshold;" the points per minute lost for fully playing out a game you won't win. It's calculated here as  $-100$  points divided by your deck's average game length.

We'll use  $\tau$  as our points per minute,  $T$  as the time before we concede,  $W$  as our deck's win rate,  $L$  as the average game length, and  $\tau_c$  as the aforementioned concede threshold. Using [equation \(3.1\)](#), we get an idea of the value of leaving a game early by summing each probability multiplied by its point gain/loss.

$$\tau_c = \frac{-100}{L} \quad (3.12)$$

$$\tau(T, W) = \underbrace{(1)\left(\frac{-100}{T}\right)}_{\text{Guaranteed loss}} + \underbrace{(W)\left(\frac{100}{L}\right)}_{\text{Possible win}} + \underbrace{(1-W)\left(\frac{-100}{L}\right)}_{\text{Possible loss}} \quad (3.13)$$

But gaining 100 points in a full length game is just  $-\tau_c$  and we're looking for when our points per minute matches the concede threshold, so  $\tau(T, W) = \tau_c$  in that case. Let's simplify this down and find a nice expression that gets us  $T$ . Since we make the cheeky assumption that all point gains and losses are in amounts of  $\pm 100$ , we'll substitute  $\tau_c = -100/L$  in line (3.15).

$$\tau_c = \frac{-100}{T} - W\tau_c + (1-W)\tau_c \implies T = \frac{-100}{2W\tau_c} \quad (3.14)$$

$$= \frac{L}{2W} \quad (3.15)$$

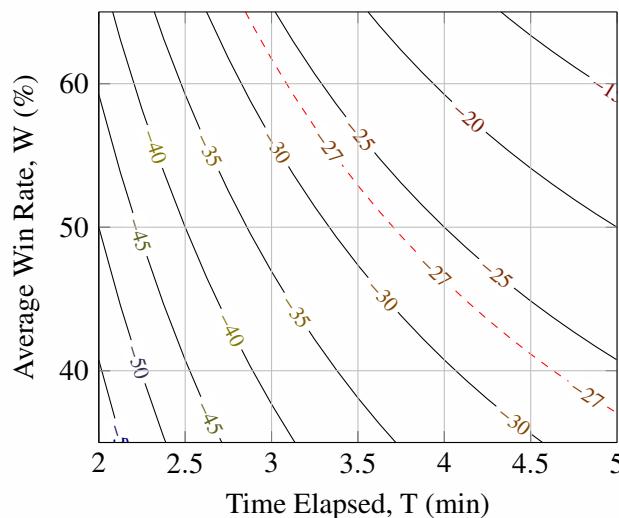
So there's our equation for finding when leaving actually saves you time, in terms of your deck's win rate and concede threshold. Each deck has a concede threshold based on its average game length and the point gain/loss for a game, which we assume to be  $\pm 100$  here. **Later in the season it becomes better to stay in-game longer because there will be more high pointage people; increasing your points per game on average and making it less worthwhile to concede early.** Back to our specific deck; let's substitute in our deck's values and find how long we should stay.

$$T = \frac{L}{2W} \quad (3.16)$$

$$= \frac{3.7\text{min}}{2 \times 0.6} \quad (3.17)$$

$$\approx 3.1\text{min} \quad (3.18)$$

**Contour Plot of Points/Minute in a Losing Game for a 3.7 Minute Deck**



This is where our deck's 60% winrate intersects the dashed concede threshold line, so staying any longer than that point in a lost game is a waste of your time. A lower win rate deck crosses the concede threshold more slowly than a higher win rate deck, because the odds of a better next game are lower.

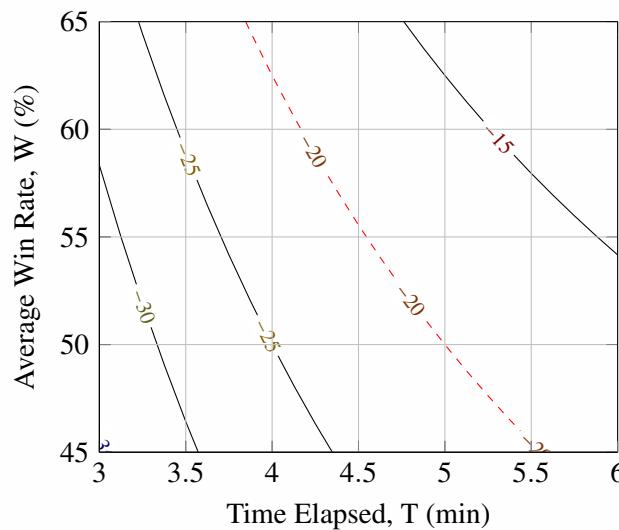
**You may say that your points per minute increase the longer you spend in-game prior to conceding. Remember that you've already considered the game lost by your own judgment; you won't gain any more points because you won't win. As soon as you pass the threshold, all you're doing by remaining is dragging the game out and wasting time. It's always better to play two games with the same net point gain in 6 minutes than in 8.**

As another example to further demonstrate, let's assume the case of a deck with 5 minute games ( $\tau_c = -20P/min$ ) and a 50% win rate. Your concede threshold will be later given the speed of your deck.

$$T = \frac{5min}{2 \times 0.5} \quad (3.19)$$

$$= 5min \quad (3.20)$$

**Contour Plot of Points/Minute in a Losing Game for a 5 Minute Deck**



This entire strategy only really works when you're good at identifying the tipping points for each bad game, which includes:

**Snowball** If you don't have the necessary removal, there are cards that can instantly put your opponent's board past the point you can manage it. Examples are [Elana's Prayer](#) and [Acceleratum](#).

**The God Hand** Play enough and you'll get to know it. When your opponent **curves** out in the best possible way their deck can, and your hand isn't going to cut it. This in all cases results in the **Snowball**. A contemporary example is [gold Kel](#), as he will usually wipe your board and in almost every single case decide the game.

**Off by 1 – and some** If your deck is aggressive and usually barely squeaks out wins, any healing on your opponent's part can quickly put them out of your reach. I generally leave if I'm waiting on two perfect **top-decks**.

# Bibliography

- [1] Herbert A. Simon, 1947, **Administrative Behavior: a Study of Decision-Making Processes in Administrative Organisations**, 193 p.
- [2] Peter M. Todd and Anja Dieckmann, 2004, Heuristics for Ordering Cue Search in Decision Making, **Advances in Neural Information Processing Systems**.
- [3] Gigerenzer, G., Todd, P. M., & The ABC Research Group, 1999, **Simple heuristics that make us smart**. New York: Oxford University Press.

# Glossary

**aggro** A fast style of deck that aims to win through a **wide** board, **Storm** followers, and **burn**. [8–11](#), [14](#), [17](#), [18](#), [20](#), [21](#), [35](#), [38](#), [39](#), [41](#)

**Ambush** Followers with Ambush cannot be targeted by enemy spells or attacked. [18](#), [22](#), [35](#)

**AoE** Area of Effect, refers to untargeted damage that hits multiple things. [35](#), [41](#)

**archetype** A general pattern or style in which a deck accomplishes its goals. Can refer to how aggressive the deck is at certain points in the game, what followers it plays, its win condition, etc. [7](#), [8](#), [10](#), [11](#), [13](#), [35](#), [38](#), [41](#)

**AS** The Altersphere expansion. [35](#)

**Bane** A follower with Bane will destroy any follower that it attacks, as well as any follower that attacks it. [14](#), [35](#)

**banish** A banished follower is removed without any **Last Words** effects activating, and does not give its player a **shadow**. [22](#), [35](#), [37](#), [39](#)

**BotS** The Brigade of the Sky expansion. [35](#)

**brick** Refers to either high-cost cards unplayable in the early-game or to the act of having drawn enough such cards to render a hand unusable. [14](#), [35](#)

**buff** An increase in the power and effectiveness of a card by Cygames, also done very rarely and often in confusing ways. [35](#)

**burn** Refers to spells or effects that deal damage to a target, usually the opponent's face. [9](#), [10](#), [15](#), [19–21](#), [35](#), [36](#), [39](#)

**CG** The Chronogenesis expansion. [35](#)

**Choose** Gives two different cards you can play the card as. **BEWARE, the chosen card doesn't keep any in-hand effects applied to it, such as Laura's Storm or bonus attack off of Furfur, this is because it counts as a new follower.** [35](#)

**Combo** A Combo deck revolves around two or more cards used in sync to achieve an effect, usually winning. [35](#)

**control** A slow style of deck that focuses on removing the opponent's followers, mitigating damage, and restoring defence. Has higher cost win conditions that often result in wearing down the opponent through attrition, or hitting **face** with very high burst damage. [8–10, 35, 38, 39](#)

**Countdown** Found on amulets, goes down by 1 at the start of the controller's turn, and the amulet is destroyed on reaching 0. [16, 35](#)

**CRQ** The card [Crimson Rose Queen](#). [9, 35](#)

**curve** The **Play Point** cost distribution of the cards in a deck, important when considering **tempo**. [34, 35](#)

**DBNE** The Dawnbreak Nightedge expansion. [14, 35](#)

**DE** The Darkness Evolved expansion. [9, 35](#)

**DFB** The card [Darkfeast Bat](#). [9, 10, 13, 35](#)

**Drain** When a follower with Drain attacks, its attack is restored to your defence. [18, 23, 35](#)

**Enhance** An effect that activates when additional **Play Points** are spent to play a card, you cannot choose to pay less in order to not play the Enhance effect. [9, 30, 35](#)

**Evolve** Spending an Evolve Point to Evolve a follower, usually results in a +2/+2 to its stats, and sometimes has additional effects. As a keyword: An effect that activates when the follower is Evolved. [7, 8, 13, 16–18, 20–22, 35](#)

**face** Refers to a leader. To "go face" is to attack a leader, rather than their followers. [8, 13, 19–21, 35–37, 39](#)

**Fanfare** An effect that activates when the card is played from the hand. [10, 16, 35](#)

**Invocation** An Invoked follower is summoned from the remaining cards in the deck after a set condition is met. [17, 35](#)

**ladder** The rank system. When you gain rank points, you "climb" the ladder. [14, 35](#)

**Last Words** An effect that activates on the follower's destruction. Can be circumvented with **banish** or **transform** effects. [16, 35, 36, 40](#)

**Leader Strike** Strike, but only triggers when the follower attacks the enemy leader. 16, 35

**lethal** Being able to win the game with a play. Usually entails having enough damage present to reduce the opponent to 0 defence or lower. 13, 20–22, 35, 38

**Machina** A trait for certain cards. Often cards with the Machina trait work synergistically, as is the case with Bloodcraft's Machina deck. 7, 8, 17, 18, 23, 35

**meta** Greek for "beyond." Refers to strategy decisions made outside the sphere of individual games. A "faster" meta will have more aggro decks, while a "slower" meta has more control-style decks. Also can mean which particular classes are dominant in a set timespan. 12, 14, 35

**mirror** A mirror matchup refers to a game in which both players are playing the same class and deck archetype. 35

**MP** Master Points. In Master rank, you can't get demoted after losing at 0 MP, and you get promoted to Grandmaster at 10000 MP. 35

**mulligan** Selecting which cards to redraw at the beginning of the game, the player going second usually has a more permissive mulligan due to the fact that they draw two cards on their first turn, instead of one. 14, 17, 18, 35

**Necromancy** Necromancy effects are spent automatically if the player has enough shadows accumulated. 35, 39

**nerf** A reduction in the power and effectiveness of a card by Cygames, done very rarely and often in confusing ways. 8, 10, 35, 38

**OBK** The card Oldblood King. 10, 22, 35

**OotT** The Omen of the Ten expansion. 35

**OP** Overpowered, refers to cards or effects that are perceived as needing a nerf. 35

**OTK** One turn kill, usually means having lethal despite the opponent still having lots of defence remaining. 10, 22, 35

**overdraw** When you draw more cards while having 9 cards in hand (the maximum hand size), excess cards drawn are removed from the game. 23, 35

**Overflow** Overflow effects activate when the Dragoncraft player has 7 or more Play Points. 35

**ping** A small amount of targeted damage, most often 1. [8](#), [9](#), [17](#), [23](#), [35](#)

**Play Point** Your resource for playing cards, you start with 1 and gain 1 more every turn, to a maximum of 10. [16](#), [18](#), [27](#), [28](#), [30](#), [35](#), [37](#), [38](#), [40](#)

**powercreep** Something has been powercrept when newer cards provide its effects in superior manner. [11](#), [35](#)

**proc** An effect that triggers once a specific condition is met. [35](#)

**reach** A card with the ability to deal damage directly to the opponent, regardless of whether a **Ward** is in play. Important for **aggro** decks, sometimes called **burn**. [13](#), [17](#), [35](#)

**Reanimate** A Shadowcraft keyword. This randomly brings back one of the highest-cost followers whose cost is equal to or less than the number specified in the brackets. [14](#), [35](#)

**removal** Effects that either destroy, **banish**, or transform a target into a more harmless form. Important for **control** decks. [13](#), [14](#), [18](#), [21](#), [22](#), [25](#), [26](#), [35](#), [40](#)

**RoB** The Rage of Bahamut expansion. [35](#)

**RoG** The Rebirth of Glory expansion. [35](#)

**rope** To rope is to let the time limit on your turn run out. Often used to irritate the opponent, it's considered very bad manners. [35](#)

**Rotation** One of the two ranked game formats. Decks must be constructed from a class's basic cards which are always available for play, and from the five most recent expansions. [8](#), [9](#), [11](#), [35](#)

**Rush** A follower with Rush can attack the opponent's followers the turn it's played. [35](#)

**SFL** The Starforged Legends expansion. [35](#)

**shadow** A shadow is gained by a player whenever they play a spell, or have a follower get destroyed, usually used for **Necromancy** effects. [35](#), [36](#), [38](#)

**SMOrce** A Twitch.tv meme. Refers to only using resources to deal damage to the opponent's **face**, ignoring anything the opponent plays. Used humorously, as this manner of play can often result in humiliating defeats. [35](#)

**soft Ward** A follower that doesn't actually have **Ward**, but is still targeted/removed as if it did because of the possible repercussions should it live. [35](#)

**Spellboost** Certain Runecraft cards gain effects as spells are played while they are in the hand. [35](#)

**SR** The Steel Rebellion expansion. 35

**staple** A descriptor for cards that are integral to a deck's construction, usually very powerful and cost-effective. 35

**sticky** A follower is sticky when it's difficult to remove. This can mean that it can't be targeted by removal, has a lot of defence, or summons more followers with Last Words on death. 35

**Storm** A follower with Storm can attack either the enemy leader or their followers the turn it's played. 8, 10, 15–17, 19–23, 35, 36

**Strike** An effect that activates when the follower with it attacks, doesn't activate when being attacked. **In the case of two followers with Strike engaging each other, the attacker's Strike effect goes off first.** 16, 35, 38

**tech** A card added to a deck to beat a specific style of deck, while being a seemingly unusual addition. 10, 14, 18, 31, 35

**tempo** The ability of a deck to consistently expend all of its Play Points every turn, while achieving the maximal effect. 28, 31, 35, 37

**tier** A subjective rating of the power level of a deck. Usually goes "0, 1, 2, 3" or "S, A, B, C," tiers 0 and S being considered the strongest. 7, 11, 35

**top-deck** When you draw the perfect card for a certain situation at the start of your turn. 34, 35

**TotG** The Tempest of the Gods expansion. 35

**trade** To trade means to sacrifice one or more followers to kill an enemy follower, can sometimes refer to using removal too. You should always aim to "trade up" and remove high cost things with low cost ones. 17, 35

**transform** An effect that changes a follower into a different follower, such as Mutagenic Bolt. 35, 37

**tutor** An effect that draws a specific card from your deck. Borrowed originally from Magic: the Gathering terminology. 13, 35

**Unlimited** One of the two ranked game formats. Decks may be constructed from any available cards, though some cards have limitations on how many of them may be included in a deck. 8, 9, 11, 35

**vanilla** A descriptor for a follower with no effects. 19, 23, 35

**Vengeance** When a Bloodcraft player is at 10 defence or lower, they are in Vengeance.

Some Bloodcraft cards perform different functions, or become stronger when Vengeance is active. Other cards are punitive when played while Vengeance is not active. This can also refer to an archetype of deck that rushes to enter Vengeance for its cards to pay off. [7–9](#), [14](#), [17](#), [21–23](#), [35](#)

**vials** Used to craft specifically needed cards, often at a deficit for free-to-play players. Conserve them until you're sure you know what you want. [10](#), [11](#), [35](#)

**Ward** When a follower with Ward is in play, only that follower and other followers with Ward can be targeted by the other player's followers. [13](#), [16](#), [21](#), [22](#), [35](#), [39](#)

**wide** Describes a board with numerous followers, often weak. A common play by [aggro](#) is to attempt to consolidate a wide board that is difficult to remove without [AoE](#). [35](#), [36](#)

**WLD** The Wonderland Dreams expansion. [35](#)