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NOTE. Book transcribed by MIKE FLYNN (mike@themikeflynn.com) on July 25, 2007 from the web copy on www.sirlin.net

1. Prologue

> It cannot be found by seeking, but only seekers shall find it.
> —Sufi Proverb

Imagine a majestic mountain nirvana of gaming. At its peak are fulfillment, "fun," and even transcendence. Most people could care less about this mountain peak because they have other life issues that are more important to them, and other peaks to pursue. There are a few, though, who are not at this peak, but who would be very happy there. These are the people I'm talking to with this book. Some of them don't need any help; they're on the journey. Most, though, only believe they are on that journey but actually are not. They got stuck in a chasm at the mountain's base, a land of scrubdom. Here they are imprisoned in their own mental constructs of made-up game rules. If they could only cross this chasm, they would discover either a very boring plateau (for a degenerate game) or the heavenly enchanted mountain peak (for a "deep" game). In the former case, crossing the chasm would teach them to find a different mountain with more fulfilling rewards. In the latter case, well, they'd just be happier. "Playing to win" is largely the process of shedding the mental constructs that trap players in the chasm who would be happier at the mountain peak.

A lot of people get rubbed the wrong way by this stuff because they think I want to apply "playing to win" to everyone. I don't. It's not that I think everyone should be on this particular peak or that everyone would even want to be. There are other peaks in life, probably better ones. But those who are stuck in the chasm really should know their positions and how to reach a happier place.

Then, there is the age-old question of how much, if any of this, applies to real life. I start out by defining the big differences between real life and games: games are sharply defined by rules; life is not. Exploring extreme "corner cases" of a game is what high-level play is about. Exploring extreme situations in life can easily be socially unacceptable, morally wrong, and illegal. Competitive games require military virtues: immediacy, emergency tactics, and the end (winning) justifies the means (as long as it's through moves the game defines as legal). Real life requires civic virtues like kindness, understanding, justice, and mercy.

And yet Playing to Win has valuable life lessons to teach that go beyond the scope of games. Before we're ready to talk about that, though, it's time to start winning.

Part 1

Beginner's Guide

2. Introduction

I am here to teach you to win.

Playing to win is the most important and most widely misunderstood concept in all of competitive games. The sad irony is that those who do not already understand the implications I will spell out will probably not believe them to be true at all. In fact, if I were to send this book back in time to my earlier self, even I would have trouble with it. Apparently, these concepts are something one must come to learn through experience, though I hope at least some of you will take my word for it.

> Human beings, who are almost unique in having the ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so.
>
> —Douglas Adams, Last Chance to See

2.1. Why Win at Games? The great thing about competitive, zero-sum games is that they offer an objective measure of your progress. When you walk the path of continuous self-improvement that a champion must walk, you have a guide. If you are able to win more (that is, more consistently defeat highly skilled players), then you are improving. If not, then not. Imagine trying to measure your success in other forms of life such as your personal life or career. Are you improving or not? To answer that, you have to know exactly what is included within the scope of the "game" and what is not. What are all the factors that go into your professional life? It's very hard to answer. Even if you did have an answer and created a measure of your progress, others would not agree on your standards. Not to say that the opinion of others is important in your measure of success, but the opinion of others does "keep you honest." Left to your own definitions, you could (and perhaps subconsciously would) define the scope of your game in a contrived way so as to appear to be doing well at it (or poorly at it). It would just be an exercise in determining whether you are an optimistic or a pessimistic person.

Games are different. The very nature of a game is that it is a collection of rules agreed upon by all players. If players don't agree on the rules, then they are not even playing the same game. The rules define exactly what is inside the game and what is outside. The rules define which moves are legal and which moves are not. The rules define what constitutes winning, what constitutes losing, and what constitutes a draw. There's no weaseling out of defeat by redefining what the game is. The game should need no redefining, and a loss is a loss.

In pursing the path of winning, you are likely to learn that concentrating merely on beating the opponent is not enough. In the long run, you will have to improve yourself always, or you will be surpassed. The actual conflict appears to be between you and the opponents, but the best way to win is to bring to the table a mastery of playing to win and a mastery of the game at hand. These things are developed within you and are revealed to others only during conflict.

> You never truly know a man . . . until you fight him.
>
> —Seraph, The Matrix: Reloaded

2.2. Do You Want to Win? Before we go on, ask yourself if you really want to win. Most people answer that they do, but they fail to consider that winning takes more than wanting. It takes commitment, extended effort, discipline, and time. It is not for everyone, nor should it be. There are a great many things to be in life other than a champion at competitive games. If your interest lies in other places, I suggest you not continue with this book as it will only upset you. Think carefully if you only say in passing that you want to win, or if you deeply desire to and are prepared to make the sacrifices required. Being a fine chef, a good mother, a doctor, a political activist, or a musician are all noble pursuits that may, due to your finite time and effort, prevent

you from focusing on something as trivial as winning games. I am not advising you to play to win, but I am here for you if you do.

There are also those who play games for something known as "fun." That subject will not be covered here. I believe there is a great deal more of this "fun" to be had while playing to win than while only playing casually, but there is no use in entering that debate now. This "fun" is a subjective thing, hard to pin down, but winning is not. That's what we have on our side: winning is clear and absolute. When you are playing to win, you have a perfectly clear goal and an objective measure of your progress. Is the master chef really the best in his field? Who can say without bias? The situation is different for the competitive gamer: either he can consistently defeat all of his opponents—or he cannot.

The principles of winning apply equally to all zero-sum competitive games. No matter the game, you must create an environment in which you can improve. You must practice against a wide range of opponents. You must free your mind from self-imposed rules that prevent you from winning. You must develop "mental toughness" and the ability to read the minds of your opponents. You must interact with a community of other players. Whether you play chess, tennis, Quake, Mario Kart, Street Fighter, or poker, the lessons are all the same.

2.3. Gaming as a Conversation. Let us look at what it is like to play competitively. A competitive game, to me, is a debate. You argue your points with your opponent, and he argues his. "I think this series of moves is optimal," you say, and he retorts, "Not when you take this into account." Debates in real life are highly subjective, but in games we can be absolutely sure who the winner is.

The conflict is between the players; the game itself is merely the medium—the language—of the debate. The game must be expressive enough to allow the debaters to articulate complex thoughts. A skilled debater knows the nuances of the language and common tricks and traps of language he can use against untested opponents, but the language is only his tool. Once he learns the theory of debate, he can apply it to any language. It is common to focus entirely on learning nuances of a language at the expense of gaining a real understanding of how debate should be conducted. Expert debate involves gaining an understanding of the opponent and what he will say, and knowing immediately what you will say back. It involves deception and boldness, risk-taking and conservatism. If you learn to debate (play to win), then learning particular languages (games) become simple in comparison.

A few paragraphs ago I said I would not cover the topic of "fun" in games, but you must learn not to be caught off guard by the unexpected, so the introduction of this book is as good a place as any to throw an early curve ball. The "fun" of the great debate, at least to me, occurs when you push the opponent by arguing your point, then that opponent is able to push back forcefully, yet you are able to withstand this thrust. If you can simply push the opponent over in any of a dozen ways of your choosing, there is no debate to be had. If after your simplest preliminary argument, the opponent can push you over, at least you had a taste of his prowess, but again, there was no real debate to be had. Only when you can each respond to the other's points and keep a meaningful debate going is there anything truly interesting going on. I would call this "fun."

3. Getting Started

Before we get on to winning games, I want to make sure you know how to play them at all. Let's make sure you have a game, an environment in which to play it, access to opponents, and an understanding of how to gain basic proficiency.

3.1. Choice of Game. You first need to choose a game to play. You probably already have a game in mind, and it might not have occurred to you to try to win at other games. Different

games require different skills, and it is not always clear to the beginner or even the intermediate which skills a particular game really demands. It's best, of course, to play a game you are well suited to play.

I recommend a game that allows all players to start with equal materials and advantages. For example, a fighting game allows players to start with different characters, but all players are free to choose any character they like before the match begins. Magic: The Gathering is a card game that allows players to bring different decks to a tournament, but assuming all players have equal access to all cards beforehand (which you must assume at the tournament level of play), then anyone could have brought any deck. But games based on "leveling up" a character such as many massively multiplayer games allow one player to have material advantage at the beginning of a "match" merely because he put in more time than the other player. Seek out games that do not artificially stack the deck, but instead reward only the player-skill that one takes into a game.

Don't choose every game. Although it's noble to believe you will simply "play to win" at all games you encounter, it's better to be realistic. Choose one or two games at most unless you have both an exceptional amount of free time and gaming skill. For example, if your focus is on a particular first-person shooter game, you might dabble with or even be expert at other games in that genre. You might also play the occasional game of Scrabble with your girlfriend, Texas Hold'em poker with the guys, and Magic: The Gathering here and there. To even attempt to truly win at any one of those games is a full-time job. You might not be aware of international Scrabble tournaments, the World Poker Tour, or Magic's Pro Tour, but every one of those games has a world class following of players. Competing at a high level in just one game is a daunting task.

You should recognize the level of commitment you are willing to live with for a particular game, and be content with it. There are a few games I take very seriously, and the rest I simply enjoy as much as I can with my limited commitment. For example, I have read many books on chess and played chess occasionally over the years. On the whole though, I am a terrible player. During a game of chess, I do everything I can (within the scope of the game) to win, but I do very little to improve myself over the long haul. I am not a member of the chess community, I do not seek out superior chess players as mentors, and I do not even seek out the readily available wealth of opponents free to play on the internet. In a very limited way (during a particular game only), I "play to win," but the whole endeavor of chess playing is an occasional "fun" activity for me, not a serious attempt to dominate the chess world. I'm comfortable with that, because I realize I can only dominate so many worlds.

Even so, I've invested quite a bit of mental resources on chess compared to other games. I used to play a few games of Boggle per week, and again, I tried to win those games, but I did absolutely nothing outside the games to improve. I was comfortable with that because any time I might have spent improving at Boggle was better spent improving at games I took more seriously.

Anyway, back to choosing your game. Another factor is a game's ability to hold together at high levels of play. Many games degenerate when played at high levels of skill, and many other games only appear to degenerate but actually don't. If you choose a mature game such as chess, you can be assured of some real gameplay at high levels, but newer games are a gamble. This may seem like a minor issue now, but whether a game breaks down as you increase in skill is, in fact, a major issue. I would even say that most serious players of most games will reach a point where they feel that their game breaks down and no longer requires any real strategy. Often, this is when they have discovered some powerful tactic that seems to have no real counter, thus removing any strategic thought from the game. I would also go so far as to say that most of the time, the player will be wrong and there will exist either counters to the tactic or far better

tactics, and that the game does indeed have more depth left to it. Sometimes though, there is no more depth and the player is right. Unfortunately, this looks suspiciously like the case where the player is wrong. It will take some wisdom to know whether you should continue with a degenerate game in order to discover its further depth or whether to abandon it in favor of a better game.

This is all too much to think about now, but beware that if your competitive game of choice is not an old and mature one, you will probably face this issue.

3.2. Environment. Creating an environment for yourself to play your game is vitally important. The champion is forged in fire, not in a vacuum. You need physical access to the game and access to a variety of opponents. It helps greatly to have friends who are players of the same game or to make friends who play it. If you truly walk the path of the champion, you will eventually find yourself closely involved with the community of players who play your game. The sooner you can become connected to this community, the better. They have a great deal of knowledge about the game and about tournaments and events surrounding it. You will find keepers of secret knowledge about your game, and you will find the very best players of the game as you approach the inner circles of the game's community.

Having physical access to your game cannot be stressed enough. If it is a video arcade game, you must live or work or go to school near an appropriate arcade. (By the time this is published, you can read about what an "arcade" is in a history book.) If it's a PC game, you must have ready access to an internet PC. If it's poker, you must have easy access to a card house where poker is played. If your game can be played remotely (over the internet), then you have the potential, at least, to play a very wide range of opponents, assuming you prove you are worthy to play them. If your game requires face-to-face opponents, you are well advised to live in a city where the best players of that game live, if possible. If this is not possible, you must realize that the players who do have access to the elite experts of the game have an advantage over you. If you don't have access to expert players face-to-face where you live, you might consider choosing a different game to win at.

Another thing you will need is a lifestyle that will allow you to devote the time, money, and mental energy to playing your game. Since this is significant, you are well advised to play a game you find "fun" or at least to find "fun" in the competition or personal challenge of improving because building your life around a game that feels like "work" is a mistake. Building your life around any game is arguably a mistake, but I'll pretend to ignore that point, as it sure helps when it comes to winning.

3.3. Basic Proficiency. Your first aim should be to learn the rules of the game, how to perform basic actions and moves in the game, to understand which legal moves are available to you, and of course the conditions required to win and lose the game. At this stage you should also try to learn the lingo used by other players and you should become comfortable performing basic moves. In some games, it will take quite some time to overcome the feeling of awkwardness of a beginner.

Note that none of these tasks strictly require an expert player to aid you. You can read rulebooks and FAQs, and simply play. An expert player serving as a mentor (not yet an opponent) is extremely helpful though. Either he can teach you the lingo and basics or, if you already know this, he can explain how the game is really played. It can also be very useful to watch expert players play each other at this stage (either in person or from recordings), but playing against them directly might be overwhelming; it depends how proficient you are in your beginner stage. Watching expert or intermediate players will also reveal "bread and butter" tactics that you will need to learn, and probably a lot of other things that are over your head for now.

Once you have done the above and understand the basics of the game, the next task is to learn a few "bread and butter" tactics of your own. You should learn effective, easy to execute sequences of moves that give you a shot at winning. The goal isn't to develop new sequences that have never before been seen; the goal is to be effective. When an opponent plays extremely poorly, you should at least have some idea about what you are supposed to do to seize the game from him. Depending on the game, there may be different "bread and butter" tactics to move you toward winning and to actually seal the game with a win. Also depending on the game, you may need to practice executing these tactics outside of the chaos of a real game. If even the basic tactics require a great deal of practice, then attempt to develop these skills as quickly as possible in a controlled environment. Do not dwell too long on isolated, laboratory practicing at this point though, because you need to dive into real games.

I know some players who, even at this early stage, wish to play only against expert players. I personally prefer to play against average and poor players for a bit, as a way to hone my skills of attacking efficiently. I think the important thing at this stage is simply to play as much as possible, regardless of the skill of your opponents. Familiarization with the game is paramount.

When you do play against experts, they will probably beat you badly. Playing them will teach you what not to do. Do this, and they punish you horribly. Do that, and the game is lost. Playing them will teach you which moves are "unsafe" or "terrible," and you must learn to make fewer and fewer of these moves that will lose you the game. Of course, if all you do is remove moves from your repertoire, you are playing a safer game that is less likely to be lost at any moment, but you also must make moves to win! You should be making good progress on not losing so quickly when you play these experts, but how can you learn to win? Watch what the experts do to you. They are likely extremely efficient at stealing a game. When you make a mistake, watch exactly how they punish you. Watch exactly which sequence they use to end the game.

Again, some of my friends swear by only playing against experts, and there is surely much to be learned from that. But once you have learned how the experts win, it can be very difficult to practice those maneuvers against them. The opportunity to exercise your winning muscles will show itself only rarely. It is at this point that I prefer to play against weaker players. The weaker players will present plenty of opportunities for you to practice your endgame skills. You can try variations on your attack patterns all day on them. You can hone your skills at ending a game. Often, attacking patterns will leave you vulnerable, so practice until your attack sequences leave no gaps of vulnerability. You won't truly know if you've accomplished this until you play against the experts later, though.

The idea is to use the beginners as a way to get an extraordinary amount of practice in the tactics that win the game in a short amount of time. The experts rarely allow such situations to arise, but when they do, you will need to capitalize on them professionally. When the opponent makes a fatal mistake, you need to be able to confidently take control of the game and win it. This act must be natural, something you've done a thousand times before. When the rare opportunity to win presents itself while playing the expert, you shouldn't have to think "I'm pretty sure I can win this in theory. The textbooks say I should do X." You should take control of the game simply, quickly, and instinctively, just as you have done countless times against the beginners.

The experts keep you honest. They remind you, "That was not a safe move. You cannot trick me with that. That will not stop my advances." The expert also teaches you how to win, but presents only very few opportunities to practice winning. The beginner, on the other hand, will let you practice winning until it's second nature. At that time, you must return to the experts.

There will soon come a time when beginners and even intermediate players are of very little use to you. They do not know how to punish your mistakes properly, so you can develop bad habits. They fall for tricks that are not "real," meaning that experts would never fall from them. And perhaps worst of all, they often defeat themselves. If you play safely for long enough against beginners or intermediates, they are likely to eventually make a mistake that gives you the win. It might teach you that long, drawn-out conservative play is the road to victory. But what will you do when the expert never hands you the game? What if the opponent is good enough that you must actively beat him rather than wait for him to beat himself? This is why you must focus all of your attention on playing experts when you are ready.

Part 2

Intermediate's Guide

So far you have learned only obvious and mundane things. I know that taking the first step can be the hardest part of the journey, so I wanted to coddle you a little just to get you going. The coddling stops here. You must now understand the cold, hard truth of competition. This is the difficult part to accept. This is the part that will upset you. You will have many defense mechanisms that will tell you that I am wrong, but I assure you with certainty that on this point I am delivering divine truth directly to you.

4. Introducing . . . the Scrub

The derogatory term "scrub" means several different things. One definition is someone (especially a game player) who is not good at something (especially a game). By this definition, we all start out as scrubs, and there is certainly no shame in that. I mean the term differently, though. A scrub is a player who is handicapped by self-imposed rules that the game knows nothing about. A scrub does not play to win.

Now, everyone begins as a poor player—it takes time to learn a game to get to a point where you know what you're doing. There is the mistaken notion, though, that by merely continuing to play or "learn" the game, one can become a top player. In reality, the "scrub" has many more mental obstacles to overcome than anything actually going on during the game. The scrub has lost the game even before it starts. He's lost the game even before deciding which game to play. His problem? He does not play to win.

The scrub would take great issue with this statement for he usually believes that he is playing to win, but he is bound up by an intricate construct of fictitious rules that prevents him from ever truly competing. These made-up rules vary from game to game, of course, but their character remains constant. Let's take a fighting game off of which I've made my gaming career: Street Fighter.

In Street Fighter, the scrub labels a wide variety of tactics and situations "cheap." This "cheapness" is truly the mantra of the scrub. Performing a throw on someone is often called cheap. A throw is a special kind of move that grabs an opponent and damages him, even when the opponent is defending against all other kinds of attacks. The entire purpose of the throw is to be able to damage an opponent who sits and blocks and doesn't attack. As far as the game is concerned, throwing is an integral part of the design—it's meant to be there—yet the scrub has constructed his own set of principles in his mind that state he should be totally impervious to all attacks while blocking. The scrub thinks of blocking as a kind of magic shield that will protect him indefinitely. Why? Exploring the reasoning is futile since the notion is ridiculous from the start.

You will not see a classic scrub throw his opponent five times in a row. But why not? What if doing so is strategically the sequence of moves that optimizes his chances of winning? Here we've encountered our first clash: the scrub is only willing to play to win within his own made-up mental set of rules. These rules can be staggeringly arbitrary. If you beat a scrub by throwing projectile attacks at him, keeping your distance and preventing him from getting near you—that's cheap. If you throw him repeatedly, that's cheap, too. We've covered that one. If you block for fifty seconds doing no moves, that's cheap. Nearly anything you do that ends up making you win is a prime candidate for being called cheap. Street Fighter was just one example; I could have picked any competitive game at all.

Doing one move or sequence over and over and over is a tactic close to my heart that often elicits the call of the scrub. This goes right to the heart of the matter: why can the scrub not defeat something so obvious and telegraphed as a single move done over and over? Is he such a poor player that he can't counter that move? And if the move is, for whatever reason, extremely difficult to counter, then wouldn't I be a fool for not using that move? The first step in becoming a top player is the realization that playing to win means doing whatever most increases your

chances of winning. That is true by definitionof playing to win. The game knows no rules of "honor" or of "cheapness." The game only knows winning and losing.

A common call of the scrub is to cry that the kind of play in which one tries to win at all costs is "boring" or "not fun." Who knows what objective the scrub has, but we know his objective is not truly to win. Yours is. Your objective is good and right and true, and let no one tell you otherwise. You have the power to dispatch those who would tell you otherwise, anyway. Simply beat them.

Let's consider two groups of players: a group of good players and a group of scrubs. The scrubs will play "for fun" and not explore the extremities of the game. They won't find the most effective tactics and abuse them mercilessly. The good players will. The good players will find incredibly overpowering tactics and patterns. As they play the game more, they'll be forced to find counters to those tactics. The vast majority of tactics that at first appear unbeatable end up having counters, though they are often quite subtle and difficult to discover. Knowing the counter tactic prevents the other player from using his tactic, but he can then use a counter to your counter. You are now afraid to use your counter and the opponent can go back to sneaking in the original overpowering tactic. This concept will be covered in much more detail later.

The good players are reaching higher and higher levels of play. They found the "cheap stuff" and abused it. They know how to stop the cheap stuff. They know how to stop the other guy from stopping it so they can keep doing it. And as is quite common in competitive games, many new tactics will later be discovered that make the original cheap tactic look wholesome and fair. Often in fighting games, one character will have something so good it's unfair. Fine, let him have that. As time goes on, it will be discovered that other characters have even more powerful and unfair tactics. Each player will attempt to steer the game in the direction of his own advantages, much how grandmaster chess players attempt to steer opponents into situations in which their opponents are weak.

Let's return to the group of scrubs. They don't know the first thing about all the depth I've been talking about. Their argument is basically that ignorantly mashing buttons with little regard to actual strategy is more "fun." Superficially, their argument does at least look valid, since often their games will be more "wet and wild" than games between the experts, which are usually more controlled and refined. But any close examination will reveal that the experts are having a great deal of this "fun" on a higher level than the scrub can even imagine. Throwing together some circus act of a win isn't nearly as satisfying as reading your opponent's mind to such a degree that you can counter his every move, even his every counter.

Can you imagine what will happen when the two groups of players meet? The experts will absolutely destroy the scrubs with any number of tactics they've either never seen or never been truly forced to counter. This is because the scrubs have not been playing the same game. The experts were playing the actual game while the scrubs were playing their own homemade variant with restricting, unwritten rules.

The scrub has still more crutches. He talks a great deal about "skill" and how he has skill whereas other players—very much including the ones who beat him flat out—do not have skill. The confusion here is what "skill" actually is. In Street Fighter, scrubs often cling to combos as a measure of skill. A combo is a sequence of moves that is unblockable if the first move hits. Combos can be very elaborate and very difficult to pull off. But single moves can also take "skill," according to the scrub. The "dragon punch" or "uppercut" in Street Fighter is performed by holding the joystick toward the opponent, then down, then diagonally down and toward as the player presses a punch button. This movement must be completed within a fraction of a second, and though there is leeway, it must be executed fairly accurately. Ask any scrub and they will tell you that a dragon punch is a "skill move."

I once played a scrub who was actually quite good. That is, he knew the rules of the game well, he knew the character matchups well, and he knew what to do in most situations. But his web of mental rules kept him from truly playing to win. He cried cheap as I beat him with "no skill moves" while he performed many difficult dragon punches. He cried cheap when I threw him five times in a row asking, "Is that all you know how to do? Throw?" I gave him the best advice he could ever hear. I told him, "Play to win, not to do 'difficult moves.'" This was a big moment in that scrub's life. He could either ignore his losses and continue living in his mental prison or analyze why he lost, shed his rules, and reach the next level of play.

I've never been to a tournament where there was a prize for the winner and another prize for the player who did many difficult moves. I've also never seen a prize for a player who played "in an innovative way." (Though chess tournaments do sometimes have prizes for "brilliancies," moves that are strokes of genius.) Many scrubs have strong ties to "innovation." They say, "That guy didn't do anything new, so he is no good." Or "person X invented that technique and person Y just stole it." Well, person Y might be one hundred times better than person X, but that doesn't seem to matter to the scrub. When person Y wins the tournament and person X is a forgotten footnote, what will the scrub say? That person Y has "no skill" of course.

You can gain some standing in a gaming community by playing in an innovative way, but that should not be the ultimate goal. Innovation is merely one of many tools that may or may not help you reach victory. The goal is to play as excellently as possible. The goal is to win.

5. More on Losing

Losing is part of the game. If you never lose, you are never truly tested, and never forced to grow. A loss is an opportunity to learn. But losing can be upsetting, and can cause emotions to take the place of logical thinking. Below are some common "losing attitudes." If you find yourself saying these things, consider it a red flag.

"At least I have my Code of Honor," a.k.a. "You are cheap!"

This is by far the most common call of the scrub, and I've already described it in detail. The loser usually takes the imagined moral high ground by sticking to his Code of Honor, a made-up set of personal rules that tells him which moves he can and cannot do. Of course, the rules of the game itself dictate which moves a player can and cannot make, so the Code of Honor is superfluous and counterproductive toward winning. This can also take the form of the loser complaining that you have broken his Code of Honor. He will almost always assume the entire world agrees on his Code and that only the most vile social outcasts would ever break his rules. It can be difficult to even reason with the kind of religious fervor some players have toward their Code. This type of player is trying desperately to remain a "winner" any way possible. If you catch him amidst a sea of losses, you'll notice that his Code will undergo strange contortions so that he may still define himself, somehow, as a "winner."

"I lost to a scrub!"

This is the most entertaining complaint of the bunch. When this player loses to someone he considers a weaker player, the "I lost to a scrub!" line is sometimes used as an excuse. This player is saying that he is very good at the game, and losing to such a poor player doesn't prove anything. He often enumerates all the weaknesses of this "poor player," including such gems as "he relies on only one tactic" and "his mind games are weak." The more he puts down the other player, though, the worse he looks himself. If the other player relies on only one tactic, and you can't beat it, then what does that say about you?

This need to displace the blame is probably motivated by pride, but it deprives you of a chance to learn from your mistakes (and it alienates other players, a point which you may or may not care about). Basically, you need to have some respect for other players who have

the power to win, no matter what faults you may see with their play styles. Sometimes, these "weaker players" really are better than you, and you just aren't admitting it. And if they aren't better, then you should not let them win. You should be recognizing and learning from your own mistakes, or you should be improving to catch up to them. Either way, the heart of the issue lies in you, not in the player you just lost to.

"I suck, why even try?"

This is the opposite of the above statement: underconfidence rather than overconfidence. Sometimes this line is said in sadness after a loss, which is somewhat understandable. In that case, just stick in there and keep trying. The real crime, though, is when this is said before or even during the match. A low self-esteem can be debilitating. Some players get thrown off by a past loss or other bad event in real life. They then take a losing attitude into the game, even in cases where they objectively have an advantage in the match (such as a better deck in Magic: The Gathering or a favorable character matchup in a fighting game). This type of player needs to put all that out of his mind and focus on the immediate match. If you do have some advantage going into the game in your choice of character/side/deck, general play skills, or specific knowledge, then that's what you should be focusing on. And if you don't have any of that, that's all the more reason to work harder, be smarter, triumph against the odds, and show the naysayers how wrong they all are. Self-doubt does not win games; positivity does.

"This game is dumb / too random / too boring."

In all fairness, sometimes the game is dumb or too random or too boring. In that case, you should stop playing it altogether and find something better to do with your time. But these claims are often made against perfectly good games. For the "dumb" game, there might be another level of understanding above your own that makes the game brilliant.

The "too random" game is a bit trickier. On the one hand, the more random a game is, the worse it probably is for serious competitive play. But randomness can add "fun" to a game. Usually, though, there is only one meaningful way to answer this complaint: examine whether the same players can consistently win at it. One could make a strong argument that the card game Magic: The Gathering is "too random," yet the same players are able to win national and international tournaments over and over. Kai Budde, the best player in the world as of this writing, routinely shows up to tournaments with the exact same deck as his teammates—yet Kai wins. Apparently the game isn't "too random."

The same could be said of poker. Even though randomness plays a large part in an individual hand, the same top players emerge with the most money over the course of several tournaments.

The "too boring" comment is always an easy way out. Basically, all these complaints are about shifting the blame over losing away from yourself and toward supposed deficiencies in the game itself. Again, sometimes the game deserves to be criticized, but be aware that these complaints are often just excuses that allow you to shrug off a loss rather than actually learn from it.

Catch yourself if you start to fall into any of these losing attitudes and take responsibility for your losses. Only the loser plays the part of the victim. The winner takes charge and actively seeks out improvement.

6. How Far Should You Go to Win?

Video games, like all software, have bugs. Even non-computerized games can have interactions the designers did not intend. If an expert does anything he can to win, then does he exploit bugs in the game? The answer is a resounding yes. The player cannot be bothered to interpret the will of the game designer as far as which moves are "fair" and which moves are not, or which

moves were intended and which moves weren't. It's irrelevant anyway. The player knows only moves that lead to winning and moves that don't.

Mysteriously, some games do expect the player to divine the will of the designer, and expect him to adhere to a set of behavioral rules on top of the actual rules of the game. This is the fundamentally flawed concept embraced by most massively-multiplayer online games. Consider World of Warcraft as an example. In a town, you can go on rooftops and you can fight against other players, but you can't fight other players while on rooftops, or you'll receive a warning. (Actually, this was totally legal before 3/11/2005 at 9:44 PM PST, but not legal after.) You can kill the same monster all day every day to "farm" in-game money for yourself (in fact you practically have to), but you can't farm "too much" or you're labeled as a gold-farmer and banned. If you break your line of sight with a monster, he often has trouble getting to you, which allows your friends to kill him much more easily. Smart play or grounds for suspension? Answer: grounds for suspension. If a monster is chasing you, you can go into a lake where he can't follow and wait for him to give up. Smart play or grounds for suspension? Answer: that one's smart play. The complex web of made-up rules is not unlike the shackling self-imposed rulebook of the scrub.

I'm here to tell you that legitimate competitive games are not like this. Reasonable games have built-in rules and simply do not allow illegal moves to happen in the first place. Tournaments for reasonable games sometimes have to impose extra rules, but they keep this list as clear and as short as possible. There are games that are just for "fun," because you can't "win" them or make reasonable tournaments out of them. These games—while interesting—are not within the scope of this book.

So what lengths should a player go to in order to win? A player should use any tournament legal move available to him that maximizes his chances of winning the game. Whether certain moves or tactics should be legal in a tournament is a totally separate issue that we'll get to later. For now, the issue at hand is that if it's legal in a tournament, it's part of the game, period. Players often fault other players for "cheating" or playing "dishonestly" when they use tactics that should not be allowed in a tournament, often because they are exploits of bugs. The player is never at fault. The player is merely trying to win with all tools available to him and should not be expected to pull his punches. Complaints should be taken up with the governing body of the tournament (or the community of players) as to what should be allowed in a tournament. This is a dead simple issue that confuses too many players.

7. What Should Be Banned?

Now this is a tricky subject, not nearly so clear-cut as the last. The world is full of players who think everything under the sun should be banned. The scrub believes that any tactic or maneuver that beats him should be labeled "cheap" and consequently banned. In actuality, very little ever needs to be banned.

Before we discuss what should or should not be allowed in tournament play, I should acknowledge that different forms of distribution of games have led to different attitudes about banning. Some types of games are released, and that's that. The players are stuck with whatever is in the game. Other types of games see a patch or two to fix the most egregious bugs and perhaps game balance problems. I'll lump these two into the same category though as they both basically stick the player with whatever is there after the last patch. These are the types of games I grew up with.

Internet gaming has introduced a different type of game. Blizzard (makers of StarCraft, Warcraft 3, Diablo, and World of Warcraft) is a special game developer that provides a free matchmaking service called battle.net for many of its games. Since all of its multiplayer competitive games are played over this service, Blizzard can (and does) gather an incredible amount

of data about how the games are played, how quickly they end, which tactics are successful, which maps are played, etc. They continue to balance their games though new patches years after release.

So-called massively multiplayer games like EverQuest and World of Warcraft, though not zero-sum competitive games, are also constantly monitored and patched by their developers. Players currently pay a monthly fee to play these types of games and thereby financially support large development teams who constantly improve and tweak the game.

The entire notion of radically patching and altering a game after its release may have many desirable properties, but it also has created an attitude among developers that they can release a somewhat buggy and imbalanced game and just patch it later. It is no surprise then that players of this type of game see differently than players of more "static" games on the issue of banning and altering a game. To players of my kind of games, banning is an ultra-extreme measure. To players of some internet games, the changing of game balance can be an everyday occurrence, as can the fixing of bugs.

The "constant patching" approach by developers also often leads to laziness on the part of the players; there's less reward for trying as hard as you can within the given rules, because if you are successful, your tactic will just be patched into obsolescence anyway. You might be a footnote someplace, but you won't still be winning. It gets worse in most massively multiplayer games, where you can actually be banned—permanently—for playing within the rules they created, but playing in a way they had not intended.

7.1. Criteria of a Ban. A ban must be enforceable, discrete, and warranted.

7.1.1. *Enforceable.* Sometimes, a tactic can be hard to detect. If you can't reliably detect something, you certainly can't enforce penalties on it. In a fighting game, a trick might make a move invulnerable that shouldn't be, but actually detecting every time the trick is used might be nearly impossible. Or consider a real-time strategy game, where a trick might give your units a few more hit points than normal, but again, detecting this might be nearly impossible in a real game. If something is to be banned from tournament play, it must be reasonably easy to identify when it happens or to prevent it from ever happening at all.

Also in a fighting game, a move might be "unfairly" unblockable, but only when that move is executed in a certain situation with precise 1/60th of a second timing. Did the player execute it during that "unfair" time window? Or 1/60th of a second late? Perhaps he accidentally executed the move at the unfair time through sheer luck. Is he to be penalized? Imagine trying to enforce a rule that states "You may usually use move X, but there's 1/60th of a second where you may not use move X."

7.1.2. *Discrete.* The thing to be banned must be able to be "completely defined." Imagine that in a fighting game, repeating a certain sequence of five moves over and over is the best tactic in the game. Further suppose that doing so is "taboo" and that players want to ban it. There is no concrete definition of exactly what must be banned. Can players do three repetitions of the five moves? What about two reps? What about one? What about repeating the first four moves and omitting the fifth? Is that okay? The game becomes a test of who is willing to play as closely as possible to the "taboo tactic" without breaking the (arbitrary) letter of the law defining the tactic.

Or in a first-person shooter game, consider the notion of banning "camping" (sitting in one place for too long). No friendly agreement between the players is necessary for the ban, which at least means it's enforceable. The server can monitor the positions of players, and it knows exactly who breaks the rule and can hand out penalties accordingly. The ban is enforceable, but the problem is being able to completely define camping. If camping is defined as staying within one zone for 3 minutes, and if it really is the best tactic, then sitting in that zone for 2 minutes

59 seconds becomes the best tactic. It's a slippery slope because there will always exist camping tactics arbitrarily close to the specific kind of camping that is banned.

Here's an example of a completely defined game element. In the card game Magic: The Gathering, if a particular card is deemed to be too good, then it is possible to ban it. One can define completely that "that card cannot be used." There is no fear of players still "sort of" using it, in the same way they could still "sort of" repeat the moves from the fighting game, or "sort of" camp for 2 minutes 59 seconds above. The card is a discrete entity that can feasibly be banned.

7.1.3. *Warranted.* Here is the whole issue, of course. If it isn't warranted to ban something, we don't need to even consider whether it's enforceable or discrete. The great lesson of competitive games is that hardly anything warrants a ban.

A bug that gives players a small advantage does not warrant a ban. In fact, it's common. Many players don't even realize they are using bugs, but instead view them as "advanced tactics." Even bugs that have a huge effect on gameplay are usually not warranted to be banned. The game may change with the new tactic, but games are resilient and there tend to be countermeasures (sometimes other bugs) to almost everything.

In the fighting game Street Fighter Alpha 2, there is a bug that allows the player to activate a very damaging move (called "Custom Combo") against an opponent who is standing up (not crouching). The designers surely intended a standing opponent to be able to crouch and block this move upon seeing it, but if executed correctly, he cannot. It has a huge impact on the way the game is played (standing up is now quite dangerous), but there is still an excellent game left even after this technique is known. At first glance, one might think that attacking is too dangerous because it usually involves standing up. Closer examination shows that the attacker can stick out moves to knock the defender out of his Custom Combo, should he try it. Basically, the bug can be dealt with. This game-changing tactic is referred to by players as the "Valle CC" after its inventor, Alex Valle (more on him later).

As another example, consider the puzzle game Super Puzzle Fighter II Turbo. It's vaguely like Tetris. In this game, blocks of various colors fall into your basin and you try to match up the colors to break these blocks to fill up your opponent's basin. If you fill up his basin to the top, you win.

Puzzle Fighter has a game-altering bug. A feature called the diamond lets the player break all blocks of a certain color on his own side (even if they aren't lined up) and send blocks to the opponent's side. Usually, doing this means sending much, much fewer blocks than if the player had broken all the blocks of that color manually. It's a tradeoff since the diamond allows the player to break all those blocks instantly, but at the price of a smaller attack. There is a bug, though, called the "diamond trick" that allows the player to send even more blocks with the diamond than he would have sent breaking all his blocks of that color manually. The diamond goes from "get me out of trouble" to being a serious, game-ending thwomp. It's nearly impossible to defeat a player who uses the diamond trick without using it yourself.

Amongst players who all know this trick, there is still a good game. One player can use his diamond trick to cancel out the other player's. Each player gets diamond every twenty-fifth piece, so you can count on the other player getting his diamond about the same time you get yours. You can also just break a lot of blocks right when the opponent does his diamond trick. This will allow you to cancel some of the incoming block, but still give you a pretty full basin. A peculiarity of Puzzle Fighter is that when your basin is nearly full, you then have a lot of ammunition to send back to the opponent. A clever player can turn the other player's huge diamond trick into a stockpile of ammunition to fire back for the win. In the end, the trick merely changes the game and does not destroy it, and is certainly not worthy of banning.

How does one know if a bug destroys the game or even if a legitimate tactic destroys it? The rule of thumb is to assume it doesn't and keep playing, because 99% of the time, as good as the

tactic may be, there will either be a way to counter it or other even better tactics. Prematurely banning something is the scrub's way. It prevents the scrub from ever discovering the counter to the Valle CC or the diamond trick. It also creates artificial rules that alter the game, when it's entirely possible that the game was just fine the way it was. It also usually leads to an avalanche of bans in order to be consistent with the first. When players think they have found a game-breaking tactic, I advise them to go win some tournaments with it. If they can prove that the game really is reduced to just that tactic, then perhaps a ban is warranted. It's extremely rare that a player is ever able to prove this though. In fact, I don't even have any examples of it.

A note to game developers: fix your bugs after release if you have the opportunity to do so. But beware that players enjoy the feeling of wielding "unfair" tactics, and taking that away from them can be a mistake if the "unfair" tactic isn't powerful enough to single-handedly win tournaments.

7.2. Immediately Ban-worthy Glitches. There are some things so extreme that they can be banned without much testing. These include glitches that crash the game or have radical effects, such as blanking out the opponent's entire screen, removing his characters, units, or resources from the game, and so forth. Glitches so extreme that they undeniably end or prevent gameplay are worthy of being banned. Likewise, so are glitches that are not equally available to all players. Some glitches in a two player game can only be performed by player 2. It is reasonable to ban such a tactic, even if it's not overly powerful, just on the basis that all players do not have equal access to it.

"It's Too Good!"

Only in the most extreme, rare cases should something be banned because it is "too good." This will be the most common type of ban requested by players, and almost all of their requests will be foolish. Banning a tactic simply because it is "the best" isn't even warranted. That only reduces the game to all the "second best" tactics, which isn't necessarily any better of a game than the original game. In fact, it's often worse!

The only reasonable case to ban something because it is "too good" is when that tactic completely dominates the entire game, to the exclusion of other tactics. It is possible, though very rare, that removing an element of the game that is not only "the best" but also "ten times better than anything else in the game" results in a better game. I emphasize that is extremely rare. The most common case is that the player requesting the ban doesn't fully grasp that the game is, in fact, not all about that one tactic. He should win several tournaments using mainly this tactic to prove his point. Another, far rarer possibility is that he's right. The game really is shallow and centered on one thing (whether that one thing is a bug or by design is irrelevant). In that case, the best course of action is usually to abandon the game and play one of the hundreds of other readily available good games in the world.

Only in the ultra-rare case that the player is right and the game is worth saving and the game without the ultra-tactic is a ten times better game—only then is the notion even worth fighting for. And even in this case, it may take time for the game to mature enough for a great percentage of the best players and tournament organizers to realize that tactic should, indeed, be banned. Before an official ban takes place, there can also be something called "soft ban." Let's look at an example.

7.3. The Two Excellent Examples of "Super Turbo". Super Street Fighter 2 Turbo, or "Super Turbo," is a wonderful example of bannings in fighting games. As of this writing, the arcade game is ten years old and still played in tournaments. In fact, there are one or two tournaments per week in this game in Tokyo alone. The game is quite mature, and there is a decade of data about the game's balance.

Many versions of Street Fighter have "secret characters" that are only accessible through a code. Sometimes these characters are good; sometimes they're not. Occasionally, the secret characters are the best in the game as in the game Marvel vs. Capcom 1. Big deal. That's the way that game is. Live with it. But Super Turbo was the first version of Street Fighter to ever have a secret character: the untouchably good Akuma. Most characters in that game cannot beat Akuma. I don't mean it's a tough match—I mean they cannot ever, ever, ever, ever win. Akuma is "broken" in that his air fireball move is something the game simply wasn't designed to handle. He is not merely the best character in the game, but is at least ten times better than other characters. This case is so extreme that all top players in America immediately realized that all tournaments would be Akuma vs. Akuma only, and so the character was banned with basically no debate and has been ever since. I believe this was the correct decision.

Japan, however, does not officially ban Akuma from tournaments! They have what is called a "soft ban." This is a tacit understanding amongst all top players that Akuma is too good to be played, and that he destroys an otherwise beautiful game, so they unofficially agree not to play him. There are always a very small number of people who do play him in tournaments, but never the top players. Usually a few poor players try their hand at the god-character and lose, which is utterly humiliating and crowd-pleasing. This is an interesting alternate take on the "hard ban" we have in America.

That's all well and good, but Japan has also shown signs of a soft-ban on another character in Super Turbo. I bring up this example because it lives on the threshold. It is just on the edge of what is reasonable to ban because it is "too good." Anything less than this would not be reasonable, so perhaps others can use it as a benchmark to decide what is reasonable in their games.

The character in question is the mysteriously named "Old Sagat." Old Sagat is not a secret character like Akuma (or at least he's not as secret!). Old Sagat does not have any moves like Akuma's air fireball that the game was not designed to handle. Old Sagat is arguably the best character in the game (Akuma, of course, doesn't count), but even that is debated by top players! I think almost any expert player would rank him in the top three of all characters, but there isn't even universal agreement that he is the best! Why, then, would any reasonable person even consider banning him? Surely, it must be a group of scrubs who simply don't know how to beat him, and reflexively cry out for a ban.

But this is not the case. There seems to be a tacit agreement amongst top players in Japan—a soft ban—on playing Old Sagat. The reason is that many believe the game to have much more variety without Old Sagat. Even if he is only second best in the game by some measure, he flat out beats half the characters in the game with little effort. Half the cast can barely even fight him, let alone beat him. Other top characters in the game, good as they are, win by much more interaction and more "gameplay." Almost every character has a chance against the other best characters in the game. The result of allowing Old Sagat in tournaments is that several other characters, such as Chun Li and Ken, become basically unviable.

If someone had made these claims in the game's infancy, no sort of ban would be warranted. Further testing through tournaments would be warranted. But we now have ten years of testing. We don't have all Old Sagat vs. Old Sagat matches in tournaments, but we do know which characters can't beat him and as a result are very rarely played in America. We likewise can see that this same category of characters flourishes in Japan, where Old Sagats are rare and only played by the occasional violator of the soft ban. It seems that the added variety of viable characters might outweigh the lack of Old Sagat. Is this ban warranted then? To be honest, I am not totally convinced that it is, but it is just barely in the ballpark of reasonableness since there is a decade of data on which to base the claim.

8. Cheating

Some people have asked if they should use these means to win:

"What about using the map hack in StarCraft, or a packet interceptor, or a macro to cast your spells faster, or just a swift kick to the shins of your opponent?"

One of the great things about playing to win is that it's a path of self-improvement that can be measured. In playing to win, we have the cold, hard results of winning and losing to guide us along that path. I think it's only useful to consider winning and losing in the context of formal competition such as tournaments. Kicking your opponents in the shins is outside the scope of the game, and is not legal in any reasonable tournament.

Likewise, any third party program obtained from an illegal warez site and installed as a hack into your game is also not going to be legal in any reasonable tournament. These things, though technically useful to those trying to win, are outside the path of continuous self-improvement that I'm talking about since they are outside of the rules of tournaments. You should use any tournament legal means to win. If you participate in some strange tournament where all players are allowed to use a map hack, then go for it. You're playing a rather weird, nonstandard version of the game, though, which defeats the whole purpose of shedding extra rules so as to play the same game as everyone else. Any reasonable person would consider "no cheating from outside the game" to be part of the default rule set of any game.

9. Sportsmanship

Some would interpret my attitude of winning by any means necessary to imply that I have no appreciation of sportsmanship. Quite the contrary, I have observed that the very best players are likely to be excellent sports. Part of sportsmanship is keeping calm when you lose. Playing to win involves viewing a loss as an opportunity to learn and improve. Getting hot-headed and yelling at an opponent or muttering under your breath that you lost to a "no-skilled scrub" does not accomplish that.

Being a good sport also involves winning politely and observing customs of etiquette before and after a match such as bowing, shaking hands, saying "good game," or whatever is appropriate. There is always the tendency to gloat, but being polite and reserved is the way to positively influence other people. Judges are people, too, and when a judgment call must be made, judges are often itching to find a technicality to use against a bad sport. Other players, perhaps potential sparring partners, team members, or keepers of secret information about the game are likely to be more open to a good sport than a raving lunatic or an idiot.

Some ask why they should not scream racist or other offensive remarks, spit on the shoes of their opponents, beat their chests, or otherwise intimidate the enemy. After all, they say, the purpose is to win using any legal means, period. Isn't that what I have said? First of all, some of these activities may not be legal in a tournament. Second, they violate the principle of goodwill that I described above. And third, I am not convinced they offer any real strategic advantage. They are more likely to make you look stupid, and create an air of negativity that will follow you.

That said, I do know of a few skilled players who use these tactics. There is usually leeway in a tournament to be physically intimidating and say mean and scary things just short of actually violating any rules. Trash talking before the event over the internet is pretty much always legal, too. Perhaps these players are playing to their own strengths by being bullies. This behavior does give them advantages over some opponents, but the costs seem too great overall for me to endorse this as a winning strategy.

If you wish to rile your opponent up, there are plenty of ways to do this within most games. There are ways of playing that are annoying and provoking. When an opponent plays defensively,

expecting you to attack him, you can play defensively, too. This may annoy him and throw him off. Or, you can make moves that obviously have no purpose as a way of "taunting" an opponent you have an advantage over. Anything you do inside the game is good and right and beyond the scope of making you a bad sport. All is fair in war.

If your aim is to intimidate the opponent, then I am all for that. But there are polite, sportsman-like ways of doing this. The best way by far is to win tournaments. See what your next opponent thinks of you then. Just give him something as simple as a half-hearted glance and empty-sounding "good luck" before the match and he will probably fall over like a feather from your presence. When a player radiates a sense of total dominance at a game, I call this a "fear aura." The most unlikely of pale, white computer geeks can strike fear into the hearts of other gamers when they discover that he is, in fact, "PhatDan09" or whatever name is known to dominate tournaments. With the fear aura, he is able to get away with gambits and maneuvers no ordinary player could ever pull off, just because the opponent gives him the extreme benefit of the doubt on everything that occurs in the game. If the wielder of the fear aura appears to be vulnerable, perhaps it is just what he wants you to think. It might be safer to hesitate, and then—oops—to lose. Once you develop your fear aura through excellent play and winning, you will laugh at the relatively ineffective notion of intimidating opponents with offensive verbal comments.

Part 3

The Art of War

10. Introduction to The Art of War

Up to this point, I have told you almost nothing about how to actually play. I have so far covered mainly the mindset you need to take into a game, not the tactics and strategies employed during a game. On this delicate subject, I will not even pretend to have unique authority, for it has been covered many times before me by more distinguished authors. Perhaps no author has ever explained it better than the military general, Sun Tzu.

Twenty-five centuries ago in China, Sun Tzu wrote a little manual called The Art of War. In the 2,500 years since that time, countless authors have tackled the subject of war, and wars unnumbered have been waged, yet still Sun Tzu's words have unnerving relevance. Mao Tse-tung's Little Red Book of strategic and tactical doctrine was a nearly word-for-word recounting of The Art of War. It's rumored that Napoleon's secret weapon during his conquest of Europe was none other than Sun Tzu's Art of War. Even David Sirlin's manual of competitive gaming Playing to Win is said to draw heavily from The Art of War.

The chapters that follow in this book are my retelling and interpretation of that great work. I have condensed his thirteen chapters to seven, joined together similar material, omitted some topics, and added two chapters of my own. I explore how his tactics of military conduct apply to playing competitive games today, and provide examples from several games. I have taken great liberties on a few subjects such as the use of spies, but overall, the application of his concepts is quite direct.

Take, for example, Sun Tzu's five essentials for victory:

- He will win who knows when to fight and when not to fight.
- He will win who knows how to handle both superior and inferior forces.
- He will win whose army is animated by the same spirit throughout all its ranks.
- He will win who, prepared himself, waits to take the enemy unprepared.
- He will win who has military capacity, and is not interfered with by the sovereign.

Now consider the application to competitive games of today. First we have "He will win who knows when to fight and when not to fight." If, in a game, you are temporarily at a disadvantage, then you should stall until you can change the situation. Capcom vs. SNK 2 is a fighting game that allows players to store resources in a "super meter" and then activate this meter. Once activated, the resources give that player a big advantage, but only until his meter ticks down to zero over time. The opponent is well advised to avoid all fighting until the opponent's advantage fades away. In a real-time strategy game such as Warcraft or StarCraft, opponents often gain momentary advantages of terrain, or concentration of troops, or even of the day/night cycle of the game. Don't engage the enemy in fighting if delaying will allow you to find more favorable terrain, or gather your troops, or wait until a different point in the day/night cycle. Run away from a fight if you can simply wait for your disadvantages to fade.

Then we have "He will win who knows how to handle both superior and inferior forces." You must often employ different tactics when winning than when losing. When losing badly, you are often forced to choose only from high-risk options that have big enough payoffs to put you back into the game. When you are down several pieces in chess, you can no longer afford to grind the opponent down slowly, trading piece for piece. The further behind you are, the more imperative it becomes to find that bold combination that traps the enemy king directly. On the other hand, if you are winning by a huge amount in a fighting game, you would be wise to restrict yourself to unusually safe moves, giving the opponent no chance to come back. When the opponent is extremely low on life, even your quickest jab is as deadly as a powerful, slow attack that would leave you vulnerable. Relying on low risk moves is totally viable when you are in the powerful position of "almost winning."

"He will win whose army is animated by the same spirit throughout all its ranks." What Sun Tzu means is that the intent of the general must be carried out by officers and then soldiers, exactly as envisioned. The strategy is wasted if it cannot be executed properly. In a sense, your mind and your body must be "animated by the same spirit" while playing. You must have the dexterity and coordination to physically carry out whatever course of action your mind believes is best. From micromanaging combat units in a battle in Warcraft to executing a skillful backhand in tennis, to hitting your target with the rocket in Quake, to landing that difficult combo in Street Fighter, you must be able to execute your moves precisely.

And then "He will win who, prepared himself, waits to take the enemy unprepared." This is closely related to the first of the five points. Advantages shift over the course of a game, and it is the wise player who puts himself beyond the possibility of defeat and waits for the enemy to make a fatal mistake, or at least waits for advantages to shift favorably before attacking.

For example, in the first-person shooter Counter-Strike, the players on the "terrorist" team must plant a bomb at one of two bomb sites on the map. The players on the "counter-terrorist" team must stop this from happening. The counter-terrorists can take up defensive positions using cover and protected snipers. When they have an iron defense in place, there is no need for them to scramble around the map looking for the enemy. If the terrorists do not plant the bomb before the match's time limit is up, the counter-terrorists win. In this advantageous situation, the counter-terrorists can just wait for the terrorists to attack. The terrorists, on the other hand, need to shake up this situation before they can successfully strike. Two basic ways of doing this are to attack the bomb site that is underdefended, forcing the counter-terrorists to call for backup, or to use grenades (high-explosive, flashbangs, or smoke bombs) to cause a brief period of chaos and confusion in the enemy ranks.

Or from chess:

> I was surprised to see that Capablanca did not initiate any active maneuvers and instead adopted a waiting game. In the end, his opponent made an imprecise move; the Cuban won a second pawn and soon the game. "Why didn't you try to convert your material advantage straight away?" I ventured to ask the great chess virtuoso. He smiled indulgently. "It was more practical to wait."
>
> —Mikhail Botvinnik, 6th World Chess Champion

And finally the most interesting point: "He will win who has military capacity and is not interfered with by the sovereign." Sun Tzu talks about the difference between civic virtues and military virtues. Humanity and justice are virtues of the state, but not of the army, he says. The army must be opportunistic and flexible. The state has principles to live by and precedents to set, but war is fierce and urgent. If you wish to win in battle, you must do immediately whatever is practical and effective.

This is the entire point of Playing to Win. Do not be interfered with by the sovereign. If you wish to win, do not play to be looked up to and admired. Do not play to make a statement about this move or that tactic. Do not play to avoid being called "cheap." Do not play to make friends with your opponent. Being friends with him is a civic virtue that you should indulge in after the match. During the match, you must harass him, annoy him, anger him, counter him at every turn, and surprise him when he is unaware. You must crush him. If you want to win, then don't do it with one hand behind your back just because forces outside the game compel you to. Inside the game, there are only military virtues. If you want to win, then play to win.

11. 1) Deception

> All warfare is based on deception. Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when far away, we must

> make him believe we are near. Hold out baits to entice the enemy. Feign disorder, and crush him. If he is secure at all points, be prepared for him. If he is in superior strength, evade him. If your opponent is of choleric temper, seek to irritate him. Pretend to be weak, that way he may grow arrogant. If he is taking his ease, give him no rest. If his forces are united, separate them. Attack him where he is unprepared, appear where you are not expected.
>
> —Sun Tzu, The Art of War

Our actions—both inside and outside the game—give our opponents information. We must recognize what information we are giving away, and replace as much of it as possible with false information. Outside the game, a player's mannerisms or "tells" can give him away when he's bluffing in a game with hidden information such as poker. Before the game even starts, your body language can tell your opponent if you expect to win or not. If he senses that you are intimidated, he knows to play aggressively, forcing you to play reactively.

Poker players have a variety of ways of masking their tells. The classic image of the poker player is the stoic, blank-faced fellow. Never show emotion and there is nothing to read. For most people, this is far too difficult to pull off. I've even seen a pro poker player play with his shirt pulled up over his nose, his hat pulled down to his eyebrows, and sunglasses over his eyes! You can't read a man you can't see! Then there's the other side of the spectrum: the life of the party. If you're always animated and excited, there's so much to read that it's hard for other players to catch the signals in your noise.

While this mostly applies during a game, it certainly has its uses before a game, too. You might intimidate a player before the game, or falsely project your own insecurities, or let him talk too much and reveal something he shouldn't about his play. I have never really done much of this, as I wonder how much it's all worth in the end versus just being a genuine and friendly person to your opponents. You'll have plenty of time to deceive them during the game. Nevertheless, if you are "playing to hustle," I'm sure these are valuable techniques.

There is much more opportunity to use "outside of the game" deception in games of hidden information that are played face-to-face. Let's look at two examples from the card game Magic: The Gathering that combine deception from both inside and outside the game: (1) the possible Counterspell, and (2) the apparently suicidal "alpha strike."

11.1. The Possible Counterspell. "Counterspell" is an important card in Magic that is able to cancel out virtually any card the opponent would play, after he reveals what his card is but before he gets to use it. This is a one-shot effect, though; if you play your Counterspell, you'll need to draw another copy of the card from your deck before you can do it again, and you are only allowed four copies (though there are other cards with similar effects).

You must seem to have a hand full of Counterspells when you have none, and you must seem to have none when you have many. The opponent does not know for sure if you have this card in your hand (that's hidden information only you know), but you can use techniques inside and outside of the game to shape his beliefs. When he plays a card, you can use your acting skills to ponder whether you should use that (nonexistent) Counterspell in your hand—then finally decide not to. Of course, you'll have to keep enough of your resources available that you could feasibly play the Counterspell because all players know the state of your resources (your "money" in the game). It's called keeping "two islands untapped," since it takes two Island cards to play a Counterspell.

Inside the game, you can make moves such as not spending your resources on things you obviously could spend them on, representing that you need those Islands to pay for your (again, nonexistent) Counterspell. Outside the game, you can fiddle with those Island cards on the table to bring attention to them. You can arrange them in a way that makes sure everyone knows

they are there, or more deviously, pretend not to care about them so the opponent thinks you are luring them into a trap. You can talk to the opponent about his options, verbally jabbing him about the humiliation he might face in this or that situation should he guess wrong. You can go to great, Academy Award-winning lengths to act like you have (or do not have!) that Counterspell. Also note that you could use the question of whether you have the Counterspell as misdirection for some other, far more important aspect of the game at hand.

All of this puts the opponent in a tough situation. If he knows you are faking, he should play his strongest threats right away while he has the chance. If he believes you have the counter, he should probably play his threats in the reverse order—weakest to strongest—forcing you to counter his weaker threats, but leaving you with no answers to his stronger threats later. If he guesses wrong, then he will either lose his strongest threat (in the case where he thought you had no counter but you really did) or play meekly and fearfully, not playing powerful cards that could give him the win, giving you more time to actually draw a real Counterspell later.

11.2. The Apparently Suicidal Alpha Strike. In Magic: The Gathering, "alpha strike" is a slang term meaning "attack with all your creatures." When you do this, you will not be able to use any of your creatures to block the opponent's attack on the next turn. Normally, you do an alpha strike in a situation where the amount of damage all of your creatures would deal will win the game immediately, so there is no next turn where the opponent can attack you back.

Let's imagine a situation where both you and your opponent have a bunch of creatures out, but that he has more than you. You see that if your opponent just attacks with all his creatures next turn (his alpha strike), then you'll only be able to block some of them, and the rest will make it through, dealing enough damage to win the game. That's no good!

You consider doing your own alpha strike this turn. Your opponent will be able to decide whether he should block your creatures with his or not. You see that if your opponent doesn't block your creatures, you still won't deal enough damage to win. Furthermore, when he alpha strikes you next turn, you'll have no creatures left to block (creatures aren't allowed to block right after they attack). This possibility leaves you much worse off than if you just did nothing at all.

Another possibility is that your opponent might block some of your creatures. If he does that, the creatures will fight each other. It looks like your opponent would lose so many creatures in this fight that he wouldn't have enough left to alpha strike you for the win next turn. It sure would be nice if your opponent chose this response, but this entire situation is clear to him as well, so he would have to be a fool to block your creatures.

Or would he? Suppose you actually do launch your apparently suicidal alpha strike. Since your opponent will of course know not to block, it looks like your move puts you in an even worse predicament than you were already in. Your move appears to be a horrible, game-losing move—unless you have some trick up your sleeve. So naturally, the opponent will know you have a trick. Remember this is a game with hidden information and you have several cards in your hand unknown to the opponent.

What trick might you have? There are many, but most straightforwardly, you might have a way to increase the amount of damage one or more of your creatures deals so that your alpha strike does deal enough damage to win. So your opponent knows you have something like this going on. He can't sit idly by and let your obvious trick beat him. What can he do? He can use his creatures to block your creatures and lose several of them in the process. He won't be able to defeat you next turn with his alpha strike anymore, but at least he won't lose the game to your silly parlor trick. Your move is so bad that it signals to him you must be up to something.

Tu Mu relates a stratagem of Chu-ko Liang, who in 149 BC, when occupying Yang-p'ing and about to be attacked by Ssu-ma I, suddenly struck his colors, stopped the beating of the

drums, and flung open the city gates, showing only a few men engaged in sweeping and sprinkling the ground. This unexpected proceeding had the intended effect; for Ssu-ma I, suspecting an ambush, actually drew off his army and retreated.

—Editorial note by Lionel Giles, The Art of War

So the bluff is that you have no trick at all. Inside the game, you've made a move that implies you have a trick, and outside the game you are surely acting up a storm about how eager you are to play your surprise card. In reality what you've done is trick your opponent into blocking and losing some of his creatures. By all sensible accounts, he should have won next turn, but now you've bought some more time to get back into the game.

11.3. Concealing Position. Don't let the opponent know where you actually are or where exactly you are trying to be. If he does not know these things, he will not be able to attack you easily, and he will not know from where your attacks will come.

Real-time strategy games such as StarCraft and Warcraft have a feature called the "fog of war" which prevents the opponent from seeing the positions of your units unless his units are nearby. If you need to establish a new base to harvest more resources, for heaven's sake don't let the opponent know that. You must keep everything about that base secret, including when and where you build it, and even whether you build it at all. In some cases, it's even feasible to set up a fake expansion base as a misdirection away from your real expansion base. Start building the fake base in a place you know the opponent will find it, and hopefully he'll think he stopped your expansion plans. This can give the real base time to set up defenses, it can waste the opponent's time, and it gives you information. His attack on your decoy tells you the position and composition of many of his units, but he still knows nothing about what you're really up to. Building an entire fake expansion base is a little extreme, though, and more often you'll focus on distracting the enemy with unimportant hit-and-run attacks designed to focus his attention on his own base, rather than on yours.

Even in a game of complete information such as a fighting game, you can conceal your current and intended positions. In these games, there is usually a "sweet spot" range, a range where the moves of your character work the best but the moves of the opponent are ineffective. For example, in all five versions of Street Fighter 2, when Ken and Ryu fight, there is a sweet spot of positioning just beyond the reach of the opponent's low roundhouse sweep. If Ryu stands at this distance without blocking (this makes him smaller than if he were crouching), Ken's low roundhouse sweep will miss him. If Ken's sweep misses, Ryu can easily sweep Ken in retaliation or even throw him. Also from this distance, Ryu can easily block Ken's projectile on reaction, and he can easily counter Ken's jump attack with a dragon punch. In short, a wide variety of Ken's most common moves are not effective at this very specific range. The exact location of this sweet spot, of course, varies by character matchup and by game.

The best players are well aware of this nuance of positioning and fight hard to position themselves favorably. The weaker player, though also "fighting hard" in some sense, probably doesn't even know he should be fighting for this exact distancing, so the expert player is easily able to occupy it. And from this catbird seat, the expert is in control.

Commonly, the expert will conceal the very existence of this sweet spot. He'll do a variety of safe moves in quick succession. He'll maneuver back and forth across the sweet spot in an elaborate dance designed to hide the true advantage he holds. Mysteriously, whenever the weaker player tries to attack, he's always barely out of range and gets hit back for his attempt. In frustration, he makes even bigger mistakes and soon falls completely apart. He is not unlike a deaf person trying to read the lips of someone doing an impression of a poorly dubbed Kung Fu movie; the real movements are too masked by the false movements to make sense of any of it.

The expert player is also aided by the "fear aura" around him. If, during his elaborate dance, he does a certain move or series with great intensity and purpose, the enemy cannot help but believe the tactic is valid. Often, it's just an illusion—a diversion—to waste time until the weaker player takes the bait and falls into the positional trap.

11.4. Concealing Weaknesses. If the opponent does not know when you are vulnerable and when you are safe, you can run circles around him. In fighting games, a "trap" is a great example of this, as nearly all traps have weak points; the trick is concealing them.

A trap is a sequence of moves that prevents the opponent from acting. A trap might be throwing one projectile after the next at the opponent, and when he jumps out, there always seems to be some sort of anti-air attack waiting. A trap can also be one or more tightly spaced moves (no gaps between them) followed by a move that allows the attacker to advance close enough to repeat the trap again. (When the enemy blocks or is hit by the moves, he's knocked back out of range, so an advancing move is needed to repeat the set).

Traps are hardly ever as solid as they seem to be in Street Fighter. Rarely can the attacker complete three, two, or even one repetition safely without leaving gaps. The effective trapper, though, is a master of deceit. Although gaps exist, there appear to be none, and the gaps that are visible are often used as bait.

Let's take a specific example of a trap to illustrate this. I'll take Ryu's fireball trap in Hyper Fighting Street Fighter, which is basically the same as most fireball traps in any version. Ryu has his opponent knocked down and in the "corner," which means the edge of the playfield. The opponent cannot back up any farther. The game is two dimensional, so there is no way "around" the fireballs other than jumping over them at Ryu. The key to the fireball trap is the slow speed fireball followed immediately by the fast fireball. When the opponent blocks the slow fireball, the fast fireball will hit him basically every time if he tries to jump between the fireballs at Ryu. So the "trap" here is really only two moves long! Not much of trap, yet through illusion, the trap can go as long as thirty fireballs or more!

First, Ryu can start with a "meaty" or "early" slow fireball against his knocked down opponent. This means the fireball is right on top of the opponent as he rises from the ground, so he's forced to block. If timed correctly, the very tail end of the fireball will make contact (rather than the front). This means Ryu has had time to finish the recovery phase of his first fireball in time to throw another one. The mechanics here are not important to the discussion, so just take my word for it that "meaty" slow fireball, another slow fireball, then a fast fireball form a three-move trap. The opponent will not (easily) be able to jump at Ryu until that series is over.

So now you have your poor opponent knocked down in the corner. He might try to jump before the three-series is over, in which case he'll get hit and probably give Ryu the chance to reset the series. Eventually, he'll wait for the third fireball (the fast one) after which there can be no more true trap. This is the gap. This is when he can jump. Of course, this is exactly what Ryu expects and that's why he didn't throw a fourth fireball, but instead waited for the jump and did an anti-air dragon punch to knock the opponent on the ground, in the corner again. The trap is reset. Now the enemy is shaken. This trap seems to be unbreakable. Ryu has created the illusion and can now use it to his advantage.

At this point, Ryu might throw a "meaty" slow fireball, then another slow fireball (that's a real trap), then another slow fireball. Now, that is not a true trap. The enemy could have jumped over the third slow fireball, but he's probably too afraid to try. Ryu could then throw a fast fireball, since "slow to fast" is a trap. Or Ryu might even sneak in three non-trap slow fireballs in a row then complete the trap with a fast fireball. Everyone knows you can jump after the fast fireball, but Ryu must surely know that too so—bam!—another slow fireball, trap reset. Shouldn't have hesitated. The Ryu player is using his "fear aura" to do moves that aren't

even a real trap (many slow fireballs in a row) and to reset the trap secretly (by going back to a slow fireball after the fast one). Though the Ryu player's intense, purposeful execution of these moves might make them appear to be a real trap, it's all just an illusion. It's an elaborate dance designed to conceal where the trap begins and ends.

The gaps are the key aspect of the traps. Because of deception, the defender is not able to detect which gaps are real and which ones are merely bait. Sometimes after a real gap, the attacker will simply wait for the defender to stupidly attack. The defender thought he was being pretty clever since he weathered the storm, then attacked at his first opportunity. Of course, this is such an obvious thing to do that the expert fully expects it.

I remember doing difficult reversal attacks at "clever" times during one opponent's traps, only to be countered every single time. I finally realized I was as clever as the man who runs from his pursuer into a room totally empty save for a large chair. It may seem "clever" to hide behind the chair, but the lack of all other alternatives makes the "clever" move wholly obvious to the opponent.

> Thus one who is skillful at keeping the enemy on the move maintains deceitful appearances, according to which the enemy will act. He sacrifices something that the enemy may snatch at it. By holding out baits, he keeps him on the march; then with a body of picked men he lies in wait for him.
>
> —Sun Tzu, The Art of War

The top fighting game players are able to conceal their strengths (sweet spot positioning) and weaknesses (gaps in traps) while simultaneously putting on mesmerizing dances designed to harass and confuse the opponent into hesitation, irritation, or worst of all—second guessing himself.

12. 2) The Sheathed Sword

To win with the sheathed sword is to achieve victory before the actual battle begins. After all, actual battle is taxing and produces casualties, and more to the point, involves the risk of defeat. Why risk defeat when it's possible to win before the fighting starts?

> Hence the skillful fighter puts himself into a position that makes defeat impossible and does not miss the moment for defeating the enemy.
>
> —Sun Tzu, The Art of War

How does this apply to playing competitive games? One application is to use your "fear aura" to win the psychological battle with the opponent before the game begins. Winning before the game even starts is always the best way, but let's suppose we actually have to play it. Even then, the "actual conflict" does not make up the entirety of a game. Most games begin with some kind of jockeying for position or resources, building up of attack potential and defense potential, and only later in the game does the conflict take place.

The conflict is where game theory kicks in full swing. During this phase of the game (in most competitive games), players are faced with decisions that depend on "what he thinks I think he thinks I think he will do." Each player must measure the other and guess what he'll do, guess if the opponent will expect that guess, and so on. It can get very messy. When things get messy, there is the possibility of surprise, luck, and defeat.

In many games, though, it's possible to lay traps or perform tricks that must be dealt with before the actual conflict can start. What I mean is that it's possible to throw up brick walls that the opponent must break through before the back-and-forth strategic play, the "fun part," can even begin. If an enemy must first defeat three brick walls before even facing you in actual battle, then he'll be weakened—or even defeated—before real battling begins.

12.1. StarCraft. In the real-time strategy war game StarCraft, a player makes a huge number of choices long before actual conflict occurs. These are decisions about how he builds his base and which units he produces when. The possibility of being defeated before "the actual game" begins is quite high. You're Protoss and didn't build any Observers? Too bad, because you die automatically to my invisible Dark Templars or invisible Lurkers. It doesn't matter what you have, since you can't even attack my invisible forces. You're dead. Or perhaps you're Protoss and didn't build any anti-air (maybe you were going for a ground force of Zealots). That's too bad too, since now you die automatically to my air force of Mutalisks, which again, you can't even attack. Maybe your mistake was not checking the perimeter of your base carefully enough. I built a bunker just outside your visual range, and put four marines in it right at the start of the game. Then I built another bunker a little closer to your gas mine, this time in your view. You'll have great difficulty stopping that second bunker, since you'll have to take fire from the first bunker if you even try. I'll eventually leap frog those four marines all the way to the heart of your base.

The list goes on and on and on. StarCraft games often go on quite long, with tactics, counter-tactics, and plenty of game theory and strategy. Your three bases in good position versus his five bases which are poorly defended. Should you cut off his mineral supply? Lay siege? Attack his flank? Sounds like we're "actually playing" here. But many games of StarCraft are over before the "game" part even begins because there are so many ways one can lose the game before real conflict begins.

This isn't necessarily a design flaw at all. You might just call it depth, though it can be frustrating to beginners who play ten games in a row of "Okay, now I know to always scout my base perimeter," "Okay, now I know to always scout his base," "Okay, now I know to build detectors quickly," and so on. There are a lot of hoops you have to jump through before you can reasonably hope to get to the "actual game."

12.2. Guilty Gear XX. Let us consider the strangely-named fighting game Guilty Gear XX. There is a character named Chipp in this game who has remarkably few hit points. The simplest combo or solid hit does an incredible amount of damage to him. When Chipp exchanges blows, Chipp dies. The Chipp player should not seek to engage in "actual fighting," but instead should attempt to lock down or "rush down" his opponent. Chipp has amazingly fast movement and moves, the ability to teleport, to turn invisible, and to jump three times before landing (rather than just two like other characters). Chipp can unleash a flurry of attacks that force the opponent to block sequence after sequence. During this time, Chipp builds up his own "super meter," which he can spend to make his rushing sequences even more effective. Meanwhile, the opponent is unable to do much and finds building up his own super meter difficult. When Chipp lands a combo on the opponent it won't do that much damage, but Chipp often has the option to end the combo with a "freeze" move that puts the opponent into a guessing game. If they guess wrong, they get hit by another combo into another guessing game. If they guess right, they merely "get to play," finally. Chipp's prime directive is to never let the opponent really play, because if they are actually allowed to get their own game going, Chipp's extremely low life total will put him at a disadvantage.

12.3. Magic: The Gathering. It is possible to win with the sheathed sword in the card game Magic as well. In the normal course of this game, each player will play one "land" card almost every turn for the first several turns. In Magic, these land cards are resources. So on the first turn, a player usually has access to just one land, then two on the second turn, etc. More powerful cards require you to have more lands. As the game progresses, each player has more land resources, allowing him to cast more powerful (or more numerous) spells.

But wouldn't it be great if you could prevent the opponent from having lands at all? Deny him resources and he will have lost before the meat of the game even begins. This is exactly the aim of a "land destruction" deck in Magic. A deck of this type contains many lands (ensuring that you will always have enough) and many cards that destroy lands. Most of these cards destroy a single land controlled by the opponent, though there are variations on the theme. One card might cost less to use, but destroy one of your own lands as well as one of the opponent's (that's okay, you have plenty of lands). Another card might return a land to the opponent's hand or to his deck. A player can only play one land per turn, so this puts the opponent behind in the race of resources. The idea is that if you hammer his resources while maintaining your own resources, the opponent will never have a chance to put together any game of his own. Once you strangle him of options, you can win the game yourself with even the weakest of offensive cards. Winning happens incidentally and without much effort when you have denied the opponent any chance to play.

Another example of this from Magic is a "disruption" deck. Disruption is a general term for stopping the opponent from getting his game together, so you could say that land destruction is one form of that. Usually, though, disruption refers to forcing the opponent to discard cards often, and destroying the cards he does get in play. You don't need to make him discard everything, and you don't need to destroy everything. You just need to get rid of his most important stuff before he ever gets to actually use it. This allows you to get away with even hokey ways of winning because you've reduced your opponent to a quivering mess, unable to do much of anything to stop you.

12.4. Street Fighter Alpha 2. I'll now tell the story of one of my own Street Fighter tournament victories. The tournament was called the East Coast Championships 4, or ECC4. I won the Street Fighter Alpha 2 portion of the ECC3 tournament, so I felt a lot of pressure to win again. I made it to the finals where I faced veteran player Thao Duong. Thao plays only one character (Chun Li), and he's incredibly robotic, meaning he executes moves perfectly and rarely makes mistakes.

I was undefeated in the tournament so far, and Thao had one loss (it was double elimination format). This means Thao had to beat me 4 out of 7 games to be even with me, and another set of 4 out of 7 to win. I only had to win one set of 4 out of 7 to win.

I started by playing Zangief, my secret counter to Chun Li. Because it's widely believed Chun Li totally destroys Zangief (but not mine!), it would be a flashy way to win. Whether it was my year of no practice or Thao's playing skills or Chun Li's dominance of the game I can't be sure, but Zangief was not up to the task that day. No problem, since I would switch to my standard Chun Li killer: Ryu. I scraped together a win or two, but again my lack of practice was showing and Thao won by greater and greater margins. I then realized the horror of what I would have to do, and what I would become somewhat famous for in the Street Fighter community. I realized that the only remaining character I could reasonably play in a tournament was Rose, and furthermore that Rose, though very good against most characters, really only has one effective move against Chun Li: low strong.

This is where Sun Tzu comes in. My use of Rose's low strong move is both a method of winning before fighting and of waiting. The low strong is an uninspiring little punch that doesn't have all that much range, but it has amazing priority to beat other attacks. It's also incredibly fast, allowing Rose to do multiple low strongs in a row with only the tiniest of gaps in between.

The low strong was my brick wall—my first test. The only problem is that there was no second test. And worse yet, there really wasn't much "actual fighting" in store for Thao should he get past my "trick." I could only hope that he'd fumble in trying to get around it, and even become frustrated enough to make mistakes. In retrospect, this is not the best approach to take

against the robotic master of move execution himself, but it's still preferable to no strategy at all, which was my alternative.

I low stronged my little heart out. Probably over 90% of my moves were low strong, done at a very particular range, and with a particular pattern of timing that I dare not reveal (let me keep some secrets). I had infinite patience to low strong forever, forcing Thao to defeat this trick. If he could beat it, we would then have to actually play, and at that point surely he would win. But fortunately, he never did beat it: he fought it head on. At times, he would decide not to attack, not to beat against a brick wall. I used that opportunity to get at the optimal range (which is one pixel farther from him than the range of my low strong). From this range, I continued to low strong forever. I wasn't winning by doing that, but I wasn't losing either. Even the robotic Thao would eventually tire and attack, sometimes at the wrong times out of annoyance or desperation. Spectators reported that I did an amazing 18 consecutive low strongs without either myself or Thao doing any other moves.

A side effect of my low strongs is that they create a "baseline expectation" of what I'm going to do. The sneaky roundhouse I do after the 17th low strong is pretty tricky, actually. I mean, wouldn't you expect an 18th low strong after the 17th one? (Note: I was actually even more sneaky by doing the 18th low strong, then the low roundhouse.)

My story is dragging on as much as that match did. Each game is best 2 out of 3 rounds, and games tended to go the full 3 rounds. They went the full count of 4-3 when Thao won the first set, and all the way to the 14th and final game, where I won 4-3 in the second set to win the tournament. I collapsed in dehydration and drank a quart of red Fierce Berry Gatorade without pause. Even today, Fierce Berry Gatorade tastes like victory to me, but I digress.

Had I ever actually fought Thao "normally" with Rose, he would have killed me easily. Instead, in an amazingly boring and non-crowd-pleasing show, I attempted to prevent actual fighting through my "brick wall trick" of low strong. Furthermore, I bored my opponent into attacking hastily at times, and generally frustrated him, or at least think I did.

It's interesting to note that early rounds of Street Fighter tournaments are often dominated by "tricks" like the ones I've described. Few players have the will to keep those brick walls up forever, though, and eventually resort to "actually playing." Also interesting is that the last rounds of Street Fighter tournaments—especially the finals round to determine the top two players—very rarely operate anything like I've described. Far more often, the players good enough to get the final two are also good enough to easily avoid the kind of roadblocks I've been talking about, even if they have to devise countermeasures on the spot. The usual case at such high levels of play is "actual fighting" right off the bat, the very thing I try to put off as long as possible in a tournament match. So it seems that (my own exploits excepted!) tricks will only get you so far. Above a certain level of play, you must actively try to win the game, not just wait for the opponent to hand it to you. To the benefit of the spectators, when the best face the best, there are more often two bloody, clashing swords than a sheathed one.

13. 3) Discipline

Sun Tzu speaks about the strict discipline of soldiers in a number of his chapters. He explains that a clear and enforced system of penalties and rewards is imperative in the military. In the chaos of battle, men are put under immense strain both physically and emotionally, and in order for them to survive and for the greater purpose to be served, they must reflexively follow orders. The officers must trust the men to carry out orders and the men must trust the officers to issue good orders. Likewise, you must be able to trust your body to carry out your mind's orders.

13.1. Technical Skill. In the chaos of battle, you will only be able to execute difficult maneuvers if they have become second nature and practiced by rote. The more moves and

sequences that can be incorporated into your muscle memory, the more attention you can pay to the strategic tasks at hand, rather than being distracted by the mechanics of execution. This applies more to some games than others, of course. Players of tennis or fighting games need to heed this advice more than players of chess or the card game Magic.

> The moment you have to think about juggling is the moment you drop the balls.
> —Old juggling proverb

Some players have far more aptitude for discipline in execution than others. I'm not sure whether all players have the potential to reach the same level of precision, but some players require radically less practice to get there. Some would call this "skill." Beware that "skill" takes many forms and this is only one, and not even the most important one, though it does rank highly. The primary skills of competitive games—the ability to know the mind of the opponent and the relative value of pieces in a game—are elusive. It's hard to even detect these skills in others when they are occurring right in front of your face. But skill at execution is clear to all. Either a player can flawlessly execute a difficult series of moves or he cannot. Because of the ease of identifying this type of skill, I think it receives a bit too much emphasis, and I say that not just because I am notoriously lacking at it.

Execution is so important (beyond the obvious reasons) because it's more of a sustainable advantage than knowledge. In today's world, information flow about game tactics is very high, so new "secrets" do not remain secret long. The players who are best at execution—the "technicians"—will refine these innovations and improve upon them. Gaining knowledge is significantly easier than gaining more skill at execution—an endeavor that can take years of muscle memory conditioning.

13.2. Mental Toughness. Discipline is more than just skill at execution. There is also mental discipline: the ability to stay focused and conserve your limited resources of concentration, tenacity, alertness, and physical strength. Physical discipline is a factor, as it can determine how much endurance or alertness you have to work with in the first place, but mental discipline is what lets you stretch your resources as far as possible. You must create a situation for yourself that allows you to be just as fanatical about winning at the end of a tournament as at the beginning.

Chess master and author Edward Lasker had this to say about chess tournaments in his book Chess for Fun and Chess for Blood:

> I do not think there is any other mental strain comparable to the exertion to which a tournament game subjects the Chess master. Working at what seemed to me the most difficult mathematical problems has never exhausted me nearly as much as playing in a Chess tournament; and of all intellectual applications mathematical work is surely the hardest. That is why physical fitness is a most important factor in tournament Chess and why young players, whose brains can stand the poisons of fatigue much longer than those of older players, have a great advantage.

My colleague Seth Killian expressed these ideas terrifically in an article about Street Fighter tournaments, reprinted here:

> Winning a tournament requires more than just strategy and execution. It requires being able to look past all the distractions. It requires being able to grit your teeth and come back from what looks like an insurmountable lead. It's being able to consistently stay on top of your game, and face down the best players in the country, and that takes mental toughness. In analyzing what tournaments (rather than just "winning") require, this is almost invariably overlooked by scrubs—it's not something that you can "see" on a video, and

it's often the missing ingredient that keeps otherwise excellent players from having any real shot at winning when it counts. Maintaining your focus is essential. Here are a few of the most common pitfalls:

That "Not So Fresh" Feeling.

Tournaments (if you're not planning on losing early, and retiring to the fabulous snack bar) are almost tailor-made to sap your strength. You're in an arcade. You're tense. Everyone else there is tense. The music is loud. The lights are annoying. People smell. And you're there for between ten and fifteen hours straight, usually eating highly crappy food (or none at all), subsisting on sugar-water.

Every hardcore player has, at some point, felt that deep sense of burnout you get from playing a little (or a lot) too long. It's the Street Fighter equivalent of futilely reading the same sentence over and over again after studying too much. You slip into a minor coma, unable to do anything but the same stupid, ineffective thing you did two seconds before ("I know! I'll throw another fireball!" . . . eats vicious super-move as opponent reads him like a large-print book for the elderly). This is actually a non-minor problem for a lot of intermediate players—when you miss a certain move (especially fireballs), you're seized by the urge to "prove" (to yourself? to anyone watching? god knows . . .) that you CAN do the move (as if anyone really doubted it), and you jump at the first opportunity to do it. It's like you've got some ridiculous "rep" that you have to "defend" (your rep as a player so good, he's actually able to do the fireball motion on command!). So you go for a fireball, and get a standing fierce or whatever—you'd be AMAZED at how many otherwise smart, competent players will IMMEDIATELY try ANOTHER fireball. It's as though they've deviated from the mental script they had of how the match was supposed to look, and can't proceed until they get that part "right" (the part where they were supposed to throw a fireball). I can't tell you how many free jump-in combos just looking for this has netted me over the years. If you thought about it for even half a second, you'd realize this was a dumb play, but that's exactly what you don't do when you're burned out.

This may sound stupid to the uninitiated, but over the course of a tournament, not having been forced to think about your early-round wins can be a big advantage as you progress. If you don't have to think to win, you can stay loose, and fresh. Mental fatigue is a very real, though often overlooked danger. A lot of people actually tend to play WORSE after they've advanced to semi-finals and beyond because of this (another reason that tournament footage isn't always the stellar display you might expect—people are burned out—they've been there for 10+ stress-filled hours).

Here's one way to help alleviate the fatigue: develop a basic technique for winning. Against players who aren't capable of overcoming your little algorithm, you can virtually play on autopilot. Beating someone "out of your book" is usually done most easily with fireball characters (a perennial choice of strong players), but can be done in lots of ways. If you can implement a simple, effective technique like this, weak early-round opponents will spend all their time worrying about just getting past that (dodging your fireball barrage, or looking for an effective anti-air to stop your Zangief from jumping in for the 43rd time in a row). They're vastly more likely to do something

stupid just trying to get into position to actually attack your character (which is the only thing that counts). This is very nice, if you can manage it.

Please note: if you are a scrub, this technique is not for you. It requires not only having a gameplan but also having a secondary, simpler (yet still effective) gameplan. Some people use different characters to accomplish this earlier on. This not only lets you play on "autopilot" but also hides the best techniques of your main ("bidness") characters until necessary. It's also a perfect example of why you don't necessarily want to be flashy. If you want to win "by any means necessary," you first have to realize exactly what IS necessary. If you have some stupid pattern that's killing the opponent, don't bother doing anything else ("if it ain't broke, don't fix it"). This also has the added bonus of driving people absolutely nuts. Someone getting beat by a single, repetitive tactic usually gets really angry and short circuits, causing them to play even worse, making more mistakes, getting angrier, and so on. A vicious spiral.

Not only does this help you to preserve brainpower, it also minimizes the chances of anything "traumatic" happening that might haunt you later. This is another major pitfall for players at every level: getting stuck in the past. They get hung up on something that's already happened, mentally focusing on it, instead of the match at hand ("How could I have been so stupid?"). Bad idea. You're taking a mistake (which is already bad) and making it even worse by focusing on it. This is not going to help you, and no one else is impressed by your willingness to yell at yourself. For instance, when I'm playing against Ken or Ryu as Chun Li (always a challenging fight), and I finally bait them into throwing a fireball when I have super charged and ready, NOTHING frustrates me more than missing it. They've handed me the round on a platter, and I didn't take it. In cases where this has happened, even if the match is still close, I used to almost always throw it away entirely, disgusted with myself, feeling like "If I can't even super through a fireball, I don't deserve to win anyway." Dumb. The same thing goes for when you pull some lucky win out of your butt. Don't sit around punishing yourself for not having earned it ("I only won because he missed his dragon punch"). If you believe you don't "deserve" to have advanced, you're likely to prove it by losing the next match, stuck in the past. Best play is to laugh it off, thank/curse the deity of your choice, and move on. Luck (or the simple failure of your opponent to execute) is a real part of every tournament. Be happy when it goes your way.

13.3. The Future is Now.

Stuck in the past is not where you want to be. Where else don't you want to be? Major pitfall #3: Worrying about the future. While this probably isn't something that you'd think about if you've never been to a tournament, once you're there, it's easy to get preoccupied.

Not worrying about the future means not fretting about which bracket you're in, with who (something people seem to obsess over when they get there, and always a major cause of traffic around the organizing table). This will help avoid fruitless focus on the enormity of your task. If Luke had stopped to think about what he was really up against, he never would have left Tatooine. Sure, you may be freaked that Dominator#47 is in your bracket, but if you spend energy worrying about it, you're handing him a big advantage before the

match even starts. Lots of people psych themselves completely out. While it's true that these players have their reputations for good reasons, it isn't true that they've got some kind of magic powers, or are going to pull out some secret move that kills you instantaneously (actually, even if that were true, worrying about it would still only make things worse). Concentrate on the match you're playing, and beyond that, your next opponent at most. If you're new to tournaments, or are merely guilty of the sin of not knowing every player's history and profile, it may be worth your time to ask around a little. Knowing that Scrub#212 plays Ken, Ken, and nothing but Ken may be very helpful, especially when choosing your initial character. Advanced Tip #2: Try to have (at least potentially) alternate characters/teams—avoid being a one-trick pony, unless you are a mighty, terrifying, Pony of Death. This will prevent your opponent from being able to select a character who they wouldn't have otherwise picked, but who beats your only guy (or team) "for free."

Matchups aside, however, you should always (almost always, anyway) pick the characters you're most comfortable with. I didn't start playing Chun Li because I thought she was #1 (she isn't even close)—I picked her because I felt comfortable with her. Even if it may open you up to a slight mismatch, you want maximum execution, and playing with "your" character is the easiest way to make that happen. Don't rely on someone else's "rankings" to decide your teams for you. Just because the theorists on www.shoryuken.com have decided that "X beats Y" doesn't mean you can't win (note: this does not mean I think rankings are worthless—quite the contrary. It's just pointing out that rankings assume evenly matched players, playing at full capacity, which is (obviously) not what you get in every tournament match. Duh.). Playing "your" character also vastly decreases your chance of being paralyzed when you're put into unfamiliar situations—something that top players are good at doing to you. You don't want to have to stop and think about which technique is going to get you out of this one; you want to know reflexively, automatically. The hesitation that anything else brings on will cost you.

To maintain mental toughness, you want to stay fresh, be in the moment, and stick with what you know. Focus on your match, and you can hold on to the motivation required to win.

—Seth "s-kill" Killian

14. 4) Attacking by Fire

Those who use fire as an aid to the attack show intelligence; those who use water as an aid to the attack gain an accession of strength. By means of water, an enemy may be intercepted, but not robbed of all his belongings.

—Sun Tzu, The Art of War

Sun Tzu spoke of using fire against the enemy, but he was driving at a fundamental tactic: attacking in parallel. One can set fire to an enemy building to drive him out into an ambush. One can set fire to one side of an enemy camp while taking up positions on the other side, again driving the enemy into an ambush. In all cases, the fire is basically used as an extra force of attackers. The fire cannot be reasoned with or bargained with or ignored. The fire has no mercy. While it serves the same function as a band of men would (to attack the enemy and drive him to action), the fire requires no manpower once it is started. It also finds its way inside a barracks without risking the lives of a squad.

Because the fire acts independently, it allows a given group of men to apply more attacking force than would otherwise be possible. Because fire can act as a barrier, it can allow a single group of men to attack from two sides at once without halving their numbers. The lesson is that attacking two times at once is deadly effective.

This is a basic concept in numerous games. In fighting games, projectiles such as "fireballs" are basically independent attacking agents. Once a character spawns a projectile attack, that character is free to move and perform other attacks while the fireball does its thing, allowing basically two attacks at once. The fighting game Marvel vs. Capcom 2 takes this to the extreme, allowing a player to attack not only with projectiles and his main character but also by calling another "assist" character into the battle at virtually any time who performs another attack. This ability to attack in parallel (with the main character and with assist characters at the same time) allows for some incredibly nasty pressure patterns. If the opponent is unable to attack in parallel (if his assist characters are dead) and you are, then your advantage is overwhelming.

Two basic tactics in chess, the fork and the pin, are conceptually similar to attacking in parallel. In a fork, one piece is able to threaten multiple enemy pieces. For example, consider a knight that could move one way to take an enemy bishop or another way to take an enemy rook. If the enemy cannot capture the knight, he will be unable to protect against these two simultaneous threats. He may move the bishop, only to lose the rook, or he may move the rook, only to lose the bishop.

A pin is when a piece threatens an enemy piece, but if that enemy piece is moved out of the way, it merely puts the piece behind it in danger. For example, consider a rook that threatens an enemy bishop several squares away. It is the enemy's turn to move, but behind his bishop is his king! If the bishop is moved out of the rook's threat, it merely puts the king in harm's way. (That's an illegal move: you can't move into check.) We say that the bishop is "pinned to the king" in this situation. The rook seems to merely attack one piece, but in a way it's a double threat. Turn-based games are often about sneaking in what effectively amounts to two moves (two attacks) in one move.

A much more direct example of Sun Tzu's attacking by fire would be the more literal case of HE-grenades ("high-explosive") or "flashbang" grenades in the first-person shooter Counter-Strike. Since it takes a couple seconds for a grenade to explode once thrown, the attackers can be fully free to act at the same moment the defenders must deal with the damaging effects of an HE-grenade or the blinding effects of a flashbang. Five players and one well-timed grenade can often have a greater effect than ten players without grenades. "Attacking by fire," or attacking doubly by using a grenade, projectile, or well-placed chess piece can create an overwhelming advantage.

15. 5) Divide and Conquer

15.1. Introducing Zileas. Although I grew up in the realm of fighting games, my community is a mirror image of nearly every gaming community. The real-time strategy game community even has a bizzaro-world version of me called Zileas (some call him Tom Cadwell). In an odd footnote of history, I was a senior at MIT when Zileas was a freshman, but I never actually met him there. We each knew the other through reputation in our respective game genres, and eventually crossed paths in the incestuous game industry.

Zileas wrote a great deal about how to divide and conquer the enemy and to concentrate firepower—and so did Sun Tzu.

Zileas was talking about StarCraft and Sun Tzu was talking actual war, but since real-time strategy games are (arguably) simulations of actual war, it's not surprising that great minds thought alike here. What's interesting is that while Sun Tzu wrote mostly about the large, macro scale, Zileas wrote about the very same concepts on the small, micro scale. Ironically,

Zileas made his fame in the StarCraft world by developing and writing about his "new school" approach to the game where he focused on dividing and conquering and concentrating firepower on the micro level, rather than the "old school" approach of concentrating on the macro level. In case you missed the irony, it's that the old school that Zileas argued against was just another interpretation of the very same concepts his own school was based on, all straight from The Art of War.

On the most zoomed out level, Sun Tzu tells us when to attack, based on the sheer size of the armies involved:

> It is the rule in war: If our forces are ten to the enemy's one, to surround him; if five to one, to attack him; if twice as numerous, to divide our army into two, one to meet the enemy in front, and one to fall upon his rear; if he replies to the frontal attack, he may be crushed from behind; if to the rearward attack, he may be crushed in front.
>
> If equally matched, we can offer battle; if slightly inferior in numbers, we can avoid the enemy; if quite unequal in every way, we can flee from him. Though an obstinate fight may be made by a small force, in the end it must be captured by the larger force.

On the most zoomed out level, Zileas tells us when (in StarCraft) we are losing:

> If your kill ratio multiplied by the ratio of your production to their production is less than 1, you are losing. If their economy is gaining speed, and yours is stationary and this number is close to but over 1, you are still probably losing. When I say kill ratio I do not mean units killed/units lost; I mean resources killed/resources lost both in terms of unit production, miscellaneous upkeep costs (scarabs) and building production/loss.

That last Zileas quote is pretty mystifying, but if you read it about twenty times, you might find some deep StarCraft insights!

15.2. Mismatched Forces. One of Sun Tzu's main points is to attack an inferior force with a superior one. Even if both armies are of the same size and power, this can easily be done by looking at smaller pieces of the whole. If the enemy only defends one piece of his empire—and we know this—then the rest of his empire is wide open. We can send but a fraction of our troops to dismantle any number of his undefended spots. The more spots he defends, the weaker each spot becomes. If he defends all ten of his outposts equally and we concentrate the attack of but half our army at one spot, we outnumber him five to one! We have concentrated our firepower, while the enemy's has been divided and weakened.

All of this rests upon the shoulders of secrecy and reconnaissance. Without these, Sun Tzu's method of divide and conquer would not be possible.

> The spot where we intend to fight must not be made known, for then the enemy will have to prepare against a possible attack at several different points; and his forces being thus distributed in many directions, the numbers we shall have to face at any given point will be proportionately few.
>
> Numerical weakness comes from having to prepare against possible attacks; numerical strength from compelling our adversary to make these preparations against us. Knowing the place and time of the coming battle, we may concentrate from the greatest distances in order to fight. But if neither time nor place be known, then the left wing will be impotent to succor the right, the right equally impotent to succor the left, the van unable to relieve the rear, or the rear to support the van.

So Sun Tzu tells us to keep our own positions and intentions secret. He tells us to discover the positions and intentions of the enemy. Through this we can concentrate our firepower on the enemy's weakest points, even at the expense of our own defense; if our weak points are secret from the enemy, he will not know where to attack and he will likely end up dividing his own forces. Our divided enemy thus conquers himself as he cannot hope to defend against our entire concentrated army with just a fraction of his own.

15.3. StarCraft: The "Old School". Sun Tzu's ways are the ways of the best StarCraft players in what Zileas calls the "old school." These players strive to build a strong economy to finance overwhelming hordes of units. When they outnumber the enemy ten to one, they surround; five to one, they attack, you get the idea. Individual battles matter little to these players, since it's more important to build a large mobile force capable of attacking the opponent's weak spots.

Most of these players come from the days of Warcraft 2, StarCraft's predecessor. Warcraft's interface and units didn't allow players to gain much benefit from micromanaging individual battles. Warcraft's units were more homogeneous, meaning you didn't see kill ratios of 50:1 like Templars and Reavers are capable of in StarCraft. In short, macromanagement was the only way to go. Build a large army. Divide the enemy's army. Concentrate the firepower of your army.

15.4. StarCraft: The "New School". And then there was Zileas. He came along and pointed out the amazing effects micromanagement of individual battles can have in StarCraft, and he preached the revolutionary ideas of divide and conquer and concentration of firepower—on the small scale, that is.

15.4.1. *Lesson 1: Shift queue to concentrate firepower.* When enemy forces engage, say ten marines versus ten marines, they will fire at each other in a mostly random distribution, so units will only start dying toward the end of the battle. The better player will select all his marines and concentrate their firepower on a single enemy marine, then (hold the shift key to) queue the next command to concentrate firepower on the second enemy marine, and so forth. All ten of the first player's marines will kill one of the enemy's units right away, reducing his firepower. The ten marines will then automatically (through shift queuing) concentrate their fire on the next enemy unit, then the next one, and so on. The enemy is dividing his own fire but the better player concentrates it. If you use this technique but your opponent doesn't, you'll probably end the fight with four marines left when he is down to none.

15.4.2. *Lesson 2: Use formation to concentrate firepower.* When two enemy forces engage, say ten marines versus ten marines, formation can be everything. If one player marches his single file line of marines into a horizontal line of enemy marines, the horizontal line formation will be able to concentrate its fire on the first marine in the single file line, then the second, and so on. The last marines in the single file line won't even be close enough to fire until all their friends are dead. Even better than a horizontal line is "shallow encirclement," a crescent-shaped formation that maximizes the firepower one can apply to a point.

15.4.3. *Lesson 3: Use choke points (narrow passes) to divide the enemy's units.* When a large enemy force must pass through a narrow choke point (either naturally created by terrain or artificially created by your buildings) he is dividing his own force for you. You can concentrate your firepower on each unit as it passes by.

There are more lessons, but his point is to focus on the concentration of firepower on the small scale of an individual battle. I cannot leave out Zileas's most extreme and signature use of concentration of firepower: his "Doom Drop."

Zileas is known for playing the Protoss race, the race smallest in numbers and most powerful in punch. Notice that they are already concentrated before he even got a hold of them. A so-called Doom Drop is when you fill about four shuttles (flying transports that carry other units)

with amazingly powerful Protoss attack units such as Reavers, Templars, and Archons. (Heavily armored air units (Scouts) must sometimes accompany the shuttles.) This superabundance of force—this concentration of firepower—is enough to overwhelm nearly anything so long as it is applied instantly at a single point. When one Archon, three Reavers, four Zealots, and three Templars suddenly appear in the middle of your base, the sheer force of it all applied to your surely badly positioned units is usually too much.

Even more devastating is what Zileas calls his "Extra Crispy with Slaw" version of the Doom Drop, where he uses hallucinated (illusionary) units to draw fire. Flying four shuttles into an enemy base is not an easy task, because they'll probably be shot down by whatever anti-air happens to be scattered about. Four Shuttles accompanied by, say, five Scouts is another matter. Now the anti-air fire has been divided among more targets. Better still if all these targets are accompanied by, say, ten illusionary Scouts. The illusions can't attack, but they draw enemy fire giving the real units more time to act. In effect, the illusions divide and conquer the enemy's anti-air fire. Deception at its best.

15.5. Micro and Macro. Why not apply Sun Tzu's teachings of divide and conquer and concentration of firepower on the large scale as well as the small? Must one choose one over the other? The answer in StarCraft, realistically, is yes. One only has so much attention that must be divided between micro Extra Crispy with Slaw Doom Drops and macro economy horde-building.

15.6. The Third Resource: Concentration. Zileas explains:

> Minerals and Gas are the resources that most players think in terms of. Although these are central to the game, you also need to think in terms of concentration. I define concentration as the time that a player has to spend focusing on a task during the game. Expanding is a high concentration task, especially if you are Protoss. Attacking certainly has a high concentration level, and the more concentration you put into an attack, the higher the effect. Even scouting carries a high associated cost. One big difference between 'someone who is really good' and someone who is #1 is knowing when you need to watch a battle and when you don't, and recognizing that your opponent also has a finite amount of concentration to draw from. There are a number of techniques for minimizing concentration costs (i.e. hot-keying buildings, using magic spell hot keys, queuing attacks, etc.), but everything you do has some intangible concentration cost. I would argue that as you get better at StarCraft, you go into a match with a larger innate concentration income/second. It is very possible when doing multiple coordinated attacks at different locations to use your superior concentration reserve (if you have it) to decimate an enemy who is tied with you in terms of unit control and tangible resources. Although I'm sorry to say this, concentration is basically talent. Playing a lot of games slowly raises it, but it's something some people have a lot of and some people don't. It's kinda like fast sprint ability in running: you can train up and become a great long distance runner, but for sprinting, there's always that talent based barrier—you can slowly improve it, but everyone has a limit. I'm sure that someone will push me off #1 who has more innate talent, along with the same skills.
>
> The best way to train concentration is to play 2 on 1s and 3 on 1s (multiple opponents vs. you). I can often pull 3 on 1s, and certainly 2 on 1s, and really the only reason I can do this is my ability to multitask. Also, team melee is an interesting game as it involves doubled concentration reserves on both

> sides . . . well almost doubled since its not one mind thinking at once and they have to communicate.

Whether you, as a player, spend your concentration resources on the large scale or the small depends on which game is at hand and your personal style. In either case, the same principles are at work. On one level or another, thou shalt concentrate thy fire and divide and conquer thine enemy!

16. 6) Study the Details of the Enemy

Carefully study the details of the enemy so you can glean his future moves. On this point, Sun Tzu's advice in war is not so different from Mike Caro's advice in the game of poker.

Mike Caro, "the Mad Genius of Poker," is a poker teacher, a poker writer, and one of the best poker players in the world. He uses computer analysis, but he is also famous for his work on the psychology and philosophy of gambling. Let's compare advice from Caro's Book of Poker Tells to Sun Tzu's Art of War.

16.1. Weak Means Strong, Strong Means Weak.

> When the enemy is close at hand and remains quiet, he is relying on the natural strength of his position. When he keeps aloof and tries to provoke a battle, he is anxious for the other side to advance. If his place of encampment is easy of access, he is tendering a bait.
>
> —Sun Tzu
>
> In a poker game, the urge to act strong when weak can be overpowering for most players. Its reverse—weak when strong . . . is also widespread.
>
> —Mike Caro
>
> When players go out of their way to act weak, it's because they hold strong hands.
>
> —Mike Caro

16.2. Sudden Action.

> The sudden rising of birds in their flight is the sign of an ambush at the spot below. Startled beasts indicate that a sudden attack is coming.
>
> —Sun Tzu
>
> Always be alert for a player who suddenly perks up and plays a pot. Usually it takes a genuine hand to rouse a player from a lethargic condition and get him interested in gambling.
>
> —Mike Caro

16.3. Smoke Rising.

> When there is dust rising in a high column, it is the sign of chariots advancing; when the dust is low, and spread over a wide area, it betokens the approach of infantry. When it branches out in different directions, it shows that parties have been sent to collect firewood. A few clouds of dust moving to and fro signify that the army is encamping.
>
> —Sun Tzu
>
> Players who are bluffing and are therefore afraid will be reluctant to exhale their cigarette smoke in a conspicuous manner. Remember, bluffers try to do nothing to bring attention to themselves and promote a call. Most bluffers would like to be invisible if they could. When a player exhales a huge cloud of smoke, he's not as likely to be afraid of your call.
>
> —Mike Caro

16.4. Clues from Appearances.

When the soldiers stand leaning on their spears, they are faint from want of food. If those who are sent to draw water begin by themselves drinking, the army is suffering from thirst. If the enemy sees an advantage to be gained and makes no effort to secure it, the soldiers are exhausted.

—Sun Tzu

Well-dressed people tend to play conservatively. However, a man wearing a rumpled business suit with a loosened tie is probably in a gambling mood and will play looser than he would if that same suit were recently donned and his tie were in perfect position.

—Mike Caro

16.5. Order and Disorder.

Clamor by night betokens nervousness. Fear makes men restless, so they fall to shouting at night in order to keep up their courage. If there is disturbance in the camp, the general's authority is weak. If the banners and flags are shifted about, sedition is afoot. If the officers are angry, it means the men are weary.

—Sun Tzu

Glimpses of an opponent's true nature can often be gained by watching the way he stacks his chips. The very organized manner in which these chips are arranged suggests that this player will probably choose his hands carefully, seldom bluff and won't display a lot of gamble. Of course his mood may change during the game, but in that case his stacks will probably become less neatly arranged. Notice that there are a few extra chips on top of his large stacks. This could be his profit.

—Mike Caro

16.6. Reckless Opponents.

When an army feeds its horses with grain and kills its cattle for food, and when the men do not hang their cooking pots over the campfires, showing that they will not return to their tents, you may know that they are determined to fight to the death.

—Sun Tzu

"Certainly, players displaying good-luck charms or showing superstitious behavior tend to be more liberal with their poker dollars than average players.

—Mike Caro

16.7. Remember: Weak Means Strong, Strong Means Weak.

Humble words and increased preparations are signs that the enemy is about to advance. Violent language and driving forward as if to the attack are signs that he will retreat. When the light chariots come out first and take up a position on the wings, it is a sign that the enemy is forming for battle. Peace proposals unaccompanied by a sworn covenant indicate a plot. When there is much running about and the soldiers fall into rank, it means that the critical moment has come. When some are seen advancing and some retreating, it is a lure.

—Sun Tzu

When players encourage your bet, it's because they think they have a winning hand . . . . The most common visual methods opponents use to make

your bet appear safe are: (1) Looking away as if uninterested; (2) Pretending to pass; and (3) Keeping their hands off their chips.

—Mike Caro

17. 7) Yomi: Spies of the Mind

What enables the wise sovereign and the good general to strike and conquer, and achieve things beyond the reach of ordinary men, is foreknowledge. This foreknowledge cannot be elicited from spirits; it cannot be obtained inductively from experience, nor by any deductive calculation . . . the dispositions of the enemy are ascertainable through spies and spies alone.

—Sun Tzu, The Art of War

Sun Tzu held spies in the highest regard, saying that they should be rewarded more liberally than any other relation in war because the foreknowledge they can provide is more valuable than any other commodity in war. When one knows where the enemy will strike, one doesn't need to spread his forces thin protecting a dozen possible targets. When one knows when the enemy is unprepared, one can strike and be assured of victory. When one knows the habits of the enemy general, those habits can be turned against him. The use of spies to gain foreknowledge is like being able to see into the future.

I see only one move ahead, but it is always the correct one.

—Jose Raoul Capablanca, 3rd World Chess Champion

17.1. Yomi. In competitive games, there is little more valuable than knowing the mind of the opponent, which the Japanese call "yomi." All the complicated decisions in game theory go away if you know exactly what the opponent will do next. Sun Tzu says that reading minds is for the spirit world, and on that I cannot comment, but I have witnessed firsthand the ability of some players to "achieve things beyond the reach of ordinary men" through eerily powerful yomi. Perhaps these players are simply adept at "studying the details of the enemy," but it seems to go far beyond that in some. There is one player who I would even say has a supernatural ability to spy on the minds of others, knowing which moves they will next make—if it weren't such an absurd thing to say. But believe me, those who have witnessed Japan's fighting game player Daigo Umehara do speak of these things in hushed tones, fancying that they might be true.

As a side note, I would even argue that the "strategic depth" of a game should be defined almost entirely on its ability to support and reward yomi. For a silly example, consider tic-tac-toe. There are only nine opening moves, and only three of them are functionally different. Even if through some witchcraft you know the move the opponent will make next, it doesn't really matter. The game is so constrained that the opponent is forced to make certain moves, so the novice player along with the master of divination will be on basically the same footing. There is no room to develop "tendencies" or a certain "personality" or style of play in tic-tac-toe. There is only a simple algorithm at work and no room for yomi at all.

17.2. Yomi Layers. Any decent competitive game needs to allow you to counter the opponent if you know what he will do. What happens, though, when your enemy knows that you know what he will do? He needs a way to counter you. He's said to be on another level than you, or another "yomi layer." You knew what he would do (yomi), but he knew that you knew (yomi layer 2). What happens when you know that he knows that you know what he will do (yomi layer 3)? You'll need a way to counter his counter. And what happens when he knows that you know . . .

I'll nip that in the bud: there need only be support up to yomi layer 3, as yomi layer 4 loops back around to layer 0. Let's say I have a move (we'll call it "m") that's really, really good. I

want to do it all the time. (Here's where the inequality of risk/reward comes in. If all my moves are equally good, this whole thing falls apart.) The "level 0" case here is discovering how good that move is and doing it all the time. Then, you will catch on and know that I'm likely to do that move a lot (yomi layer 1), so you'll need a counter move (we'll call it "c1"). You've stopped me from doing m. You've shut me down. I need a way to stop you from doing c1. I need a counter to your counter, or "c2."

Now you don't know what to expect from me anymore. I might do m or I might do c2. Interestingly, I probably want to do m, but I just do c2 to scare you into not doing c1 anymore. Then I can sneak in more m.

You don't have adequate choices yet. I can alternate between m and c2, but all you have is c1. You need a counter to c2, which we'll call c3. Now we each have two moves.

Me: m, c2

You: c1, c3.

Now I need a counter to c3. The tendency for game designers might be to create a c4 move, but it's not necessary. The move m can serve as my c4. Basically, if you expect me to do my counter to your counter (rather than my original good move m), then I don't need a counter for that; I can just do go ahead and do the original move—if the game is designed that way. Basically, supporting moves up to yomi layer 3 is the minimum set of counters needed to have a complete set of options, assuming yomi layer 4 wraps around back to layer 0.

This is surely sounding much more confusing than it is, so let's look at an actual example from Virtua Fighter 3 (which will almost certainly confuse you even more).

17.2.1. *Example of Yomi Layer 3 from Virtua Fighter 3.* Let's say Akira knocks down Pai. As Pai gets up, she can either do a rising attack (these attacks have the absolute highest priority in the game) or she can do nothing. A high rising attack will stop any attack that Akira does as she gets up, but if Akira expects this, he can block and retaliate with a guaranteed throw. Pai does the rising kick and Akira predicts this and blocks. Now the guessing game begins.

Akira would like to do his most damaging throw (that's his m), and be done with it. Even though the throw is guaranteed here, all throws can be escaped for zero damage if the defender expects the throw and enters the throw reverse command. The throw is guaranteed to "start" but Pai might reverse it. In fact, Pai is well aware that a throw is guaranteed here (it's common knowledge), and it's only obvious that Akria will do his most damaging throw. After all, this situation has happened a hundred times before against a hundred Akiras and they all do the same thing. It's really conditioning, not strategy, that tells Pai she needs to do a throw escape here (that's her c1). In fact, it will become her natural, unthinking reaction after a while.

Akira is tired of having his throw escaped again and again. He decides to be tricky by doing one of his very slow, powerful moves such as a double palm, a reverse body check, a two-fisted strike, or a shoulder ram (we'll just lump all those into c2). Why does a big, slow move work in this situation? First of all, if Pai does her throw escape and there is no throw to escape, the escape becomes a throw attempt. If her opponent is out of range or otherwise unthrowable for some reason, her throw attempt becomes a throw whiff. She grabs the air and is vulnerable for a moment. One important rule in VF is that you cannot throw an opponent during the startup phase or the hitting phase of a move. So if Akira does a big, powerful move, he is totally unthrowable until after the hitting phase of the move is over and he enters recovery (retracting his arm or leg).

Back to our story. Akira is tired of getting his throw escaped all day, so he does the standard counter to any throw: a big, powerful move. This c2 move does a decent amount of damage, by the way. The next time this whole situation arises, Pai doesn't know what to do. Her instincts tell her to reverse the throw, but if she does, she is vulnerable to Akira's slow, powerful move. Rather than go for the standard reverse, Pai does her c3 move: she simply blocks. By blocking,

she'll take no damage from Akira's powerful move, and depending on exactly which move it was, she'll probably be able to retaliate.

So what does Akira do if he expects this? In fact, he needs no c4 move since his original throw (m) is the natural counter to a blocking opponent. A throw is a special kind of move that grabs an enemy and does damage regardless of whether they are blocking. It's specifically designed to be used against an opponent in block who is afraid of an attack.

In summary,

Akira has throw and powerful, slow move.

Pai has throw escape and block.

As I tried to show, it's actually pretty reasonable to expect players to be thinking on yomi layer 3, 4 or even higher. It's because conditioning makes doing the throw escape an unthinking, natural reaction. But against a clever opponent, you'll have to think twice about doing a standard throw escape or blocking. The Akira player will do the occasional powerful, slow move just to put his enemy off balance and abandon his instinct to escape the throw. Then Akira can go back to his original goal: land the throw.

Another very interesting property is "beginner's luck." Notice that a beginner Akira in this situation will go for the throw, since that works on other beginners who haven't learned to throw escape. The beginner Akira will never land the throw on an intermediate player, though, since the intermediate player knows to always throw escape. But strangely, the beginner will sometimes land the throw on the expert because the expert is aware of the whole guessing game and might block rather than throw escape. Of course, the expert will soon learn that the beginner is, in fact, a beginner and then he'll be able to yomi almost every move.

Just as a final note on Virtua Fighter to further demonstrate the complexity of its guessing games, I actually greatly simplified the example above. I left out, for example, that Pai could attack with a fast move rather than block. And Akira has another c2 move besides a slow, powerful move. He can also do what's called a "kick-guard cancel" or "kg." This means he can press kick, which will make him unthrowable until his kick reaches recovery phase. If Pai tries to throw, she'll whiff. But then Akira can cancel the kick before it even gets to the hitting phase. Now he's free to act and take advantage of Pai's whiffed throw vulnerability. Now, Akira has a guaranteed throw, putting him back in the exact same situation he began in. The catch is that if Akira does kg-cancel and then goes for the throw he originally wanted to do, Pai will probably not have time to react with a throw escape. It's just too fast. She'd have to be on the next yomi layer. She'd have to expect Akira to throw, enter a throw escape, see the kg-cancel, then immediately enter her next guess (probably an attack or throw escape). Any hesitation and she'd be thrown.

The point I'm making here is that despite Virtua Fighter's absurd complexity, players really are able to think on the levels I'm hinting at. While having a mental mastery of the structure and payoffs of these guessing games is important, the master of yomi can cut to the chase by guessing correctly in a particular situation, rather than merely following a theoretically good rule of thumb for similar situations.

18. 8) Critical Points

There are often "critical moments" in a game, moments when the outcome of the game is really decided, or at least moments that hugely shift momentum and advantages. You might be carefully eking out small advantages over the course of 90% of a game, but a critical moment can blow the game wide open and cause fortunes to change.

After ten hands of low bets in a game of no limit poker, it can all come down to that one big bet your opponent makes—and how you react to it. In a fighting game, you can slowly build yourself a healthy lead, but one misjudged move that leaves you open can allow that huge combo

your opponent needs to even things up. In chess, lots of careful moves that develop and support your pieces don't count for much if you are caught off guard by a bold brilliancy that steals your mate. And in StarCraft, that army of units that took twenty minutes to amass can be wiped out in a mere second if you were distracted right when those enemy Templars psi-stormed everything.

I put this chapter near the end of the "Art of War" section because it cuts across so many topics already covered. If the entire outcome of a game can be determined by just one or two key moments, then deception becomes all the more powerful. Perhaps you can hide from your opponent when those moments arise. Discipline in execution and mental toughness also come to the forefront. Sure you can execute moves well, but can you come through at the critical moment when it counts? These moments can occur late in a game when your concentration is waning, possibly after you're already fatigued from playing matches all day in a tournament. Your mental alertness and tenacity resources are tapped, but do you have the discipline to maintain your mental toughness when the critical moment presents itself? Have you studied the details of the enemy to guess how he might react in this game-defining moment? And most of all, through whatever divination powers you possess, can you yomi what your enemy will do during this critical moment, so that you can dictate its outcome?

Critical moments are what you need to create and take advantage of when you're losing. They are what you need to suppress and avoid when you are winning. When you're winning, the last thing you need to do is entangle yourself in a situation where if you guess wrong, you lose your lead. You need to create safe situations that allow you to keep that lead, and force the enemy to take bad risks (which you are waiting for) in a vain attempt to get back into the game.

For example, consider "knock downs" in fighting games. When you knock your opponent down in pretty much any fighting game, he gains many protections (often total invulnerability) until he gets back up. Even with these protections, the attacker always has the advantage because at that critical first moment when the defender is fully standing up, the attacker can force a guessing game he controls. The defender might get up inside a move that must be blocked high or low, or in Street Fighter a "crossup attack" that might have to be blocked left or right. The attacker can do nothing at all, hoping the defender will attack at that critical moment—and be countered. The attacker calls the shots, and the attacker has the advantage. But this is a guessing game. It's possible that the defender will guess right or get lucky and hit the attacker with a combo or super move or whatever. Most of the time, you should play the odds and force that guessing game since there's more upside to you than downside when you force it. But what if you are winning? Even the most aggressive players know that aggressive play is about attacking safely and taking calculated risks. At the beginning of a round, creating that critical moment is what they want to do to gain the lead and rattle the enemy. But what if you are already winning by a large margin? It is possible that the calculated risk is worth it and that yomi fairy on your shoulder is telling you exactly how the enemy is going to act, but it's usually not worth it. If you simply back off, you have a 100% chance of not creating that critical moment the enemy needs.

The art of the "set up" is the art of seizing the critical moment. When you feel that critical moment is upon you, and you don't want to be in it, try every way possible to negate the entire situation rather than play the guessing game. In Street Fighter, a critical moment can occur right after your opponent just did some devastating thing to you, and you now have an opportunity to act. Most players are flustered in this situation and tend to do stupid or transparent things, and the clever attacker is waiting for this. Let the moment pass. Attacking at the very first moment you possibly can is a common, predictable thing to do. It's often smart (and the "textbook" thing to do), but it creates a moment your opponent can count on. He knows it's very likely you will do something during that moment. What if, instead, you do nothing for two seconds? In a fighting game, two seconds is a fistful of moments. If you didn't attack during that first moment, will you attack just after it? Or just after that? Doing nothing can defuse the situation and

bury the moment. It's very hard for your opponent to do a split-second move (like a parry or a counter or a super) out of the blue; he is relying on predictable moments. If you're winning, don't let him have any.

On the other hand, if you are losing, you often need to spur the enemy into action so you can engage him. Hopefully you can create a messy, chaotic situation because at least that will give you a chance to come back from behind. In war games, it can mean "attacking by fire" to force an enemy out of his defensive position and into an engagement with you. Maybe you'll lose that engagement, but at least you now have a shot. In poker, it can be threatening with your "all in" bet of everything you have. Does your opponent really want to take the chance that you have a good hand? If he's wrong on that one guess, the entire momentum of the game could shift.

Although winning with the sheathed sword is always best, harnessing the power of the critical moment is the culmination of so many of these concepts. With everything from deception to yomi in play, the whole of winning and losing can come down to the blink of an eye: the critical moment.

19. 9) Presence of Mind

Presence of Mind is the ability to see all the moments of a short-lived situation as they go by, often accompanied by the sensation that time has slowed down. This is possible when the situation has grown familiar to you and your brain is able to filter out all the unnecessary elements leaving only a few simple cues.

When you step into a new, unfamiliar game, critical moments will pass you by in the blink of an eye. At first, you won't even know that these moments mattered, that you were supposed to be paying attention during them. Even when you do know, a feeling of being overwhelmed by the millions of things that might occur can cause that moment to flicker by and you won't have that feeling of total awareness. The change comes when your mind is fully ready to accept the moments ahead. You know they are coming (because you recognize the pattern of events leading to them), you know that only a very few things could possibly happen during them, and you are able to filter out everything except the one or two cues that you're waiting for.

Let's take the fighting game Guilty Gear XX as an example, using my character Chipp. I run at you and force you to block my attack sequence (you'll block it crouching). One trick I can use is to sneak in an "overhead" kick that you'll have to stand up to block. If you are unfamiliar with Chipp, then my whole attack sequence will go by in a flash. You will be waiting for it to be over so you can do something again, and you don't even realize that a decision is required of you before my sequence ends.

Now let's say I show you this so-called overhead kick beforehand so you know exactly what it looks like. Anytime you see it, I tell you to block high. We practice this and you are able to do it. Now we play a real game, and I can probably still hit you with it. It's quite a task for you to sort through the chaos of a real match and actually see that kick. For all you know, it could come at any moment, which makes it difficult to mentally prepare for it. I think you probably could block this without trouble if you have good reaction times, but fighting games (and most competitive games) are not ultimately about reaction times, contrary to popular belief. One time they do come in handy, though, is when you are put in a situation where any of a thousand things could happen, and you have to detect a certain one and react to it instantly. Yomi is useful here (if you have some basis to predict which of the thousand things the opponent might do), but lacking that, you are left with reaction times.

Now I will tell you the crucial information you need to block the overhead kick. I cannot do it any time I want; there are only two ways I can do the kick. When I run at you, I will start with a few moves such as f+p, slash, slash, heavy slash. You don't need to care about these, really, and if they seem to go by in a blur, that's fine. At this point, my options become much

more limited, and one of the few things I can do is my "fire punch" series. It starts off with a distinctive looking, well, "fire punch." After that I have the option to do the overhead kick. If I don't, I can instead do a low kick. After the low kick, I have another chance to do the overhead kick. Those are the only two times I can ever do the overhead kick.

Now you can develop your Presence of Mind in this situation. I run at you and do some punches you don't really have to scrutinize. But you know that I usually do a fire punch after that. You are totally ready to see that fire punch and you already know it's likely you'll have to make a decision about blocking high or low soon. Ahh, there's the fire punch, right on schedule. Now you know I have my first chance to do the overhead kick. For all practical purposes, I have only two options. Your mind isn't spinning with the multitude of options you're faced with. You are totally focused on this one upcoming moment. You're waiting for it. You're tuning out all the extraneous information on the screen. Forget our health meters. Forget our super meters. Forget the sound effects. Forget the fancy graphics of our characters, and the pretty backgrounds behind them. The only thing you need to see is the start of that overhead kick. In time, this situation becomes so familiar, and your ability to filter out the extraneous stimuli becomes so good that you can't even imagine getting hit by this kick. The moment will seem to go by in slow motion, and it will even be amusing to you that the opponent could ever think he'd hit you with this move. Meanwhile, the beginner saw this moment go by in a flash and is oblivious to all these moments.

An analogy would be if I told you to clap your hands when you heard the voice of a certain person. I then put you in a room with thirty people all talking over each other. Every couple of seconds someone new is speaking, but it's all a cacophony and you can't imagine being able to make heads or tails of anything. Now, I give you the same task in a totally silent room with only the one particular person in it. Total silence . . . then the person speaks. You would think, "This is so easy, how could anyone possibly fail at this task?" You'd then clap your hands at the right time without any trouble. That is exactly how the expert player sees that 1/60th of a second go by when he has total concentration on the moment and is able to filter out everything but the single relevant clue.

Another example. In Virtua Fighter 3, if Jeffry lands a "major counter" low kick on the opponent (meaning he knocks the opponent out of a move) then he can get a guaranteed throw on them. If the low kick doesn't major counter, he can't get a guaranteed throw. When I first asked other players how they know when they can get the throw, they told me, "Just listen for the sound of the major counter. If you hear it, then enter the throw command." I thought they must be joking at first. It seemed too difficult to cut through all the chaos of a match and hear that one sound. But eventually, when I pressed the button to do the low kick, everything slowed down in anticipation of that one sound. When I heard it, I was so fully ready for it that entering the throw command in time was ridiculously easy.

The first thing to take away is that if you have command over seeing the moments in all sorts of situations that your opponents don't, then you have a huge advantage. You'll land your tricks on them all day, and you'll start to believe that your tricks are good. When you finally meet an opponent who has the same Presence of Mind as you, he will think to himself "Who is this guy kidding with his obvious tricks?" You will feel a little silly, and your tricks might no longer work.

But there is a level of understanding even above that one. Once you meet the expert, can you no longer do your "Presence of Mind tricks?" I used to think that you basically couldn't, and that you had to develop entirely different tactics. But then I noticed one player in particular who is unquestionably one of the best there is, and he often does things that are strictly terrible ideas in a textbook analysis. (His name is Alex Valle, and I'll mention him again later.) He does sequence A when we all know that sequence B is strictly better. He does trick X when we all

know that everyone decent can see trick X coming every time you do it, so it's a waste of time to do it. But he does it, he hits with it, and he wins. Why?

Valle does not accept the notion that his opponent has a fixed, unchanging ability to see the moments. Valle does everything he can to fluster and confuse the opponent, reducing the opponent's ability to see the moments. If something really weird happens in a game, the player can be caught in a moment of "what the hell was that?" and he's momentarily blind to the passing moments. During this time, he might get hit by something he'd ordinarily see every time. Valle makes you lose focus and lose that sense of time slowing down.

It's interesting to see how effective abandoning the textbook play really is for Valle. Not only is he able to sneak in things that should never work once the enemy is "blinded to the moments," but in order to blind them in the first place, he has to do weird stuff that confuses and hypnotizes the enemy. If you analyzed his choices on paper, you would say "this move is unsafe, this other move does nothing, this sequence is totally inefficient compared to this other one that always does more damage." His choices are often seemingly illogical and suboptimal, but he is the master and I am the student, not the other way around. When you are facing high level opponents who are more skilled at seeing the moments than anyone you have ever faced, it becomes that much more important to break out of the textbook mold and throw some figurative sand in their eyes. If you can blind them to the moments they would normally see, you then have access to the large repertoire of intermediate moves and tactics that you thought you couldn't use on the experts.

> Let your plans be dark and impenetrable as night, and when you move, fall like a thunderbolt.
>
> —Sun Tzu, The Art of War

Part 4

Play Styles

Every gaming community is a weird mirror image of every other gaming community. The same personalities and the same play styles seem to repeat themselves, ad infinitum. While reading about the personalities throughout the history of chess, I was struck by how similar it all was to the personalities I grew up with playing Street Fighter. I will now relate to you some of those personalities, and I will also take a very controversial stand: I believe that there is one style of play that is superior to all others. The upper echelons of gamers always seem to show a similar mix of varied play styles, but the one true style has its way of coming out on top. This is certainly not the style I am known for, but I'm working on it. Perhaps you will recognize these players in your own gaming communities

20. The Turtles

20.1. Chess Player: Tigran Petrosian, The Turtle (1929-84). Petrosian was often criticized for his "boring" play. He paid careful attention to his pawn structure and rarely exposed himself with any kind of pawn weakness. He would stop his opponent's attacks before they even started.

> With the initiative Petrosian often played like a python, squeezing and squeezing the victim until he was almost happy to resign. When the chances were balanced, Petrosian was like a mongoose deflecting every thrust.
>
> —Larry Parr, Outspoken Chess Player

My circles have a different animal-term for such a player: a turtle. The turtle takes no risks, and engages in no unnecessary action, much to the dismay of the spectators who always hate a turtle. Petrosian had these responses to his critics:

> Some consider that when I play I am excessively cautious, but it seems to me that the question may be a different one. I try to avoid chance. Those who rely on chance should play cards or roulette. Chess is something quite different.
>
> —Tigran Petrosian
>
> They say my chess games should be more interesting. I could be more interesting—and also lose.
>
> —Tigran Petrosian

His second response goes to the heart of the matter. Petrosian, and nearly all turtles, are simply trying their best to win given the particular situation and their own knowledge and skills. Petrosian did not win many tournaments, usually taking second or third place, but he was still regarded as nearly impossible to beat. Even turtles have their day, and in 1963 he won the World Championship from the top Soviet player Mikhail Botvinnik.

20.2. Street Fighter Player: Ricky Ortiz, The Turtle. Ortiz is an unusual little fellow: dainty and effeminate, he often changes his hairstyle and hair color, and he occasionally wears glitter on his face. Like Petrosian, he is widely criticized for his "boring" play, yet he is also considered almost impossible to beat.

Although I am known for my patience in tournament matches and my tendency to annoy the opponent, Ortiz has taken these methods to entirely new heights. He plays a nearly zero-risk game, and is content to eke out a small advantage in life totals over his opponent. He then shamelessly "runs away" for the rest of the match. (This prevents the opponent from being able to hit him, and when the timer runs out, the game awards victory to whoever has the most remaining life.) His infinite patience upsets even the most solemn opponents as they become more and more desperate to even things up while the time ticks down. Ortiz is a slippery fish that's hard to catch.

His other skill is his ability to hover just at the "sweet spot" range: the range where his moves are most effective and his opponent's moves are least effective. He baits his exasperated

opponents into attacking at the wrong time, and uses his excellent reflexes to punish them for it. Gaining a lead allows him to run away even more, further angering his opponents and the crowd.

21. The Attackers

21.1. Chess Player: Frank Marshall, The Attacker (1877-1944). Marshall was from an earlier era in Chess history than Petrosian, the so-called romantic era. Marshall, like all romantics, lived for the brilliant combination and the fiery excitement of battle. He played for complicated positions with little regard for defense so he could pull out an amazing brilliancy for the win. His ability to trick his way out of troubles on board earned him the title "the Great Swindler." He played at least as much for the crowd and for the thrill of the attack as for actually winning. Marshall held the US Championship from 1909 to 1935.

> I have always liked a wide open game and tried to knock out my opponent with a checkmate as quickly as possible. I subscribe to the old belief that offense is the best form of defense.
>
> —Frank Marshall
>
> Some of Marshall's most sparkling moves look at first like typographical errors.
>
> —William Napier, Chess Player
>
> Probably no American champion took more pleasure out of playing chess, as opposed to winning games, than did Frank Marshall. He would rather lose the game than lose the chance for brilliancy.
>
> —Andy Soltis, Chess Grandmaster

21.2. Street Fighter Player: Alex Valle, The Attacker. Valle is a formidable man in every sense of the word. Of Peruvian descent, he is strong, carries himself with confidence, and can be physically intimidating. Valle is known for his offensive style, often "rushing down" turtles and overwhelming them with pressure. His style has also proven impossible for other players to copy; things that work for Valle work incredibly well for him, but they often only work for him. He does a lot of unusual things at unusual times and it can be very uncomfortable to face that in a match. He is renowned for his reflex speed and willingness to take risks often. You never know what is going to come out of him next, or when it will come. Even the technique he uses to physically press the buttons is intimidating and disconcerting. Valle's play style and physical presence often allow him to psychologically beat opponents long before the game is over—sometimes before it starts.

But I will now reveal what I believe to be Valle's great secret: his offense and his risk-taking are often illusions. This is no slight on him at all—in fact, it is a compliment. While Ortiz shamelessly avoids fighting, Valle appears to be doing quite a bit. He does lots of moves and he maneuvers around close to the opponent. It feels like he is attacking, but often he is merely doing an elaborate dance that keeps him mostly safe and lures the opponent into attacking. While he certainly does take more risks than most players and has better reflexes than most, many of his apparent risks are nearly a "sure thing," because he has conditioned his opponent to respond in a certain way at a certain time. One does not need fast reflexes or excessive risks if one can be virtually sure that the opponent will do (or fail to do) a certain thing at a certain moment.

Valle cleverly mixes his "fake attacking" with actual attacking. He mixes real risk-taking with simply capitalizing on people's bad habits. His unpredictability gives him one of the strongest "fear auras" of any fighting game player.

22. The Obsessed

22.1. Chess Player: David Janowski, The Obsessed (1868-1927). This grandmaster was completely fixated on one aspect of the game: the two bishops.

> He had little foibles about the kind of game he liked—his weakness for the two bishops was notorious—and he could follow the wrong path with more determination than any man I met! He was also something of a dandy and quite vain about his appearance.
>
> —Frank Marshall, on his good friend David Janowski

Janowski loved the bishops and his opponents knew it. He surely developed numerous lines of play and board positions that exploited the strengths of his pet pieces. It is the fate of the player obsessed with a certain facet of a game to know that particular facet better than almost anyone—even better than the best players in the world—but to be somewhat lacking when out of his element. Janowski's opponents learned to offer him situations that would allow him to keep his precious bishops in exchange for losing considerable other material. For many years, US players called the two bishops "the two Jans."

22.2. Street Fighter Player: David Sirlin, The Obsessed. And now I get to talk about myself! I am known secondarily for some of the same traits as Ortiz: my patience and ability to annoy opponents. But I am primarily known for my obsession with doing the same move over and over again. I try to find moves that are 100 times harder to stop than they are for me to do. If I can find something I can do over and over and over without fear of retaliation, then I am at my happiest. When I do discover such things, it doesn't say much for the game's design, but that isn't my problem as a player, and I have no obligation to anyone to play a game "as it was intended" or in an "exciting" way. Janowski caused the two bishops to be called "the two Jans," but I have caused myself to be called "low strong" after Rose's move in Street Fighter.

The theory is that if an opponent can't stop a certain move, then I don't have to bother with the sticky business of predicting what they will do next. I also don't have to worry about them predicting what I'll do: we all know what I'll be doing! As long as whatever I am doing isn't making me lose, I'm content to continue doing it and make the opponent prove that he can beat it.

I am also notoriously lacking in dexterity and "technical skill" at games. I've always had to make up for this with my good sense of timing (exactly when to do a move). When it comes to tournament performance, I was able to dominate the scene in a particular version of the game called Street Fighter Alpha 2. I won national tournaments, and could consistently beat any opponent in the United States, save for Valle and Choi. In other games, I have reached the upper echelons, but other players have overshadowed me.

The lesson to learn from my play style is that while it can get extremely far, obsession with a single aspect of a game just can't go all the way. Even in my most successful showings in Alpha 2, my secret was that at the highest level of play against Valle and Choi, I had to abandon my "same move over and over" tactics in favor of using my backup characters, which I played with a much more well-rounded style. After realizing the superiority of Choi's style, I have attempted to change my focus and "use all the buttons."

23. The Snakes

23.1. Chess Player: Howard Staunton, The Snake (1810-74). Many would say my epithet for Staunton is unfair, as he accomplished so many great things in his life. In fact, the standard physical design of chess pieces today is known as the Staunton design, which he commissioned and endorsed. He was the chess columnist for the influential Illustrated London

News for twenty-nine years. He played the first game of chess by telegraph, ever. He was even the leading Shakespearean scholar of his day, and he wrote an annotated edition of Shakespeare's plays. He was unquestionably a man of position, importance, and influence.

However, he proclaimed himself the "Chess Champion of the World." He abused his editorial powers and engaged regularly in what today we would call flat-out trash talking, both in print and verbally. He was rude and hostile toward those who beat him. It is said that he would use any advantage possible outside of the game, such as making his opponents sit facing the sun! Most famous of his underhanded exploits was his controversy with American champion Paul Morphy. When players challenged Staunton's self-proclaimed title, he made up excuses that he should not be expected to travel the globe because he had no time to take off from work. Paul Morphy took this as an invitation to travel to Europe and beat Staunton on his home turf. Morphy went to Europe and finally met Staunton and challenged him to a game (Morphy almost never directly challenged anyone, by the way). Staunton made more excuses and put the game off day after day after day. Morphy pressed him and he asked for a month to study his openings. Morphy agreed, yet Staunton never ultimately granted the match. Staunton went on to publish in his paper that Morphy hadn't showed up on this occasion, hadn't brought the necessary money to wager on the match on that occasion, and other bold-faced lies. For better or for worse, this type of personality seems to show up in every gaming community, and can be counted on to make blood boil and spur others into action!

23.2. Street Fighter Player: Jeff Schaefer, The Snake. Schaefer was in a perpetual state of argument with the entire Street Fighter community. He invented issues to debate, usually centering on how good the other Los Angeles players were, but often about how good various game characters were relative to each other. These character rankings changed every week, and Schaefer regularly took completely insane stances on almost every issue. You couldn't help but hate him. Most of his attacks were designed to "prove" that pretty much all non-Los Angeles players were no good, and he was happy to stoop to personal attacks to make the flames even hotter. He famously denounced the game skills of one Northern California player, saying he "can't get laid in a MORGE," which is the probably the strangest insult I've ever heard. Also, he spelled "morgue" wrong.

As a player, Schaefer was good, but not exceptionally so. His main contribution was that he made it practically impossible to sit idle. Schaefer got people's blood boiling, he made people travel and practice and come to tournaments. He has since left the Street Fighter community and strange as it is to say, I think we are worse off for this loss.

24. The One True Style

24.1. Chess Player: Emanuel Lasker, The One True Style (1868-1941). Lasker was polite, a remarkable player, and a remarkable person by all accounts. He held a PhD in mathematics and he happened to share an apartment with Albert Einstein in the 1930s. Dr. Lasker played bridge, Go, and chess. Although he had many interests, he utterly dominated the world of chess. He held the title of World Champion for an amazing twenty-six years, during which time he defended the title seven times. Dr. Lasker's winning percentage is the highest of any World Champion: 66%. His record was 52 wins, 16 losses, 44 draws for a total of 74 points in 112 games.

But numbers alone cannot convey the genius of Lasker. He was an attacker, but not overly so. He was a defender, but not overly so. His mathematical mind saw solutions on the chessboard that few others could see, but it was not about "finding the solution" to Lasker. He believed chess has a spirit, and that psychology of the opponent was at least as important as chess theory when deciding a move. His style showed a balance of many aspects and schools of thought, and

thus he was versatile and adaptable. Like all masters, he made his art look easy. He was also quite adept at making moves that made his opponents very uncomfortable, and at finding his way out of positions that other players called hopeless. The thing that really calls out to me about Dr. Lasker, though, is that others believed his ability to read the mind of the opponent was simply uncanny. Nebulous as it is to "know the mind of the opponent," that accusation shows up again and again when dealing with the world's best players of strategic games.

> Lasker won so many games from bad positions that he was accused by at least one opponent of witchcraft, by another of hypnotism and by many more as being grossly over-endowed with good luck. In fact, he often deliberately courted difficult positions because he understood the mental stress that can be built up in the mind of an attacker when he meets with a resolute defense. By building up an opponent's hopes and then placing a trail of difficulties in his path, Lasker would induce feelings of doubt, confusion and finally panic.
>
> —Bill Hartston, Chess Author
>
> While both Steinitz and Tarrasch . . . [put] into practice a perfect strategy, playing only the best possible moves on every occasion, Lasker's approach to the game was certainly more flexible. For Lasker understood better than anyone that the true nature of the struggle in chess was not an objective search for the truth, but a psychological battle against both oneself and the opponent in conditions of extreme uncertainty.
>
> —Bill Hartston
>
> It is remarkable, and deserves special mention that the great masters, such as Pillsbury, Maroczy, and Janowski play against Lasker as though hypnotized.
>
> —George Marco, Chess Annotator
>
> Emanuel Lasker was undoubtedly one of the most interesting people I came to know in my later life.
>
> —Albert Einstein

24.2. Street Fighter Player: John Choi, The One True Style. Choi is polite, humble, and utterly dominating as a player. In high school, he was a champion wrestler, and now he is a champion fighting game player, probably the best overall player in the United States. Choi has good reaction speed, but not the best. He has good technical skills and dexterity, but not the best. He is, however, one of the most adaptable, versatile players around. Choi quickly learns exactly what it is you're up to, and soon makes you feel a bit silly for thinking you could really get away with it. Like Lasker, he attacks at times, defends at times, and generally plays a balanced game. His style is one of simplicity, and he makes the game look easy. Also like Lasker, he combines the analytical approach of determining the logically correct thing to do in a given situation with the psychological approach of measuring and reading the mind of the opponent. It's very hard to get such a player "out of his element" since virtually any situation or turn of events becomes his element, just as much as it is yours. In the end, it's not hard to see why the central style has proven stronger than obsessive styles like my own, or overly defensive styles like Ortiz's.

Choi has won far too many US national tournaments to even mention.

25. The Invincible and The Beast

25.1. Chess Player: Jose Raoul Capablanca, The Invincible (1888-1942). If there were ever a player who played to win, it was Capablanca. Throughout his career he refused to study chess books or openings, which would ordinarily not be considered the attitude of a champion, but Capablanca was no ordinary player.

At the age of seventeen, he was one of many players to play simultaneous games against the World Champion Dr. Lasker in an exhibition. Capablanca won his individual lightning game. Three years later, he went on a tour of the United States where he broke records on both speed and results in simultaneous play. He played a whopping 168 games in ten consecutive sessions before losing his first game! His final score was 703 wins, 19 draws, and 12 losses. In 1909, he soundly defeated the American Champion Frank Marshall with a score of 8-1 with 14 draws.

He went on to thoroughly dominate chess with a record of losing only 36 games out of 567 during his entire career. He went ten years without losing a single game!!

By all accounts, Capablanca's style was direct and flawless. He treated every move as a puzzle with an optimal solution. Content with gaining a small advantage of space or material in the beginning and middle game, he would convert that advantage into a decisive win in the endgame, his known specialty.

> I always play carefully and try to avoid unnecessary risks. I consider my method to be right, as any superfluous 'daring' runs counter to the essential character of chess, which is not a gamble but a purely intellectual combat conducted in accordance with the exact rules of logic.
>
> —Jose R. Capablanca
>
> Poor Capablanca! Thou wert a brilliant technician, but no philosopher. Thou wert not capable of believing that in chess, another style could be victorious than the absolutely correct one.
>
> —Max Euwe, 5th World Chess Champion
>
> I have not given any drawn or lost games, because I thought them inadequate to the purpose of the book.
>
> —Jose R. Capablanca, on his own book about chess
>
> It's entirely possible that Capa could not imagine that there could be a better move than one he thought was good and he was usually right.
>
> —Mike Franett,
>
> Chess Master and editor of Inside Chess magazine
>
> Capablanca was possibly the greatest player in the entire history of chess.
>
> —Bobby Fischer, 11th World Chess Champion and youngest chess champion ever.

25.2. Street Fighter Player: Daigo Umehara, The Beast. The Japanese call him "Ume," the Americans call him "Daigo," and everyone calls him "The Beast!" Daigo is the best overall fighting game player on planet Earth. He is sort of like a Choi raised to the 3rd power, minus all emotion. When it comes to technical dexterity and deep knowledge of a game's nuances, Daigo is outclassed by many of his Japanese contemporaries, but when it comes to winning, there is no other. Daigo does not merely win; he utterly destroys. I watched Daigo completely humiliate an American player in a tournament match, just moments before I would face him in the exact same character matchup. Though I was armed with the knowledge of exactly what not to do, Daigo completely rolled over me in a virtual instant replay.

More than any other fighting game player in the entire world, Daigo has the power of yomi: the power to know the mind of the opponent. There is no need to execute difficult combos, or to have deep knowledge of the nuances of a game when you know exactly what the opponent will do next. Daigo throws out "risky moves" left and right, and lands virtually every one, because again, there is no risk when you know what the opponent will do. Going into my match with Daigo, I vowed not to attack at the "correct times" so as to be harder to read, but I found that it is nearly impossible not to attack at the correct times. I have ten years of experience telling me to do so. As soon as you feel the presence of Daigo inside your mind, you have that split-second

of second guessing yourself, which is the exact moment he finishes you off. Daigo (and Choi) are both great examples that there is a skill to competitive games more fundamental than the language of the particular game at hand. Daigo doesn't even need to be particularly "good" at a game to dominate it, he simply is Daigo and wins.

> I never thought a player was actually, literally psychic before . . . in the supernatural sense . . . but honestly . . . Daigo scares me. I think he might be.
>
> —Romel "Chaotic Blue" Shaheed, member of US National Guilty Gear XX team
>
> ". . ."
>
> —Daigo

Part 5

Advanced Player's Guide

26. Tournaments

You should seek out formal matches in the form of tournaments. The best way to measure your progress is to measure your ability to win, but matches you play outside of formal competition, real as they may seem, are rarely a good measure of much. The strongest steel is forged in the hottest flame, and fiercest competitor is forged in the most serious battle. Casual play is often for "fun" but tournament play is for blood.

In a tournament, even the same opponents you are used to facing may rise to a higher level of play. Players sometimes save their secrets—their best tactics—for serious competition. In a tournament, players tend to be more conservative. They also tend to find answers to tactics they have never answered before, because now they have to. They may cling to life in the game like the fate of Earth depends on it, whereas in casual play they freely give up a game in a position of disadvantage.

As you can see, playing for "fun" and playing to win are wildly different pursuits. Edward Lasker (who only coincidentally shares his name with the ultimate grandmaster Emanuel Lasker) summed this up at the beginning of the second half of his book Chess for Fun & Chess for Blood.

In the preceding pages, we have looked only at the pleasant side of chess—the kind played among amateurs for the excitement of a battle without bloodshed, in which the supreme command is in their hands, but the outcome of which is of no grave consequence to either player.

There is another side to chess, however, which is quite different—tournament and match games played by masters or those striving to become masters, whose standing, if not livelihood, may be seriously affected by the outcome.

Such games are no fun, even for the winner. They are the hardest work imaginable. You play for blood! You avoid the lure of beautiful combinations unless you see clearly that they do not endanger your chance to draw the game at least, if you cannot win it. For it is not the beauty of a combination which wins a tournament, but the number of points you make—a whole point for a win, a half a point for a draw, and an 'egg' for a loss.

26.1. Understanding Tournaments. I remember at one of my first game tournaments, I did not perform as well as I thought I should have. I entered with a friend who happened to be the one of, if not the, best players in the country, John Choi. (Yes, he won that day.) He counseled me "Don't worry. You just aren't used to tournaments yet." I disagreed and responded, "No, it's not that. I just didn't play well today." I now know that Choi was correct.

The tournament is a strange beast to those unfamiliar with its workings. There are many rules and nuances that have to do with running the tournament, apart from the rules of the game itself. Perhaps the tournament is single elimination format, or double elimination with a loser's bracket, or round robin, or Swiss. Perhaps players are seeded based on past performance. Seeding ensures that the best players have early matches against the worst players. But why should this be? If you are new, how is it fair that you have to fight the best players right off the bat? You might be inclined to complain about this or challenge the entire concept. The purpose of seeding is to prevent the very best players from eliminating each other early in a single or double elimination tournament. This is an example of something that you should waste no mental energy on during the actual tournament. (It is a matter of course to the veteran.)

There are many customs in a tournament. How will you determine whether you are the 1st player or 2nd player in a game where that is meaningful? How will you pick your characters in a fighting game or your side in war game, or your color in chess? The newcomer to tournaments, even if he is an expert at the game, will find himself a stranger in a strange land of foreign customs. When others talk to you, are they genuinely interested in being friends? Or are they "scouting you out" to find out if you are a threat or which tactics you might use? If you have

a thorough understanding of tournaments and how they work, this is a much easier question to answer and you will need to expend no mental energy on paranoia.

What is the format of a match in the tournament? A match is an encounter with an opponent that may take the form of a single game, or a set of games. In a single or double elimination tournament, the winner of the match (overall set of games with that opponent) is usually all that matters. Do you need to care about winning individual games, perhaps for tie-breaker reasons? Or is only winning matches important? What about the feel of a match? If a match is best 3 out of 5 games, you will need to have a feel for the flow of gameplay over the course of 5 games. Often, one player will be able to "figure out" the other, and the scales will tip more and more in his favor as games go on. You must be able to identify the moment that this is happening, and if you are the victim, then you better change things up one way or another. Does your tournament allow you to change what it is you control in the game between matches? In a fighting game, you can switch characters if you lose. (At least in America you can. In Japan, you cannot!) In a real-time strategy game, usually both players may switch "races" (sides) after each game. In the card game Magic: The Gathering, players are not allowed to switch decks between games, but both players are allowed to alter their 60-card decks by swapping in and out cards, one for one, from a pre-registered "sideboard" of 15 extra cards. It takes time to be able to identify when you should switch your strategy and when you shouldn't. All these factors are tied up in the strange practices of tournaments and can really throw off excellent players who are simply not excellent tournament players.

The only way to truly test yourself is through formal competition. You should not become merely an excellent player, as that is a very subjective thing. You must become an excellent tournament player. You must win tournaments.

26.2. Preparing for tournaments. Depending on who you talk to, preparing for tournaments takes either an enormous amount of work unthinkable by the layperson, or it takes none at all. In college, I used to say that the more you prepare for a final exam, the worse you'll do. The reason is that if the final exam is mere days away and you need to cram for it then your battle is already lost. Despite your best efforts, it will be hard to compete against students who have developed a natural understanding of the material and have been able to think about it and mentally manipulate it over the semester.

Gaming is not so different. Things learned at the last minute just aren't as effective as things you've fully integrated into your play over a long period of time. If something requires physical dexterity, you're much better off if it becomes deeply engrained in your muscle memory. If it's a tactic, you're much better off practicing it over time against a variety of opponents in order to gain a full, first-hand understanding of it. Basically, if you stay on your path of continuous self-improvement then you are prepared for a tournament.

However, an upcoming tournament is a way to refocus your approach to the game. There might be a few techniques you know you are bad at, but you usually get away with not doing them. If you are serious about the upcoming tournament, you will isolate those techniques and practice them by rote, no matter how boring or time consuming it may be. You might have a tendency to explore the unusual corners of the game. In a fighting game, perhaps you often play bad characters because you can. In a real-time strategy game, you play your "fun race" rather than your "business race" or you build "fun units" rather than "business units" in order to show off or have a little more variety. In a first-person shooter, you might develop skills with ridiculous weapons that are mostly useless. All of this may give a deeper understanding of the game, but in the tournament, you will not have the opportunity to explore every facet of the game; you will have just a few chances to show what you can do, and you better make them count. In a fighting game, you'll be playing your best character so that is what you need to practice. In a real-time

strategy game you will pick your best race, use your best build order and your best tactics. In a first-person shooter, you will use your best weapons and run your best routes on the map. It's nice to have some backup options, but let's be practical. Preparing for a tournament forces you to set aside your "fun" and develop the skills more important for winning. In a fighting game, you might be able to improve your skill at a certain character from a 20 to a 75 out of 100 (in arbitrary "skill units") in the same time that you could develop your main character from a 93 to a 93.5. But your main character is what is going to win you the tournament, and you need every edge you can get with him.

Another aspect of preparing for a tournament is knowing the meta-game that you are facing. That means knowing the prevailing trends of how the game is being played now, and how it will be played at the tournament. In Warcraft, is everyone going to play Night Elves and rush with Huntresses? In Street Fighter, is everyone going to play Chun Li? In Magic: The Gathering is everyone going to play a mono-red Sligh beatdown deck? If you don't know what you are going to face, you can be really thrown off come tournament day. Having an inkling of the meta-game lets you prepare for the right things. This is unusually important in a game like Magic: The Gathering where everyone brings their own custom-made decks to the tournament. If you know everyone is going to play a certain type of deck, you can make a deck that would ordinarily be bad, but is designed to beat what is popular. Being well-connected with your gaming scene and regularly attending tournaments gives you an advantage over the more isolated players.

In my own fighting game experience, I have seen that at high levels of play, the "meta-game" has an entirely different meaning. Top players usually don't need to consider the prevailing trends of how the game is played overall, because they can easily crush the mid-tier and below players anyway. But they often do need to consider the "mini-meta-game" composed of the current tricks and techniques of the two or three other players in the tournament who can actually beat them.

Either way, you can see that knowing your enemy is part of preparing for tournaments. Time and time again, I have seen new players who think they are very good claim that they would do well in tournaments, and they basically never do, at least not right away. Part of being good is being plugged into the tournament meta-game, and it's extremely difficult, and in some games impossible, to simply develop skills in a vacuum then waltz in and win a tournament.

27. Love of the Game: Not Playing to Win

Now it's time for what appears to be the opposite point of view: "playing to win" at all times is counter-productive. If you want to win over the long term, then you can't play every single game as if it were a tournament finals. If you did, you wouldn't have time for basic R&D, you'd never learn the quirky nuances that show up unexpectedly at tournaments, and you are likely to get stuck honing suboptimal tactics.

Playing to win and playing to learn are often at odds. If you play the game at hand to maximize your chances of winning, then you won't take the unnecessary risks of trying out new tactics, counters, moves, patterns, or whatever. Playing it straight is the best way to win the game at hand, but at the cost of valuable information about the game that you may need later and valuable practice to expand your narrow repertoire of moves or tactics.

Here's a simple example from Street Fighter. Let's say I know for a fact that one split second from now my opponent will do a particular "super move." To win the game at hand, the smartest thing to do is just block the move, but that doesn't teach me a whole lot. How invulnerable is his super move, anyway? Could I have stuck out an early kick that would knock him out of his super? Or could I have waited for the "super flash" to happen (signifying the beginning of his super move) and then done an invulnerable dragon punch 1 frame (1/60th of a second) later? Maybe my invulnerability will last longer than his and I'll knock him out of it. Maybe his will always win. That's valuable information to have for the time when you have zero energy and

the opponent forces you to block the super move and die. This situation will happen in the tournament, so you better know what your options are.

Very often in "casual play" I will forgo the safe option in order to try possible counters to certain moves. Even if I lose a game when a possible counter turns out not to work, the knowledge gained is well worth it, since I'll never make that particular mistake again (I hope!). If you really want to play to win, you have to know all the options open to you at every moment and that doesn't happen without a lot of disastrous experiments.

This concept applies to pretty much any game, of course. "Will my six Corsairs really beat his twelve Mutalisks in StarCraft?" Or, "I know I have the flak cannon, but will the shock rifle combo work just as well around corners in Unreal Tournament?" You will never know unless you try it.

27.1. Honing Suboptimal Tactics. Early in a game's life, players have not yet figured out which strategies and tactics are actually the best, though many players will claim to know all. Those players may very well know better tactics than other players of their time, but games evolve. New things are discovered that make old tactics obsolete. Usually, radically different and better tactics are discovered that put the old ones to shame. Sometimes, new counters are discovered that can entirely defeat the old "best" tactics. In a fighting game, you also have the concept of figuring out which characters are the best. It can take months (or years!) for players to figure out that character X, though widely thought to suck, is actually able to abuse bug/feature Y in such a way as to be nearly unbeatable.

So how does all this relate to playing to win? The hardcore "Play to Win" player will choose his one character, his set of powerful tactics, and hone them to perfection over time. He'll know all the tricks for that character to perform those tactics. For example, in the fighting game Marvel vs. Capcom 1, he might pick Mega Man and learn the "rock ball trap." This is a pattern of attack where Mega Man creates a soccer ball ("rock ball" in Japan), kicks it diagonally across the screen, then fires one blue projectile in the air, then one on the ground. That's three projectiles total, controlling the play field. While the opponent deals with that, Mega Man has time to summon another soccer ball and repeat the pattern.

A serious Mega Man player will learn the rock ball trap variations needed against Chun Li, the different variations needed against Venom, and so on. Other players will find tricks to negate the usefulness of the rock ball trap in general, then the Mega Man player will find the counter-tricks that allow him to keep the pattern going. This will feel a lot like "Playing to Win," but in the end, this player will do precious little winning. He will have mastered a suboptimal tactic that in the end is not bad, but isn't one-tenth as good as other things that other characters can do.

I think of a game as a topological landscape with lots of hills and peaks that represent different tactics/strategies/characters. The higher the peak, the more effective that strategy is. Over time, players explore this landscape, discover more and more of the hills and peaks, and climb to higher locations on the known hills and peaks. Players can't really add height to these peaks; they are only exploring what's there, though that is a rather philosophical distinction. The problem is that when you reach the base of a new peak (say, the rock ball trap peak), it can be very hard to know that the pinnacle isn't very high. It might be really difficult to climb (lots of nuances to learn to do the trap), but in the end, the effectiveness of the tactic is low compared to the monstrous mountains that are out there. You have reached a local maximum, and would do better to go exploring for new mountains.

In other words, playing to win involves exploring. It involves trying several different approaches in a game to see which you are best at, which other players are best at, and which you think will end up being the most effective in the end. When you are perfecting your rock ball

trap (your best chance of winning at the time), you have to realize that "playing to win" might actually involve taking up a new character you know nothing about—a character that you will eventually play ten times better than you could ever dream of playing Mega Man.

> It cannot be found by seeking, but only seekers shall find it.
> —Sufi Proverb

27.2. Learning Secret Lore. Tournament play often creates critical moments of decision when you are exposed to a very strange situation in the game. In a tournament, the best players get to play each other, often with a clash of play styles. They each have their own tricks and must find immediate answers to the tricks of their opponents. And it's not just for fun anymore, it's "real." It matters. Under this pressure, players find creative and unusual solutions to the tricky spots they get put into.

When these strange situations come up, will you be familiar with them? Do you know the options and the risks involved? Knowledge of "secret lore" or unusual interactions in a game often means the difference between winning and losing.

And how will you learn this secret lore? Perhaps you are preparing for a tournament, practicing, playing to win. What will you practice? You'll practice the things you know you need to do the most in a match. You'll practice against the things that you know you'll face. Basically, you'll do it all "by the book." Consciously preparing for a tournament is pretty much the opposite of exploring "unusual situations." In your practicing, will you seek out a player of a character you think sucks? Will you play characters you have no intention of playing in the tournament? Probably not. But what happens when a mysterious player out of nowhere shows up with that "sucky" character, and shows everyone how good that character really is? That other character you were messing around with might be just the thing you need. Too bad you didn't explore that, you were "playing to win."

The Karmic justice of it all is that love of the game really does count for something. Those who love the game play it to play it. They mess around. They pick strange characters, try strange tactics, face others who do the same, and they learn the secret knowledge. Those who play only to win can't be bothered with any of that. Every minute they spend playing goes toward climbing their current peak, attaining their local maximum. Perhaps they don't even like the game enough to be bothered with anything except the most mainstream character and the most mainstream tactic with that character.

I practiced pretty hard for a tournament in Super Turbo Street Fighter that occurred on August 9-11, 2001. Before the tournament, I decided to play only Dhalsim and to practice him a lot against whomever I could. I also happen to actually like the game, and I'd sometimes mess around with my "fun characters" of Honda and Ryu, and occasionally with my "professional" character: Bison. Dhalsim was my focus, though.

When the actual tournament came around, I would have never guessed what it all came down to. My Dhalsim did well, and it came time for me to face a well-known Japanese player who plays T-Hawk. T-Hawk is known to be terrible, especially against Dhalsim, but this was a prime example of a player who could work magic with a "sucky" character. After one game, my Dhalsim was utterly destroyed, and I needed a change of plans. I figured that my "casual play" Honda would do well, since I could sit and do nothing the entire game and be safe from T-Hawk. If he ever got near, I could head-butt and knock him away, then sit and do nothing. Anyway, my performance—a true exhibition of stubbornness and boringness in tournament play—paid off. I defeated the Japanese player in an utterly ridiculous character matchup that no one would ever predict actually happening in a tournament. I went on to lose another ridiculous character matchup against a different Japanese player, but that's another story.

The unlikely moral here is that playing to win is often counter-productive. Those who love the game and play to play will uncover the unusual nuances that might be important in a tournament. Those nuances might never be important, but the "play to play" player doesn't care. It's all for fun, and he's happy to accumulate whatever knowledge he can. The "play to win" player might lock himself into perfecting certain tactics/strategies/characters that will eventually be obsolete, as hard as that will be to believe at the moment. Meanwhile, the player who is able to take a step back and mess around will either discover new mountains to climb, or at least take a stab at climbing some other known mountains. The joke's on you when his mountain turns out to be ten times higher than yours.

27.3. My Own Advice. In 2003, I began to realize that there's a higher mountain out there in Super Turbo Street Fighter than the characters I had been playing. Given my personal skills and deficiencies and the meta-game of which characters I often lose to in tournaments, I decided to take up Vega as a new character (the Spanish fighter with the metal claw). For several tournaments I played Vega, and if I lost, I switched back to my old standby, Bison. That Vega practice paid off once the East Coast Championships 9 tournament rolled around in 2004. Besides a single match where I played Bison, I played Vega the entire tournament and won 1st place, with a record of 8 rounds to 0 in the finals.

27.4. A Note From Japan. Months after writing the above chapter, I traveled to Japan in March 2003 as part of Team USA, representing the United States in Super Turbo Street Fighter. I also played a bit of Capcom vs. SNK 2 over there. One interesting thing about Japanese players is that they stick with just one character (or one team of characters in CvS2), since their tournament format requires keeping the same character the entire tournament. In the United States, we can switch characters between games, giving us an incentive to learn at least two to four different characters.

The Japanese players definitely proved to me that by sticking to one character and learning everything about that character, you win the unwinnable matches. In both Street Fighter games I played in Japan, I saw Japanese players who devoted themselves to supposedly weak characters and demonstrated that the topological peaks for those characters are miles higher than I had realized. One might think that that invalidates some of the points I made about exploring many mountains in hopes of finding the highest, yet the winner of the CvS2 tournament used the same old unfair, broken characters and tactics that we're all aware of (A-groove, roll-canceling Blanka/Sakura/Bison for those who care). That same player, Tokido, won the CvS2 portion of the 2001 tournament I mentioned above, so perhaps he's proved my point after all. He's identified what many players agree is the highest peak of that game, and devoted himself to perfecting it. Unfortunately he's an incredibly boring player, but nonetheless a boring player who won the US National and Japan National tournaments!

28. What Makes the Best Player?

I have spent years pondering which traits make a player the best at a game. Is there one archetype of the unbeatable player? Or are there many paths to victory? Do all competitive games require basically the same traits, or does it vary wildly between games? This is a big topic, beyond the scope of this book, but I'd like to touch on it.

The book Built to Last asks a similar question about which traits make a company the best in its industry. If Built to Last merely compared all #1 companies, it would have discovered such similarities as "they all have employees and buildings." In order to avoid "discovering buildings," Built to Last compared the best company in a number of industries to the second best companies in those industries. The best and second best shared a lot of traits, but the real question is whether there is a set of traits shared by the #1s that the #2s don't have. So I tried to

determine what distinguishes the best players of a game from the pack of near competitors, the top ten.

First, I identified a list of factors that I thought might be the most important ones, then looked at the best players of various games to see which factors really set the gold medallists ahead of the pack. This is all highly anecdotal and unscientific and slanted toward games I know about, so take it for what it's worth, but I do believe that I'm on to something here.

Here's my initial list of traits that I thought might make a gold medallist:

- Familiarity with tournaments & Deep knowledge of the game at hand
- Love of the game
- Mental Toughness
- Mental attitude toward winning, losing, improving
- Technical skill (usually dexterity)
- Adaptability
- Knowledge/ability in other games of that genre
- Yomi Appraisal

28.1. Familiarity with Tournaments & Deep Knowledge of the Game. If you are on the outside of competitive games looking in, then every single one of these traits is important to strive for. But again, some of them don't actually distinguish the good players from the great ones. For example, "familiarity with tournaments" is something that pretty much all expert players had as a prerequisite to even be considered top ten. And "deep knowledge of the game at hand" is definitely something that separates expert players from average ones, but in no game was the very best player the one with the deepest knowledge of the game.

28.2. Love of the Game. "Love of the game" is a close one to call. #1 players are probably more likely to genuinely love their game than other top ten players who merely "call in" their performances. Having a love of the game probably allows a #1 player to remain #1 for much longer than he otherwise could, but there are plenty of terrible players who also love their games, so while it's important, it's hardly a solid distinguishing factor.

28.3. Mental Toughness. "Mental toughness" showed more promise. Almost by definition, the #1 player must possess a wealth of concentration and willpower that keeps him on track for the long hours of an organized competition. I'd like to emphasize how much easier said than done this really is. If anyone would be good at this, I'd think it would be me, yet I have often thought in the back of my mind how much easier it would be to lose the next round and be done, rather than to face the upcoming lineup of superstar players. That's a horrible thing to ever think, and a lack of mental toughness probably does hold back some top ten players from becoming #1, but still there are even more important factors at work.

28.4. Mental Attitude Toward Winning, Losing, Improving. This was a tricky one. At first glance, many of the #1 players had extremely poor attitudes. Many are unwilling to give opponents any credit or respect and are generally full of themselves. But they were not always this way. They tended to have a much better attitude during their climb to the top than when they actually got there. Apparently, power corrupts. Those who have always had poor attitudes find it difficult to truly break through, so this really is a distinguishing factor, even though at first glance you see poor attitudes across all ranks of players. Of course, you also see bad players with great attitudes.

28.5. Technical Skill. I would think that in theory "technical skill" would be one of the defining traits of a #1 player in a "mature" game (a game that's been around long enough that it has a low rate of new discoveries about gameplay). In actual fact, this does not appear to be true. Having more ability at executing difficult techniques surely never hurt anyone, and the best players of games that require dexterity usually do have a wealth of it. But the absolute best players are not the ones with the absolute best dexterity and technique, so there are more important forces at work.

28.6. Adaptability (Versus Planning). "Adaptability" is a loaded term. First, let's look at its opposite: Planning. Some players are highly concerned with knowing exactly how the game "system" works. They have deep knowledge of the game rules, the consequences of the rules, and the optimal situations they want to create. They have a plan. They will know that in a certain situation the opponent has, say, five reasonable responses. They will know the optimal counter that minimizes overall risk and maximizes overall reward. Perhaps the optimal counter ends up "even" versus responses 1 and 2, gives a small advantage versus 3 and 4, and a large advantage versus response 5. The Planner knows all the ins and outs of this situation, how to steer the game into it, and the "solution" to it. I once heard a player claim that he could beat anyone in a very particular character matchup in a particular fighting game. When asked why he was so confident, he said "because I know the algorithm." "Knowing the algorithm" is something I have been known for and teased about for years. It's the perfect motto of the Planner.

But this quality is rarely seen in #1 players, which is somewhat surprising to me. I would think that players who have a deep knowledge of the game system and know the optimal responses to all guessing games are the players who would tend to come out on top. Perhaps the personality type of the Planner is so rare that it simply occupies a proportionately small number of the #1 spots in various games. Or perhaps, the entire approach is inferior to Adaptability. A great many players I asked listed Adaptability as one of the three most important traits of a #1 player, and I didn't even list it as a choice to color their responses. Some even use it as their main measure of determining how good another player is: can the player adapt quickly to new situations? Oh, and if the Adaptive player were put into the situation described above (with the 5 possible enemy responses), then how would he react? He might not even need to know the totality of the situation. All he knows is that you will do response 5, and he's not falling for it.

Here is an anecdote about Adaptability. The "B3" tournament was a landmark in fighting game history. It marked the first meeting between virtually undefeated players John Choi and Alex Valle in the game Street Fighter Alpha 2. Each easily cut through the field, eventually to face each other in the finals. At this time, Alex Valle unleashed a new technique never seen before, something he had saved until this moment. I should note that "saving your good stuff" backfires 99 times out of 100, but this is one of those storybook situations almost too extreme to be true. Valle's technique, which an untrained eye would probably not even notice, went on to become the single most powerful technique in the game, it changed the way the game was played, and it was immediately named "the Valle CC" after the man himself. The point is, this was no ordinary trick, but the most powerful, game-changing tactic the game would ever know.

How did Choi fare in such unfamiliar waters? Many players would have lost the entire set without even realizing what Valle was doing. Choi may not have fully grasped what was going on, but he knew the rules were suddenly very different. Choi ultimately lost that match, but to leave it at that is an injustice. He changed his gameplay, got caught fewer and fewer times by the new trick, and even managed to do it back to Valle! Valle dominated several rounds, but his grasp slipped more and more as the games went on. The crowd was in utter awe that Choi could possibly even hang in there against such odds, much less slowly shift the momentum in his favor. The match went the full count of possible games: all the way to the last bit of health

of both players in the 3rd and final round of the 14th and final game. By a razor's edge, Choi lost. Yet even today, that match is cited as the most amazing display of Adaptability in fighting games. Planning would have been of little use to Choi in that match, yet Adaptability is seen by nearly all as a rare and distinguishing factor of the most elite players. And don't let that story give you the wrong impression of Valle either. He richly deserves his status as a #1 player, and while he may not be a strong Planner, he has proven time and again his utter dominance in the realm of Adaptability.

28.7. Knowledge/Ability in Other Games of the Genre. "Knowledge/ability in other games of the genre" is a somewhat unexpected trait for a #1 player to have. After all, if a player is really so good as to dominate a field of obsessed, bloodthirsty competitors, then how could he possibly have the time or energy to play other games at a high level, even other similar games? While not all gold medallist players show this trait, a surprising number of them do. I believe this is more of an effect than a cause of their greatness, though. It demonstrates that there is a heart to competitive gaming that lies beneath the details of a particular game. The best players are in tune with these underlying concepts, and carry them into any game they play. Furthermore, the #1 players tend to be highly Adaptive rather than Planners, so they don't need deep understandings of a game system to do well at it. They can often just stumble into a similar game, learn the bare basics, and quickly adapt to avoiding the deadly tricks that more knowledgeable opponents rely on.

28.8. Yomi. "Yomi" and Adaptability often go hand-in-hand. A Planning-type player can exhibit good yomi skills by knowing a particular situation so well, that he knows all reasonable responses and their payoffs, so he can make a strong, educated guess about what you will do. But the Adaptive players are more likely to just "know what you will do" in the first place. It pains me to have to speak about yomi in such non-scientific terms, but it appears to be a mysterious, right brain function that is inherently hard to explain. One thing is for sure, though: the yomi abilities of top players are unmistakable. Perhaps it must be seen to be believed, but believe me: I've seen it over and over and over. Some players just "guess right" almost every time. I used to believe that yomi was the single most important factor in distinguishing #1 players from the rest of the pack. The reason is that it's the one absolutely clear factor that #1 players have and their close competitors don't. And I have never seen a player who consistently gets 8th place who has people gossiping about and fearing his yomi abilities. That honor rests squarely in the hands of the best, and only the best players.

Some games are designed to reward yomi skills more than other games. Perhaps poker is one of them. But in the realm of fighting games, there is one game that requires, or at least rewards, yomi skills ten times more than any other fighting game: Virtua Fighter. This game has a very elaborate system of paper/rock/scissors (with unequal payoffs) going on. The high speed at which you must make these decisions makes yomi even more important than it otherwise would be, because it will all go by too fast for you to even enter a guess unless you have a very good idea of what the opponent will do.

Virtua Fighter puts the player in a series of rapid-fire guessing games. The number of interactions—that is, the number of guessing games per second—is so high that masters of yomi shine above all others. The game offers the Planners a wealth of systems to understand as well, but I don't think any Virtua Fighter player would disagree that yomi is the primary skill of unbeatable players in that game. Does Virtua Fighter merely demonstrate which players had the best yomi skills all along? Or does it develop yomi skills in all its players more than other games do? I'm not sure of the answer, but perhaps both are true.

Consider the Japanese Thumb game. In this game, all players start by holding out both fists. One player starts the action by yelling "1, 2" (to get the other players ready) and then

another number, which is his guess. Right after he yells "2" each player sticks up either 1 thumb, 2 thumbs, or no thumbs. The active player is trying to guess how many total thumbs (including his own) will be up. If he is wrong, the next player takes his turn. If he is right, he removes one of his hands from the game and takes another turn. The first player to remove both hands from the game wins. There is a special exception rule that if the active player guesses "0 thumbs" and he is correct, then he wins the game instantly.

The Japanese Thumb game is pure yomi. I see no logical explanation for why one player would be any better at it than any other player. And yet in gatherings of fighting game players, the Virtua Fighter players always win this game. Yomi is an inexplicable, unseen force, but it is very real, and possessed by the very best of all players.

28.9. Appraisal. "Appraisal" or "Valuation" is the ability to judge the relative value of different pieces, moves, tactics, or strategies in a game. This might be the most important skill in competitive games. If Yomi is understanding the opponent, then Appraisal is understanding the game itself.

In some sense, this skill is, by definition, what all competitive games are about. Games are about making decisions, which of course makes them about knowing the relative values of the pieces and situations in question. Some claim that "Appraisal" is just too obvious and basic a thing to place on such a high pedestal. But when I looked at all the best players of the games I know, this skill tied it all together for me.

The best players are usually doing somewhat weird things that most players don't understand. I picture a bell curve of "valuations" that players have about their game. What I mean is that there is a large number of players in the middle of that curve who share common beliefs about what is good and effective, and what is not. They represent the "conventional wisdom" about the game. But there are a few players at the extreme end of the bell curve who have different views on what is good. In their world, some of the commonly known tactics don't work on elite players, so they are worthless. Some moves or tactics are seen as worthless to most, but the elite player has a very specialized or refined use of them that makes them highly effective. Basically, because these players are on a higher level of understanding about the game—either with an explicit, logical analysis or through inexplicable intuition—they see the game through different eyes and see different relative values. Sometimes the conventional wisdom is just wrong about a game, and only the best players are able to step out of the mold and not be bogged down by how the masses incorrectly think the game should be played. And these elite players very often cannot explain in full, logical, step-by-step detail exactly why they value one thing so much more than another. I think the mental process for arriving at these valuations and the process for fully explaining them to others are very different things. You are better off watching what the masters do than asking them why they do it.

The moment all this crystallized for me was when I was thinking about taking up a new game. I knew a player who knew quite a bit about this game and was at least fairly good at it. It seemed natural for me to ask for his advice on how to learn the game. And yet, I hesitated to do so. I thought at first it was some deficiency of my own, perhaps an irrational fear of losing to him that made me shy away. But then the real reason occurred to me: I did not trust his Valuation skills. It's not that I knew anything about this game that would contradict what he thought (I knew almost nothing), but I knew his personality and his style and performance in other games. He always has a clear, well-articulated argument about why a certain tactic or character or whatever is good and why another is bad. It's usually hard to refute his views in a debate, as he has facts and reasoning behind them. And yet, they so often prove incorrect once tournament play reveals which characters and tactics are actually good.

And then I realized that all my #1 players displayed unusually good Appraisal skills in some way. In fighting games, they often tended to play characters that others didn't think were good, or characters no one else could play well. These players are just a little out in left field with what they're doing, because only they know what really is good to be doing in the first place. Many of them were not "innovators" since they didn't personally discover these weird things, but they all were able to recognize a good thing when they saw it, more readily than their peers.

The reason I now put Appraisal even higher than yomi on my list of traits for the gold medallist is mainly that in most games, there are only so many opportunities to yomi, but almost everything you do in the entire game is some measure of your Appraisal skills.

I should make another distinction in Appraisal, breaking it into two categories, because it applies to both the Planner and the Adaptor. Consider the example of chess. The "conventional wisdom" of the game ranks the value of pieces according this scale: pawn 1 point, knight and bishop 3 points, rook 5 points, queen 9 points, and king infinite points. But how true is the conventional wisdom? Maybe, when all is said and done, bishops really are worth a bit more than knights. Or even more to the point, how much are pawns really worth? One of the great advances in chess theory was the realization that chess is really all about the pawns. Open versus closed pawn structures lead to very different types of games.

> Pawns are the soul of chess.
>
> —Philidor, Musician and unofficial World Chess Champion of 1750

So this type of Appraisal comes from deeply understanding the system of a game and realizing which forces are more important than others in determining the outcome. Often, a Planner-type player is thinking in these terms.

The other type of Appraisal is of a much more specific nature. Rather than caring about which general principles are more correct, the player is adept at judging the relative value of moves in a particular game situation. Yes, bishops are generally worth the same as knights, but in this particular board situation, perhaps the bishop is worth everything and the knight is worthless. A player good at this type of Appraisal does not necessarily have a good grasp of the underlying game system or the theories about the game's strategy, but he knows exactly what is good and what is not, right here and now given a specific, complicated game position.

Just as Virtua Fighter is an unusually good test of yomi skills, Magic: The Gathering is an unusually good test of Appraisal skills. It is a card game with thousands and thousands of cards, where the player must build a deck of only 60 cards (or 40, depending on the tournament format). There are cards that are bad, but seem good. There are cards that are good, but seem bad. There are cards that are strictly better than other cards in most situations, but far worse in very specific situations. There are cards that are incredibly good, but no good deck can be built around them. There are cards that are bad, but are used in the very best deck because the rest of the deck is utterly dominating and desperately needs a certain ability, even if the best available source of that ability is on an otherwise terrible card.

Perhaps the hardest lesson to learn, the lesson that every Magic player seems to have to learn over and over, is that there are great cards that come together to make great decks that ultimately do not win because they aren't as good as something else that's out there. It's easy to get excited when you see a great deck come together, but the "great deck" does not exist in a vacuum. Very often, there is some completely different deck that's trying to do completely different things, and that other deck is ultimately stronger than yours. It's not that yours is bad per se, but the opportunity cost of not playing the even better deck is just too high. It's all about the relative value of the decks, not their absolute measures. Even when you've learned that lesson and have found the actual "best deck" to play in a given card pool, you still might be foolish to play it. You also have to judge the "meta-game," which is the landscape of deck choices all your competitors have made at a given tournament. Perhaps they all know about

this "best deck" and have all decided to play decks that do nothing at all but beat that deck. Sometimes, the "best deck" can still win even when subjected to extreme hate, so again it's all about judging the relative value of the pieces.

The so-called "limited" formats of Magic (including sealed deck and draft formats) require you to make choices on the fly about the relative value of cards that you will put into your deck. In limited formats, it's more difficult to rely on the conventional wisdom of which decks are good, so some players value these formats even more highly because they test Valuation skills more.

Magic is an interesting case, because some players argue that the game is too random, yet the same few players are able to consistently win tournaments. Currently, Germany's Kai Budde is the #1 Magic player in the world, and I believe the main factor is that his Appraisal skills are that much better than everyone else's, especially the second type of Appraisal, the moment-to-moment type. Everyone knows that Wild Mongrel is a great Magic card and that Merfolk Looter is a good card. Which is more valuable in general? Such things are debated endlessly on forums and chat rooms about the game. More importantly, though, which one is more valuable in a specific game situation? When you factor in the life totals of each player, the time left on the clock, the number of cards in each player's hand, the quality of those cards (some might be useless, "dead" cards), the other cards in play already, etc., you'll find that it all depends on the exact situation. So who knows if it's a good idea to make a move that kills your Wild Mongrel and their Merfolk Looter, given a specific, highly complicated game situation? I'll tell you who knows: Kai Budde knows.

Part 6

Elite Player's Guide

If you are truly the best player at your chosen game, or one of the very best, then you don't need my advice anymore. In fact, I invite you to give me yours. But I can offer some cautions on issues you will face. You must:

(1) Recognize that you have power, even if it is over the small group of people in this world who play your game.
(2) Understand that your power is fleeting. There are many forces seeking to revoke your power and you may choose to combat them, or to give in to them.
(3) Decide what to do with your power while you have it. What good or evil can you do? Who decides what is good or evil in the first place? What obligations, if any, do you have to other players and community members?

29. Now You're Playing with Power

> You got the touch, you got the power!
>
> "The Touch" by Stan Bush; Transformers: The Movie Soundtrack

If you are merely "theoretically" the best player of your game, I hate to break it to you: no one really cares. Instead, let's focus on players forged in fire who have proven themselves in organized competitions. These players have taken on all challengers and have publicly demonstrated their dominance of the game. These players have power.

Competitive gaming communities are naturally hierarchical organizations with the very best players in an elite club at the top. Sometimes accompanying the best players at this highest echelon are other leaders: tournament organizers, website administrators, or presidents of player organizations. The only thing certain is that the very best players are always in this unofficial club, and they have enormous influence over the masses below them.

When these players speak about how to play well or correctly, the masses listen. If they believe that the game or the associated tournaments need rule changes or bans, they can rally support among the troops to effect change. (Maybe their ideas about things outside the game are ill-conceived, but their power does allow their message to be heard.) And whether they are seen as villains or heroes, they can assert dominance over anyone who disputes their in-game techniques. The high expert need not listen to the cries of scrubs, because the ultimate power—the power to win—is the final arbiter in any competitive gaming community worth its salt.

When the misguided scrub complains to you, or the earnest beginner challenges you, their fate is in your hands. You can strike them down without mercy. You can nurture and teach them. You can lose on purpose to them, either secretly or overtly. You control not only the outcome of the game, but also, to some extent, the perceptions of your opponents about the game, about you, and about competitive gaming in general.

30. Power Is Fleeting

Both fame and competitive gamers are fickle. "What have you done for us lately?" the masses will ask you. To stay in the spotlight, you will need to keep winning, which is no small task. Just because you've done it before is no reason to believe that winning is your divine right. Others are continuing to improve and work hard and they may "deserve" to win more than you at some point.

> When you're king of the hill, there's always someone waiting in line to knock you off the top.
>
> —Sagat, boss character in Street Fighter 1, to Ryu upon passing his title

You have probably thought a great deal about how to beat your peers and how to stay ahead of them in the race to improve. But your current peers aren't your only competitors: new players,

even players who have not yet started playing will eventually threaten you. You have so many advantages over them (knowledge and experience) that they are easy to dismiss, but they have youth on their side. Eventually, they will have more physical strength than you, and more powers of mental concentration—at least some of them will. Whether it's tennis or chess, experienced players reach a point where they become vulnerable to newcomers, whether they like it or not. Newcomers are not without their own advantages, chiefly their ability to think "outside the box" because they either don't know what the conventional wisdom is, or they reject it, as young rebels are known to do.

So if it's not your current peers who dethrone and surpass you, the future generation of players combined with the ravages of "old age" will eventually get the better of you. By the way, "old age" can be as young as twenty-five in some games!

Will you do as the poet Dylan Thomas advised?

> Do not go gentle into that good night.
> Rage, rage against the dying of the light.

There are more forces than just other players and old age seeking to subdue you. The demands of the game itself on your lifestyle are serious concerns. No matter your inherent skills, dominating a game takes a huge investment of your time and thoughts. Life has many ways of pulling you away: a girlfriend (or boyfriend), spouse, kids or other family obligations, career obligations, a social life, or even other hobbies. And if all that isn't enough, you may no longer have "love of the game." Continuing to be the best at a game you no longer love, or never loved, is a difficult and hazardous thing to attempt. Those who love the game will find an easier time sticking to it, improving, and giving it their time and thoughts. Even if you can keep up with them, devoting such a large part of your life to something you don't love is going to create its own problems that will no doubt eventually lead to your downfall.

Some games have it easier than others here. If you're really so good and your game happens to be basketball, well, you don't have to worry about your career at the pencil factory: you should be raking in the cash by now with your basketball career and advertising endorsements. Several of those life forces just lined up for you, so consider yourself extremely lucky.

Competitive video game players should be so lucky. Unfortunately, as of this writing, organized competitive video gaming is still in it's infancy and "going pro" is only a reality for a very small number of players of select games. A few gaming organizations are trying to change this, and I'd love to help them make it a reality, but it just hasn't come true yet. I deeply wish our society valued our mental games more than our physical games, not the other way around.

Since going pro is not a reality for most gamers, it's entirely possible that sustaining any kind of balanced lifestyle with career and social or family life is incompatible with the time commitment necessary to stay on top of the gaming world. Savor it while it lasts.

31. Using Your Power

> No man can choose how much time he has, he can only choose what to do with the time he is given.
> —Shameless revision of a quote by Gandalf the Grey, The Lord of the Rings: The Fellowship of the Ring

One way to go is to be a total jerk during your reign. You certainly can be. You can be shady, always involved in questionable rules calls and investigations of possible cheating. You can openly trash talk and belittle your competitors. You can be rude and obnoxious. You can be the villain. Some players act this way, drunk on the power they command in their little corner of the world. Some players are jerks to begin with and will act this way, power or not. Competitive gaming communities value the ability to win tournaments so much that they will put up with

you, possibly even "love to hate you." Tournament judges will probably be looking for excuses to make your life harder, but if you've gone down this path, you probably don't care about that since you love the infamy of it all.

The thing you might not be thinking about, though, is that your involvement with your gaming community is likely to far outlast your reign of terror at the game. To get where you are, you've probably met many players who have become friends and acquaintances, and since you have common interests with them (the game you play), your relationships are likely to outlast your win streak. How will you be remembered when new kings of the game take your place?

> My name is Ozymandius, King of Kings: Look on my works, ye Mighty, and despair!
>
> —Percy Bysshe Shelley, English Romantic Poet

Shelley's poem was about a traveler who encountered a pedestal at a ruined statue surrounded by nothing but endless stretches of sand. Though the king's accomplishments are long forgotten, his ire and arrogance live on. Incidentally, "Ozy" comes from the Greek "ozium," meaning "breath" or "air." "Mandias" is from the Greek "mandate," meaning "to rule." Ozymandius was a "ruler of air" or a "ruler of nothing." Something to think about before getting too drunk on your own measure of "power" in your gaming community.

31.1. Good and Evil. It is not so easy as you might think to judge the actions of a powerful player as good or evil. Consider two examples: The Slaughterer and The Teacher.

31.1.1. *The Slaughterer.* This is the case of legendary Street Fighter player Thomas Osaki. I did not actually play with Thomas during his heyday, but I have since met him and I hope he forgives any misrepresentation of his conduct during his glory years.

In his day, Thomas Osaki dominated the game of Street Fighter in Northern California. His reputation for "playing to win" was quite extreme. They say he never really engaged in "casual play," but rather always played his hardest, as if every game had something on the line or was a serious tournament. They say he played this way regardless of his opponent, even if his opponent were a nine-year-old girl with no skill at the game. He would "stutter step, throw" her like all the rest (a particularly "cheap" tactic). Did he have no compassion at all? Was he just a jerk? I like to think of Thomas (or his legend, in case it happens not to be true) not as mean player, but as an inspiring player. He set a bar of excellence. In his path of self-improvement, he was not willing to compromise, to embrace mediocrity, or to give less than his all at any time. His peers had the extraordinary opportunity to experience brilliant play whenever he was near, not just at rare moments in a tournament.

And what of the nine-year-old girl? Perhaps she had no business playing in the first place. From Thomas's view, getting her off the machine allowed him to face the opponents he "should" be facing anyway.

31.1.2. *Shadows and Vorlons.* Before we get to The Teacher, and before you write me letters on any of this, consider the parable of The Shadows and the Vorlons from J. Michael Straczynski's Babylon 5 television series. In this space epic, the Shadows and the Vorlons are the two "ancient races" that have opposite belief systems about how to treat all of us younger races. The Shadows cause chaos and unrest. They make deals engineered to incite war between races and they double-cross their "allies." They use nearly invulnerable spooky black ships piloted by kidnapped telepaths to attack, unprovoked. Obviously, they're evil.

The Vorlons, on the other hand, are diplomatic and nurturing. They prefer to stay out of the action, letting the younger races develop on their own, but the Vorlons do make critical moves to help the younger races unite. In fact, the Vorlons even seeded the galaxy with certain DNA during the beginnings of life to guarantee that all of us younger races would grow up to view

them as gods when they appeared. This way, we will all be sure to listen to their message and unite against the forces of the Shadows when the time comes. The Vorlons represent good.

Or do they? The Shadows eventually reveal that they are after the same thing as the Vorlons: to ensure that we younger races become strong and wise. The Shadows believe that showing up every few eons to shake things up frees the galaxy of the weak to make room for the strong. Coddling the weak, though poetic, is not healthy for the long-term survival of a race, they argue. The Vorlons seek similar ends, but through nurturing, promoting growth, and peace.

One argument against the Shadows is that they are imposing their will and their beliefs on everyone, which is seen as wrong. Consider the application to competitive games, though. There are two key differences. First, the Slaughterer does not impose his beliefs on everyone—only those who play his game. While humans were not free to simply ignore the beliefs of the Shadows, no one is forcing you to play competitive games at all, much less the Slaughterer's particular game. You have entered his domain by choice. Second, the very nature of competitive games is that one player (the winner) imposes his beliefs about how to play the game on another player (the loser). Perhaps this is inappropriate in galactic politics, but it's exactly what competitive games are about. Those who are turned off by the notion of the Slaughterer imposing his values of winning and losing really shouldn't be playing competitive games in the first place (or they should adopt the values of the Slaughterer).

Although this Shadow approach may seem harsh, I am often reminded of the meetings between American and Japanese players of Street Fighter. In general, the Japanese are on a higher level of play (I won't go into the reasons for that here). When faced with a new set of incredibly strong opponents such as the Japanese, wouldn't you rather your own community of players were trained in a results-oriented system that pruned the weak and produced winners forged in fire? A nurturing, kindergarten-like system may have many more civic virtues, but when you face the Japanese (or any fierce opponents) only military virtues will save you.

Still, though, the Vorlon's approach has some appeal. I know everyone wants their way to work and is rooting for good to triumph over supposed evil. Many players need coddling before they can mature into strong warriors. The gaming community as a whole needs nurturing teachers who can guide new players in the right direction. Surely the community as a whole would benefit from having nurturing teachers working to increase the number of overall players, and increasing the skill level of those players. By mentoring weaker players rather than just slaughtering them, they are increasing the overall level of competition and slowly forcing everyone to improve.

So who is right? Unlike the Shadows, I'm not here to impose my beliefs on you (on this topic, at least), so you will have to choose for yourself. I think either approach is viable and perhaps a gaming community needs people from each of these camps to be complete. I will say this, though: taking the Shadow's approach will generally strengthen your own play skills, while taking the Vorlon's approach will generally weaken them. Teaching has its virtues, but it is often bad for the teacher.

31.1.3. *The Teacher.* The Teacher does have to learn both the fundamentals and the nuances of a game well enough to teach. He will have plenty of opportunity to observe common mistakes and to critique the play of others. Unfortunately, there are no medals for critiquing play, only for winning, though there is something to be said for living vicariously through the success of your students.

The Teacher has several forces working against him. First, all the time he spends on helping weaker players could be spent playing against stronger players. Next, he can develop bad habits by using techniques on weaker players that would never work on stronger players. And what's worse, he will not have even a fraction of the practice that the Slaughterer will have when it comes to "pushing as hard as you can for as long as you can." The Teacher will often need to push just enough to challenge the student, giving them chances to learn this or that concept.

Remember, even I advised playing weaker players as part of your development so you can hone a technique you'll only get a brief chance to use in a real game. The Teacher must often take on the role of that weaker player.

Meanwhile, the Slaughterer learns to push and push and never let up, never give up. Every moment he plays the game, he plays as hard as he can. Even if his weaker opponents don't give him practice in tactics, they always give him practice in keeping his intensity at 100% at all times, an invaluable tournament skill.

Slaughterer or Teacher, it's up to you. Everyone defends the merciful teacher, but I hope I have made a case for you to appreciate the virtues of the cold slaughterer. He's the one pushing the envelope of play skills, which makes his contribution incredibly valuable, even if it is not often popular.

32. Final Thoughts

So do all the lessons of winning at games apply to real life? No, they do not. But only a fool would walk away from competitive games without learning a wealth of life lessons. Games require training, practice, and discipline. Having a love for what you're doing really does help you. Games teach you to remain calm under the most dire of circumstances, and to never give up until your very last breath of life is spent. They teach you to learn from your mistakes, rather than shift the blame to others, because that is the only real way to improve. They teach that continuous self-improvement over time is the only way to survive.

Competitive games are a means of expression as well. Players seem to have trouble approaching a game differently than they approach life in general. The way they take in information, the way they make decisions, the aspects they value, and the skills they excel at are usually similar inside and outside of the game. In fact, many people, myself included, have come to understand a lot more about who they really are through the way they end up expressing themselves in games. There are many forms of expression in the world, but one of the advantages of competitive games is that they force you to test your worldview against the worldviews of others. It's easy to develop highly unpopular theories about life in general that you have no real way of testing, but competitive games force you to jump in, get dirty, and see how those ideas really stack up. If you are an unconventional genius, you will prove so beyond all doubt. If you are a confused quack, that too will be borne out, and you will have the opportunity to learn from others and change your ways.

Furthermore, competitive games teach you to focus on results. You can define yourself to be a great player, but the community will define winners in terms of their ability to win. They care about results, and you should too. Everyone "could be" the best player if only they practiced more, if only they had the chance to play more, if only this or that. But none of that really matters when the gold medal is handed out. The gold medal goes to the person who gets the job done. That is great lesson for anyone who is involved in any business endeavor at all. The grand, unfinished product or project is of little value compared to the one that demonstrates results. The brilliant, half-finished book is of little value compared to the published one. The daydreams of a better life are not as valuable as getting out there and effecting real change in your life, and getting results.

So the application of Playing to Win to real life is not a simple, direct relationship. It may require some wisdom on your part to know which aspects of games are diametrically opposed to real life, and which ones are not. Those are decisions you'll have to make for yourself. Should you choose to truly Play to Win, though, I would expect your path to be as difficult and fulfilling as almost any other worthwhile personal journey you might undertake.

Happy gaming, and make your own luck.

—Sirlin

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