Backgammon Praxis

The Matches of Malcolm Davis

Volume One



Backgammon Praxis

The Matches of Malcolm Davis

Volume One

Marty Storer

The Fortuitous Press San Francisco

The Fortuitous Press

www.fortuitouspress.com San Francisco

Copyright © 2005 by Marty Storer All rights reserved. Printed in 2005

Published in the United States of America

ISBN: 0-943292-35-2

Cover Illustration by Dana Zatman

For Bill Tallmadge

Table of Contents

Volume One

Acknowledgments	9
Introduction	
Match 1: Malcolm Davis vs. Ed O'Laughlin	
Game 1: (Needs 11; Needs 11)	
Game 2: (Needs 10; Needs 11)	
Game 3: (Needs 8; Needs 11)	
Game 4: (Needs 8; Needs 10)	
Game 5: (Needs 8; Needs 8)	
Game 6: (Needs 8; Needs 4)	
Game 7: (Needs 8; Needs 2)	
Game 8: (Needs 4; Needs 2)	
Game 9: (Needs 2; Needs 2)	
Match 1: Conclusion	

Volume Two

Match 2: Malcolm Davis vs. Marty Storer	9
Game 1: (Needs 7; Needs 7)	
Game 2: (Needs 7; Needs 6)	
Game 3: (Needs 5; Needs 6)	
Game 4: (Needs 4; Needs 6)	
Game 5: (Needs 4; Needs 2)	
Game 6: (Needs 2; Needs 2)	
Match 2: Conclusion	
Match 3: Malcolm Davis vs. Frank Talbot	
Game 1: (Needs 17; Needs 17)	
Game 2: (Needs 17; Needs 15)	
Game 3: (Needs 17; Needs 11)	
Game 4: (Needs 16; Needs 11)	
Game 5: (Needs 16; Needs 10)	
Game 6: (Needs 14; Needs 10)	
Game 7: (Needs 14; Needs 6)	
Game 8: (Needs 14; Needs 2)	
Match 3. Conclusion	242

Acknowledgments

Though many people contributed to this book directly and indirectly, I would like to give special thanks to the following people and groups: Jeremy Bagai, Judith Bagai, Bailey Boys, Ann Driscoll, FibLinks, Mike Fujita, GammOnLine, Elliot Grant, Herb Gurland, Mary Hickey, Neil Kazaross, David Levy, Clint McClintic, David McKenzie, Mark Ross, Phyllis Shapiro, Bill Tallmadge, Paul Weaver, and Alex Zamanian. Their comments and suggestions have been quite helpful. Very special mention is due to Jeremy Bagai for first-class editorial help and technical feedback, and to Herb Gurland and Paul Weaver for their keen backgammon eyes. Special thanks to Neil Kazaross for insights on doubling strategy in races at certain even-away match scores. Thanks are also due my wife, Nona, and my children, Ben, Sam, and Chloe, for their patience as I disappeared into my backgammon sanctum to work on the book, night after night and the occasional precious weekend.

Thanks to the players, Malcolm Davis, Ed O'Laughlin, and Frank Talbot, for their illuminating commentary. Their insights are valuable additions to the book.

Thanks also to Michael Strato, one of the proprietors of GammonVillage, for unwittingly kicking off this project by soliciting and publishing my analysis of a Senkiewicz-Tardieu match. As partial compensation for that analysis I was given a copy of Snowie. Thanks too to Olivier Egger and André Nicoulin, Snowie's authors. Nice job!

This book wouldn't have been possible without other help and support I've received over the years. Besides my wife and children, my father, Norm, and my brother Tom have always been there when I needed them. Bill Tallmadge was my original backgammon mentor and contributed to this book more than he knows.

Introduction

Backgammon, Bots, and You

Backgammon theory is rapidly advancing. Over the past decade it's been transformed by the Bot Revolution. New artificial intelligence methods, aided by increasingly fast computer hardware, have enabled backgammon programs to reach an unprecedented level of playing strength. These programs are commonly known as *bots*, which is of course short for *robots*. The strongest bots are now among the world's finest players; some would argue they're the very best, and that's not far wrong. Initial human resistance has given way to the consensus that the leading-edge bots are amazingly good.

The Bot Revolution brought a sweeping change in the way we understand the game. The bots did many new and wonderful things, and humans adapted these techniques as best they could. The World Wide Web gave rise to online playing sites and forums, which became a major vehicle for communicating the new ideas. Knowledge gained from the bots spread rapidly. The result is quite a transformation; much of the best play and analysis from as recently as nine or ten years ago already seems quaint and out-of-date. Recent authors, notably Jeremy Bagai; Danny Kleinman and Antonio Ortega; Bill Robertie; and Kit Woolsey and Hal Heinrich, have written about some of the influences of the bots and made good use of their capabilities.

Of course, the Bot Revolution isn't over. It probably never will be. New bots, and improved versions of existing bots, continue to appear. With each new and improved bot come fresh insights and the need to integrate them into the vast and burgeoning body of backgammon knowledge. Indeed, we're not finished with the older bots' opinions yet. For example, people still disagree on how to play some opening rolls, not to mention replies to openers. Backgammon is an extremely complicated game, and it's hard to stay abreast of developments. Yes, very hard—but necessary for the avid player. It's the rare backgammon master anymore who's without at least one faithful bot ready to help with organized study or *ad hoc* problem solving.

The time-honored way to improve your skill at backgammon is to play, play, play, and study, study, study. Studying is indispensable. There are now many books available that do a very good job covering everything from basic concepts to advanced. There are online forums like GammOnLine (www.gammonline.com) and GammonVillage (www.gammonvillage.com), where cutting-edge concepts are regularly discussed by some of the world's best players. You have to take advantage of such opportunities for study. If you're already a good player, you must keep up with current theory. If you want to stay on top of things, you have to log in and see what's happening. Online, backgammon knowledge is freely shared and spreads very quickly.

If you spend enough time on Internet backgammon, you'll see that bots are in heavy use by today's theoreticians. The days are gone when a pronouncement by some fine player or analyst won't be extensively checked. The bots make it easy to see what's going on in a position—at least, comparatively easy. In olden days the only way to check whether a move was correct was to play the position out repeatedly. That took a very long time, more time than most people had available. Today, positions are constantly dissected where the right play looks obvious but turns out to be wrong, determined only with the help of some workhorse bot that rolls out the position thousands of times. Jeremy Bagai has written an entire book, *Classic Backgammon Revisited*, that analyzes many positions from classic works, in modern perspective. Bagai uses Snowie 3 rollouts to support his conclusions. I use them too. I'll say more about rollouts later.

Besides real-life and Internet-based play and study, there's another way to learn about backgammon. You can watch some of the world's best players. No longer do you have to travel to tournaments or find clubs where they congregate. All you need is a computer and Internet access. Online, you can watch masters play in real time, and automatically save games and matches for later study. GamesGrid (www.gamesgrid.com) is one popular hangout. Although it's fine to study general concepts, or individual positions representing a common type, it's also great to watch the masters in action. It's even better to analyze the matches later, with the help of your favorite bot.

That's what I've done in this book. This book is match analysis, done by me but aided by Snowie 3.2, which I judged the best bot available at the time I started the project. The moves of two of the matches were available online. I played the third myself and had a copy. I ran all three matches through Snowie, which gave its "quick" evaluation of each match, move by move. I then sat down to analyze. When an interesting position came up, I told the bot to *roll out* the position: that is, to play it to conclusion many times and save the results. Such results are widely considered more reliable than evaluations; more on that later. As I expected, frequently the roll-out results differed from the evaluation. The bots aren't perfect; if you're able to imitate the bots blindly (no small task!) you'll do well, but you'll still miss a lot. I did many rollouts, and the results were almost always illuminating. In this book I give the actual numbers generated by the rollouts, and I do my best to explain what's going on.

Snowie 3.2 rollouts are very high-quality information. They were recently used by GammOnLine members to compare the strength of four bots, including Snowie 3.2 itself. But they're not perfect. That a rollout favors one play doesn't make it best. We have to treat even the strongest bot's rollouts with the same skepticism due any statement in an art or "soft science" like backgammon. The rollout results are raw information, and it's up to us to figure out what they really mean. That's what I try to do.

I aim to do much more than creatively rubber-stamp rollout results. I think I succeed overall, but I confess to some bias in favor of the bot. Anyway, the perspective of this book is *not* primarily bot-versus-human. For those who want an extensive discussion of how bots have changed the way we understand the game, I recommend Bill Robertie's book *Modern Backgammon*. Though you'll find that I frequently remark on the differences between bots and top humans—I've been playing since 1975 and I've read much theory and engaged in much praxis—what I really want to do is focus on modern match play to help advance our knowledge.

Theory, Praxis—and Malcolm Davis

The title of this book is *Backgammon Praxis. Praxis* means the practice of an art or science as distinct from theory. Backgammon theory is recorded knowledge, defined here not as indisputable truths but rather our best guess at the real story. What passes for knowledge—that is, the current state of theory—is being changed and refined all the time. Praxis is theory at work, and it's both less advanced and more advanced than pure theory. Backgammon praxis, expressed in one match, is as imperfect as the players on the given day—yet much of what very strong players do isn't completely described in the literature, nor well understood by the average tournament player. We need to read the literature, but we also need to see what the best players are doing. The cutting edge of backgammon knowledge derives not only from bots, but in the ways humans put bots' ideas into practice, and discover new ideas of their own.

Let's take an example. For a long time we've thought bots to be too conservative and raceoriented. The bots are very strong, but we believe they have some weaknesses in priming games and other types of strategies involving multiple back men. When blocking is a main theme, bots are very good overall—but far from flawless.

It's interesting to see whether and how the best human players act on that idea. Do they imitate the bots' opening plays? Should an opening 51 be played 13/8 6/5? That's a nice unstacking play with a good upside, but is it too risky? Maybe it's best; if the bots can't properly take advantage of the priming variations after the opponent misses, they'll falsely undervalue the slotting play. On that question and on many others, the jury is out. Time and experience, which means praxis, will tell.

It's particularly interesting to study the praxis of players who were successful in pre-bot days and continue to do well now. If anyone is likely to combine the best elements of modern and classical theory and practice, it's a veteran whose career has spanned both periods.

Malcolm Davis is one such player. He's been winning tournaments for decades. Notably, he won the prestigious World Cup in 1996. Bill Robertie and Kent Goulding, writing in 1996 and recounting an amazing string of Davis's tournament wins, put it this way:

[T]he trend is clear: Malcolm shows up, Malcolm plays, Malcolm wins! Given the level of play these days, this is the best 12-month tournament run by any player in the history of organized backgammon. *(Inside Backgammon Vol 6, Issue 4-5, p.36)*

Davis is still winning. He won the 2004 Pittsburgh Championship. He won the 2003 American Backgammon Tour title, based on victories in the Midwest and Florida State Championships. He won the 1999 International Cup, the 1998 Nordic Open Super Jackpot, the 1997 Tournament of the Americas—the list goes on. He was an early supporter of the bots, and has no doubt learned a lot from them. But it would be wrong to ascribe his success to slavish imitation of silicon-based life-forms. Kent Goulding, writing in the *Inside Backgammon* issue already cited (p. 22), says that "Malcolm, while heavily influenced by using [the bot] JellyFish as a learning tool, has developed a decidedly unique style all his own."

About the Book

This book features three of Davis's matches, all from the Bot Era: the earliest is from 1997 and the most recent from 2001. All are instructive, and well played by Davis. I'm his opponent in the second match; I hope including one of my own matches is justified. I think the match is a good one, and as Davis's opponent I have an advantage in commenting on it. I remember many of my own over-the-board perceptions. In the other two matches, Davis's opponents are strong, well-known competitors: Ed O'Laughlin and Frank Talbot.

This book is intended chiefly for advanced players. I assume much familiarity with tournament play, backgammon notation, and jargon. I analyze as exhaustively and accurately as I can, within some reasonable limits. But enthusiastic players below the advanced level can get a lot out of it. All that's needed is a good grasp of basics—and some perseverance.

I include plenty of diagrams, and show many positions after alternative plays. It's easier for an advanced player to visualize the different choices than it is for a novice, but supporting diagrams help everybody. Anyway, in live match play, you're allowed to set up alternative moves and look at them before deciding what to do. Diagramming alternative choices is a bit similar.

For the benefit of all readers, I offer a section called "Lessons" after every game. These sections will be especially helpful to non-experts, but I hope they'll be useful to experts as well. I'll have more to say about the Lessons later.

Methodology

Bots are such good players, and so easy to use for match analysis, that they're indispensable for Third Millennium backgammon writers. I analyzed the matches with the help of Snowie 3.2 (see www.snowiegroup.com), which I thought was the strongest bot available when I started, and which a couple of years later is still considered among the best. I used two types of information from Snowie: *evaluations* and *rollouts*.

Evaluations

Snowie's *evaluations* are its estimates of percentages of simple wins, gammons, and backgammons for each player. These are combined into one number, a points-per-game estimate that also takes into account the effect of the doubling cube and the match score. I treat evaluations as I would the judgment of a very strong player: extremely useful, but still requiring skepticism and scrutiny. Nobot is perfect.

Snowie has three types of evaluation: 1-ply, 2-ply, and 3-ply. (A *ply* is a turn for one side.) Three-ply is slowest but most accurate. One-ply evaluation is fastest and least accurate. In 1-ply evaluation, Snowie uses its stored knowledge to estimate how much the position is worth.

Two-ply evaluation involves *lookahead*: the bot uses its 1-ply method to evaluate alternative plays for each of the 21 distinct dice rolls. Results for the top evaluation choices are then combined to form the final 2-ply evaluation for the position.

Three-ply evaluation looks ahead a step further, using the 1-ply method on all the opponent's replies to the first player's possible moves. That's 441 combinations of the first player's roll followed by the opponent's, with at least several move choices considered for each. Three-ply evaluation makes your computer's CPU work hard!

Snowie's settings allow you to choose how many alternatives you want to examine: a great many, a lot, some, or a few. The tradeoff is between accuracy and speed: Examining *all* the alternatives will usually give more accurate results, but may take significantly longer than looking at only a few. Snowie also lets you limit lookahead time.

Evaluation Settings

In this match, I used 3-ply evaluation for every position. Also, I told Snowie to consider as many alternatives as possible and take as long as it liked about it.

Rollouts

When I encountered a particularly interesting or controversial position, I asked Snowie for a *rollout*. In a rollout, the bot plays a number of games to conclusion and records the results. It

chooses each move according to the type of evaluation you select: 1-ply, 2-ply, or 3-ply. Rollouts can be done for checker plays or for cube actions.

I consider rollouts to be more reliable than evaluations. Snowie knows a lot about different types of positions; it's very good at weighing the factors important in many situations. However, the nuances of a specific position may occasionally fool Snowie's evaluation methods. If it consists of sufficiently many games, a rollout will almost always be more accurate than an evaluation. In many situations Snowie's rollouts favor a different move than its top evaluation choice. We call this a *reversal of the evaluation*.

I rolled out over 200 positions in these matches, of which about 40 were reversals of Snowie's initial evaluation. Some of the rollouts didn't reverse the evaluation *per se*, although they did paint a different picture: different rankings of alternatives, or large differences in equities. Such results are interesting not only because Snowie 3.2 rollouts are usually pretty good reflections of reality, but also because they tell us a lot about the bot's strengths and weaknesses.

Rollout Settings

Computers are still slow enough that an analyst has hard choices about rollout settings. Snowie's most comprehensive settings result in very slow rollouts. The tradeoff is between rollout speed and accuracy of the results. Results may be inaccurate just because of random dice fluctuations ("luck") in the rollouts, and you often need a large number of rollouts in order to minimize that effect.

One solution favored by many people is to do *truncated* rollouts. The bot will roll the position out repeatedly, but will stop each game after a preset number of moves. Then the position will be evaluated and the result integrated with the results of the other rollout trials. This is faster than *full* rollouts, where each position is rolled out until the end of the game. Moreover, truncated rollouts are considered fairly accurate for most positions.

However, full rollouts are more accurate than truncated. For example, we're pretty sure Snowie often goes wrong in complicated blocking positions. Such *systematic errors* won't be as bad if we make the bot play every rolled-out game to the end. The more Snowie can play the position out, the more it can look ahead and at least partly overcome some of its biases. But again, the problem is that full rollouts take much longer to complete. Not only that: Because of greater influence of luck in longer games, more full-rollout trials are needed to get reliable results.

I've chosen a compromise approach to these typical rollout problems. In rollouts, I usually settled for 2-ply lookahead rather than 3-ply. Some would consider this a big compromise, but that's the only corner I cut. I almost always chose full rollouts over truncated. I also opted for score-based checker play, where the bot takes the match score into account in making its moves. The volatile nature of many of the games made me worry that non-score-based play wouldn't be accurate enough. Also, I allowed Snowie to consider, move by move, the effect of cube actions during rollouts. Though some people distrust Snowie's *live-cube rollout* option, in my experience it's given reasonable results. In the interest of accuracy, I use 3-ply lookahead for all cube actions in live-cube rollouts.

Sometimes I used 3-ply lookahead for checker-play rollouts; sometimes I did truncated rollouts. Truncation was always done at 11 ply. Truncated rollouts aren't ideal, but they're usually O.K. for early-game or simpler types of positions. Since Snowie 3.2 has the most problems with priming and backgame positions, I often picked 3-ply lookahead to roll out checker plays and cube decisions in such positions.

To summarize: For these matches, the usual settings are 3-ply evaluation, examining maximum possible alternatives, with no limit on lookahead time. For rollouts, the normal settings are 2-ply lookahead, score-based checker play, with live 3-ply cube. Whatever the settings, they're shown for each rollout.

Rollout and Evaluation Results: Examples and Explanations

The following is an example of rollout results for the first move of the first match: Davis to play an opening 64.

The top line presents the parameters of the rollout. Unless otherwise marked, rollouts are score-based and complete. In this case, the 3-ply rollout was money-based rather than score-based, and truncated (always eleven ply deep) rather than complete.

24/18 13/9 +0.018 ±.009; +0.011 24/14 +0.010 (-0.008) ±.008; +0.015 8/2 6/2	3-ply Rollo	ut (Mone	ey, Trunca	ated);	Eval.
8/2 8/2 +0.010 (-0.008) ±.009; +0.007	24/18 13/9 24/14 8/2 6/2	+0.018 +0.010 +0.010	(-0.008) (-0.008)	±.009; ±.008; ±.009;	+0.011 +0.015 +0.007

The first column below the line shows the moves, in best-to-worst order, according to the rollout. The move actually made is shown in **boldface**. The next three columns show the rollout results, and the final column gives the results of the 3-ply evaluation.

The rollout results consist of three numbers. The first is the points-per-game result. In the rollout above, $24/18 \ 13/9$ came out ahead of the other two alternatives, scoring +0.018 points per game, versus +0.010 for each of the others. A positive number means the move is worth the given number of points per game; a negative number means the position stands to lose the given number of points per game. Points-per-game results are often referred to as *equities*.

Equity differences from the best play are presented in parentheses. In this case, the play made at the table gave up .008 points of equity compared to the best play.

The final number before the semicolon is an error term, and determines the size of a 95% confidence interval. That's a statistical concept that describes the accuracy of a sample. In this case, consider the result for 8/2 6/2. The third number, \pm .009, means that if you did an extremely large number of Snowie rollouts using the same settings, the chances are 95% that the result would be within 0.009 ("plus or minus 0.009") of this rollout result. So the size of the 95% confidence interval would be 2 x 0.009 = 0.018. The middle of the interval would be found at +0.010, which is what the rollout says the position was worth.

Though a comprehensive discussion of statistics is beyond the scope of this book, I include the 95% confidence interval error terms—"half intervals"—for the sake of accuracy. That's what scientists do when they communicate their experimental results, so others can repeat their

experiments and evaluate their published claims. In that way, good results can be verified, and questionable ones discounted. That's how scientific knowledge advances.

I strongly believe that Third-Millennium backgammon analysts should use rollout results to support analysis, and that 95% confidence intervals should be included. (In the spirit of the scientific method, Snowie obligingly provides them.) Rollouts are a kind of experiment: What happens when *this* bot plays 1296 games to conclusion with *these* settings? What's the 95% confidence interval around that result? How reliable is it?

In the scientific community, 95% confidence is used as the informal cutoff between "reliable" and "unreliable." If the rolled-out difference between two moves is greater than about 1.4 times the error term (which will usually be about the same for each alternative), the result is *statistically significant*. Informally, this means you're pretty sure Play A is better than Play B. Formally, this means that if there truly were no difference between the two plays, you would get a reported difference at least this large in less than 5% of the rollouts you might perform.

In the rollout above, the results *aren't* statistically significant. The difference required for significance between any two moves would be about 0.0125, which is greater than the actual differences of 0.008. Moreover, the rollout is truncated, not full; and the bot doesn't play every move completely accurately. No matter how good we think this particular bot is, these results don't tell us much about how to play an opening 64. Even a statistically significant result may not indicate the best move, simply because we can't have complete confidence in any one bot. Too bad, but that's backgammon! It's still much more an art than a science. However, it's better to provide more information than less. We should add as much as we can to the sum of backgammon knowledge.

Here is another example of a checkerplay rollout. This time all the results *are* statistically significant: the difference between any two moves is much more than 1.4 times the error term. Finally, the move order is the same in the rollout as in

3-ply Rollout (Money); Eval.				
24/22 6/5 24/22 24/23 7/5 24/23	-0.238 -0.275 -0.298	(-0.037) (-0.060)	±.012; ±.011; ±.022;	-0.244 -0.250 -0.272

the 3-ply evaluation. The rollout didn't reverse the evaluation this time.

At right is an example of a cube decision. The top line indicates the position was rolled out at 2-ply lookahead. The next three lines present the equities (and equity differences) of the three possible cube-actions. Again, the play made at the table is shown in **boldface**. The correct action is always on top. The equity for *Double, pass* is always 1.000—cube level isn't taken into account. If the cube is on 2, double-pass is still considered worth 1 point.

2-ply Rollout			
Double, take No double Double, pass	+0.992 +0.840 (-0.152) +1.000 (+0.008)	±.017 ±.012	
Wbg Wg W 00.4 16.4 72	L Lg .4 27.6 04.5	Lbg 00.2	
Cubeless equity: +0.570			

The next two lines present the cubeless outcome distribution. When this position is played to completion, the player on roll has a 0.4% chance of winning a backgammon; a 16.4% chance of

winning a gammon or backgammon; and a 72.4% chance of winning in any way. He has a 27.6% chance of losing the game, with 4.5% gammon and backgammon losses, and 0.2% back-gammons. Because the central Wins and Losses columns include gammons and backgammons, they always sum to 100%.

The last line presents the cubeless equity: the value of the position when the game is played without the doubling cube, but with gammons and backgammons counting. Although backgammon is not often played this way, cubeless equity is a useful measure for comparing positions. Here, the cubeless equity is .570—over half a point. If the position were played out one hundred times (without the doubling cube), the player on roll could expect a net profit around fifty-seven points.

In the above rollout, we can be pretty sure the position is a correct double. It's very unlikely that Snowie would inaccurately report such a large difference in favor of doubling. How about the double-take results? Perhaps the position is a take, perhaps not. The double-take results aren't significantly different from 1.0. We can speculate and cogitate, and maybe we can find the right answer through analysis alone; but from the results by themselves, we just don't know whether it's correct to take the cube. As previously noted, rollouts are far from perfect information. They're useful, but we have to question them ceaselessly if we want to approach the bots' level.

Some Timeless Guidelines

Humans like general rules and use them well. Here are some quaint, and not-so-quaint, guidelines for every backgammon player. They've all stood the test of time. I refer to them often, so it seems convenient to collect them in one section.

Magriel's Criteria for Safe Play Versus Bold Play

Paul Magriel was one of the best players, perhaps the very best, of the 1970s. He wrote the game's first real textbook, *Backgammon*, which I recommend as every player's first book. It's a thorough, systematic approach to the game's basics, with many diagrammed examples that illustrate the main ideas very well. The book came out in 1976, but it's still a good investment. Every player should own at least one copy.

Chapter 16 of *Backgammon*, "Safe Play vs Bold Play," remains one of the finest achievements of backgammon theory. Magriel lists and explains several criteria for deciding when to play safely and when to play boldly. These criteria are as valid now as they were when the book was written. They're easily the most useful of the time-honored rules of thumb. If you have any doubt about whether to make a safe or a bold play, go through the criteria and ask yourself, "What would Magriel do?" A huge majority of the time they'll lead you to the right play. Of course, that means you have to memorize them, but that's not too hard. Here they are in their entirety:

- A. Tactical Principles
 - 1. Do you have an advanced anchor? Having an advanced anchor enables you to play boldly.
 - 2. How strong is your opponent's inner board? The stronger your opponent's inner board, the more conservatively you must play.
 - 3. How strong is *your* inner board (especially compared to your opponent's?) If you have more inner board points closed than your opponent, you tend to play boldly; with less points closed, more conservatively.
 - 4. Does your opponent have blots in his inner board? If your opponent has blots in his inner board, you can afford to take more chances because of possible return shots.
- B. Strategic Principles
 - 1. How many men do you have back? The more men you have back, the more chances you can take. With no men back or only one man back, you must play conservatively.
 - 2. How many men does your opponent have back? When your opponent has no men back or only one man back, you want to play provocatively to try to force an exchange of hits.

(From Magriel, Backgammon, p. 221.)

A Few Other Guidelines

1. Put your checkers where you want them.

This is a positional guideline. Slot important points. Make important points. Keep your opponent off important points.

2. When in doubt, hit.

"When in doubt, X" is what I call the Weak Form of a saying. The "when in doubt" qualifier is a good one, because no saying can cover all situations. If you have *no* doubt that you should hit, you simply hit and don't worry about guidelines. The Strong Form of a saying is "Always X." For years I've been preaching "Always hit!" to emphasize how important hitting is.

Of course you shouldn't *always* hit. *When in doubt* you should hit. The main reason is that when your opponent stays on the bar it's a huge swing in your favor. Also, the need to come in diverts his attention from other areas of the board, restricting his options. So, if you're in doubt you should hit. You probably already know this, but you should probably be in doubt less often than you are. Malcolm Davis likes to hit: a player after my own heart.

3. *Prime an anchor; attack a blot.*

If your opponent has an anchor in your board, it's good to block it. It's less important to block a single checker. It's much easier for a single checker to escape any sort of blocking structure than it is for two checkers to escape singly or in tandem. It's more than twice as hard to escape two checkers as it is to escape one. Therefore, a very good way to play against one back checker is to attack it. Priming it can be useful, but an attack is usually better.

4. *When ahead in the race, race.*

Kit Woolsey has written articles about this one. It's simple: If you're ahead in the race, racing will make you the favorite in the game. Whenever you're ahead in the race, you should look for opportunities to convert to a purely racing game plan. These opportunities can be found in strange places.

Final Note about Guidelines

After each game of this book's matches, there's a section called "Lessons" where I distill some of the game analysis into guidelines. These aren't always sweeping generalizations, but they're as broad and as useful as the players, Snowie 3.2, and I could make them.

Comments by the Players

Malcolm Davis, Ed O'Laughlin, and Frank Talbot kindly agreed to comment on the matches. Their remarks are included in the text. Davis commented on all three of his matches. O'Laughlin and Talbot commented only on their own.

Commentaries from such great players are really valuable. We're all experts at home, where we can study and ponder at our leisure. But over the board, face to face, world-class players consistently find the plays that lesser talents don't. Their commentary gives us insight into what they were thinking about over the board, under pressure.

In analyzing these matches, I try to pick apart the interesting moves in all their nuances. But detailed analysis isn't always possible at the table. You have to generalize. The best guidelines, like Magriel's criteria for safe versus bold play, will seldom lead you astray. Others are good, but none are guaranteed pointers to the correct moves. Yet we're human, and we have to work with the best abstractions we have. That's what the players of these matches do, including me. Their over-the-board thoughts and impressions are an important part of their praxis.

Here are Davis's general impressions of his own play, in his own words:

I've been trying to win matches as opposed to playing for a low bot error rate. They're probably pretty close to the same thing, but I don't worry about my error rate.

If I knew why I make the plays I make I'd feel better, but I don't. I just really have to play enough so that it looks right to me and I do it, you know. I've noticed years ago that good players who are well-intentioned and honest and talented and knowledgeable would give me reasons and the reasons just turned out not to be right. The only thing I could do any better was just not give reasons. I hate to give them if I'm not pretty sure they're right.

We can learn a lot from Davis even in those brief paragraphs:

- (1) Davis doesn't care how well the bots say he played, he just cares about winning.
- (2) Davis strives to play by instinct, to do right and not to worry about analyzing his moves in great detail. The best detailed reasoning he encountered long ago has often proven wrong. If he can get to the point where the best play *looks right*, he's arrived—he doesn't need to analyze any further than that.
- (3) Davis seems modest, very non-egotistic. He seems that way in person, as well. That's a very good attitude. If you're humble—but not so humble that you don't trust your own judgment—you're ready to learn from your mistakes, forget about the past, and win tomorrow.

Enjoy the matches!