

# To Hit, or not to Hit

Volume I

Dirk Schiemann

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# Acknowledgments

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# Contents

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<b>Acknowledgments</b>	<b>ii</b>
<b>Contents</b>	<b>iii</b>
<b>Introduction</b>	<b>vi</b>
<b>I Basic Concepts</b>	<b>1</b>
<b>1 Reasons for Hitting</b>	<b>2</b>
1.1 Hitting to Improve Racing Chances . . . . .	2
1.2 Hitting and Gammons . . . . .	7
1.3 Hitting as a Tactical Measure . . . . .	14
1.4 Hitting as Part of a Blitz . . . . .	20
1.5 Do We Want Our Opponent to Dance? . . . . .	26
1.6 Summary . . . . .	29
<b>II Hitting in the Inner Board</b>	<b>31</b>
<b>2 Hitting Loose in the Early Game</b>	<b>32</b>
2.1 Constructive and Non-Constructive Alternatives . . . . .	32
2.2 Hitting Loose or Making an Advanced Anchor . . . . .	43
2.3 Hitting Loose or Making an Outfield Point . . . . .	46
2.4 Summary . . . . .	55
2.5 Quiz and Solutions . . . . .	56

<b>3</b>	<b>Hitting Loose in the Middle Game</b>	<b>64</b>
3.1	Summary . . . . .	84
3.2	Quiz and Solutions . . . . .	85
<b>4</b>	<b>The Tempo Hit</b>	<b>94</b>
4.1	Tempo Hits in the Early Game . . . . .	94
4.2	Tempo Hits in the Middle Game . . . . .	108
4.3	Summary . . . . .	120
4.4	Quiz and Solutions . . . . .	121
<b>5</b>	<b>The Double Hit</b>	<b>132</b>
5.1	The Double Hit with One Home Board Blot . . . . .	132
5.1.1	Deciding Whether to Hit Two Checkers or not Hit at All . . . . .	135
5.2	The Double Hit with Multiple Home Board Blots . . . . .	148
5.3	Summary . . . . .	160
5.4	Quiz and Solutions . . . . .	161
<b>6</b>	<b>Hitting in the Opponent's Inner Board</b>	<b>170</b>
<b>III Hitting in the Outer Board</b>		<b>189</b>
<b>7</b>	<b>Hitting or Making a Defensive Point</b>	<b>190</b>
7.1	Hitting in Our Own Outfield . . . . .	190
7.2	Hitting in Our Opponent's Outfield . . . . .	201
7.3	Leaving Our Anchor in Order to Hit . . . . .	207
7.4	Quiz and Solutions . . . . .	215
<b>8</b>	<b>Hitting or Making an Offensive Point</b>	<b>222</b>
8.1	Hitting in Our Outer Board . . . . .	222
8.1.1	Hitting on Our Bar Point . . . . .	229
8.2	Hitting in Our Opponent's Outfield . . . . .	234
8.3	Summary . . . . .	242
8.4	Quiz and Solutions . . . . .	243
<b>IV Appendix</b>		<b>251</b>
<b>A</b>	<b>Summary of Our Rules of Thumb and Concepts</b>	<b>252</b>

<b>B</b>	<b>Important Probabilities in Backgammon</b>	<b>260</b>
<b>C</b>	<b>Equity</b>	<b>264</b>
<b>D</b>	<b>Glossary</b>	<b>270</b>

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# Introduction

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When learning backgammon, the first impression that most players get is that the game is mainly about getting your checkers around the board as quickly as possible. For them the rule of thumb “When in doubt hit!” makes perfect sense since hitting fits neatly into a racing strategy: you slow your opponent down by sending a checker back and you may slow her down even more when she fails to enter from the bar. However, I think in order to become a good player you need to get rid of this simple rule at some stage of your learning process. Even though hitting is indeed the default play in many situations, there are others where it is a big mistake. The purpose of this book is to shed some light on the various strategic and tactical factors that determine whether to hit.

The choice between an aggressive hitting play and a safe alternative is a risk versus reward decision. For a proper assessment of risk and reward it is essential to know some probabilities in backgammon. For example, you need to know how often your opponent will hit back, or how likely it is that she will stay out. If you have difficulties counting shots or dancing numbers, I therefore strongly recommend going to appendix B first, where you can find a short introduction to basic probabilities in backgammon.

In appendix C the concept of equity is introduced. Fully understanding equity is not as important as being able to compute or simply knowing the basic probabilities. However, since all mistakes are measured in (cubeful) equity, it is helpful to understand the meaning of the term. Furthermore, it is useful to know how equities are displayed in the analysis window of the backgammon software eXtreme Gammon, especially with regard to cube level. In appendix D you can find the definitions of



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some basic backgammon terms used in this text.

In part I of this book I discuss the various reasons for hitting, and I introduce basic concepts that are important for the discussion such as cubeful equity and gammon value. Part II is mainly about hitting loose in our inner board. I examine in detail loose hits in the early game and in the middle game before discussing tempo hits, double hits, and double tiger plays. To complete the discussion, in the last chapter of part II I look at some examples where you may not want to hit in your opponent's inner board. Part III is about whether you should hit or make a valuable point. The first chapter deals with hitting versus making a good advanced anchor, whereas the second chapter is about hitting versus making a strong offensive point.

Most chapters are structured in a similar way. Basic concepts will be developed first, with the help of very simple early game positions, and then these concepts will be applied to positions deeper into the game. Whenever possible they will be presented in easy-to-remember rules of thumb.

When nothing else is indicated, the positions in our diagrams refer to unlimited games with the Jacoby Rule in play. This means that, unlike in match play, an arbitrary number of games is played without any limit to the cube level, and that gammons and backgammons don't count when the cube is in the middle. Instead of "unlimited" I also use the term "for money".

The position diagrams are more or less self-explanatory. The numbers on the right side of a standard position diagram are the numbers that you can find in the analysis window of eXtreme Gammon. For all positions they are the results of full XG rollouts (standard settings, 5184 games, seed 1). I use various terms in the text to refer to a position: "the position in diagram 1.1", "diagram 1.1", and "position 1.1" all refer to the position shown in the diagram labeled 1.1.

When I started this book project, I quickly realized that the topic is too broad for only one volume. In this book I mainly concentrate on positions in a stage where the game is not yet well-defined. This means that it is not clear which game plan both sides should pursue, as is the case in many positions in the opening or in the early middle game. In volume II I will mainly examine positions from a stage where the game has taken shape already. Topics include how to execute a blitz attack, whether to hit against a backgame, or whether to hit a lone checker in our home board in a containment game.

## Chapter 2

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# Hitting Loose in the Early Game

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Hitting loose means hitting at least one checker in our home board and leaving a blot which is vulnerable to a direct return shot from the bar. There is a big difference between hitting on a high inner board point like the 5 or 4 and hitting on low points like the ace or deuce. The latter is done mainly for tactical reasons: we want to force our opponent to use part of her next roll to enter from the bar. Hitting on the low points is therefore called a tempo hit and will be dealt with in chapter 4. Hitting on the 5 or 4 and to a lesser extent on the 3, by contrast, has a strategical component as well. We are hitting on a point that we hope to make in order to construct a board or a prime, while at the same time trying to prevent our opponent from getting an advanced anchor.

### 2.1 Constructive and Non-Constructive Alternatives

As with any checker play decision, we have to evaluate the merits of the alternatives to hitting loose. One alternative to hitting in both positions in diagram 2.1 is playing 13/8, which slightly improves Black's checker distribution. Another is to move the back checkers, which increases Black's chance to make an advanced anchor or to escape. But these alternatives lead only to modest improvements in Black's position

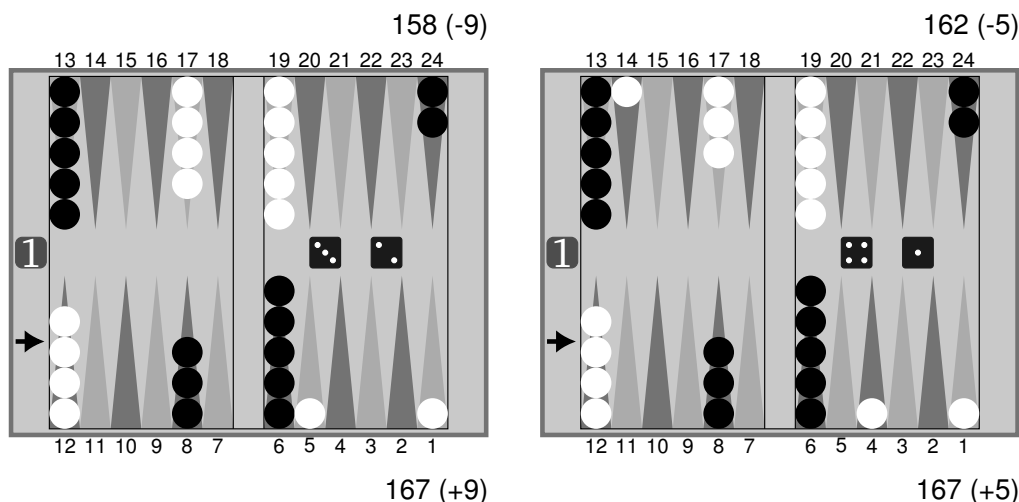


Diagram 2.1: In the early game it is generally correct to hit loose on a high inner board point when there is no constructive alternative.

compared, for example, to making an important point.

In order to formulate our first rule of thumb, we will call non-hitting plays that improve our position significantly “constructive” alternatives and plays that don’t do much “non-constructive” alternatives. The following simple rule has few exceptions, which mainly occur when you have escaped both back checkers or when your opponent’s home board is very strong:

In the early game when there is no constructive alternative, hit loose on your 5 point, 4 point and to a lesser extent your 3 point.

This is true despite the fact that hitting loose is bad for your racing chances. Depending upon where you hit in your home board you gain only 1 to 5 pips in the race, but you risk losing 24 to 20 pips when your opponent hits you back. Thus hitting loose, on average, loses ground in the race.

Any non-hitting play is a big blunder in the left position of diagram 2.1 and a significant error in the right position. Had White split with a  $\bullet\bullet\bullet\bullet$  instead of a  $\bullet\bullet\bullet\bullet$  in the left position, it would still be correct to play 13/11 6/3\* with a  $\bullet\bullet$ . Note that in our two examples the resulting positions after hitting don’t look very appealing. As you can see in diagram 2.2, Black’s checker distribution after 24/23 8/4\* is much

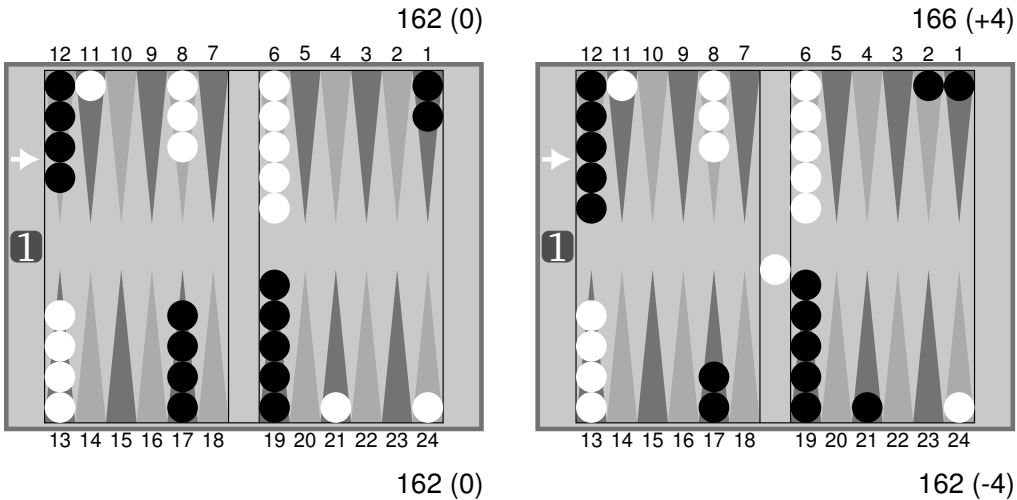


Diagram 2.2: It is more important for Black to keep White from developing than to improve his checker distribution.

worse than after 13/8, with a stripped 8 point and big stacks on the mid-point and 6 point. So why is hitting nevertheless superior?

The main problem with a safe but passive move like 13/8 is that it cedes control of the game. White has many numbers that will make either a good defensive or offensive point or that will escape with one of her back checkers. Furthermore, due to White's weak board, getting hit is oftentimes less harmful to Black than letting White develop her position. For example, Black wouldn't like if White hits back with a in the right position in diagram 2.2, but this is still a better outcome for him than letting White make her 5 point in the left position with this number. Additionally, after Black hits loose White has some very bad come in numbers, mostly containing a , after which Black becomes an immediate equity favorite. After Black plays 13/8, White will remain the favorite no matter what she rolls.


followed by and followed by are bad opening sequences for Black and no matter what he does he will be the underdog. When you are off to a bad start you should generally discard passive plays and try to take the initiative. This can be summarized as follows:

When you are behind in development you should actively try to change the course of the game, even if that means taking some risks. Conversely, when you are ahead in development, you should generally be inclined to play more conservatively.

This is a good guideline not only for early game positions but for checker play generally: when the game seems to be slipping away from you, take more risks and try to turn things around before it is too late.

### When there Is a Constructive Alternative

When you haven't yet escaped with your back checkers and you don't have a constructive alternative, the decision whether to hit loose is easy. It becomes tricky when the choice is between making a good point or hitting, or when you have to sacrifice an already-made point in order to hit loose.

Making the 3 point with  in position 2.3 is safe and solid, although Black would prefer to keep a spare checker on his 8 point. The problem with playing 8/3 6/3 is that White has already split to Black's 5 point and there are therefore many numbers that will allow her to make an advanced anchor. If that happens, the 3 point no longer has any blocking value. Furthermore, White is already the favorite in the game because she is one step ahead in development and has a slight racing advantage. According to our rule of thumb, Black should therefore look for a more active alternative. 13/5\* is superior because it fights for the all-important 5 point, unstacks the mid-point, and leaves a spare on the

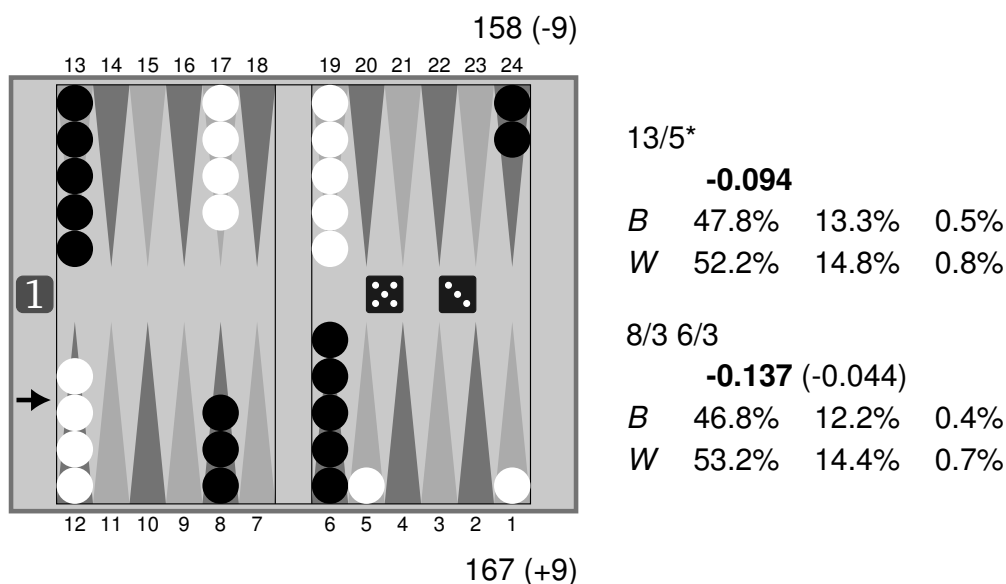


Diagram 2.3: An active play is often preferable when being behind in development.

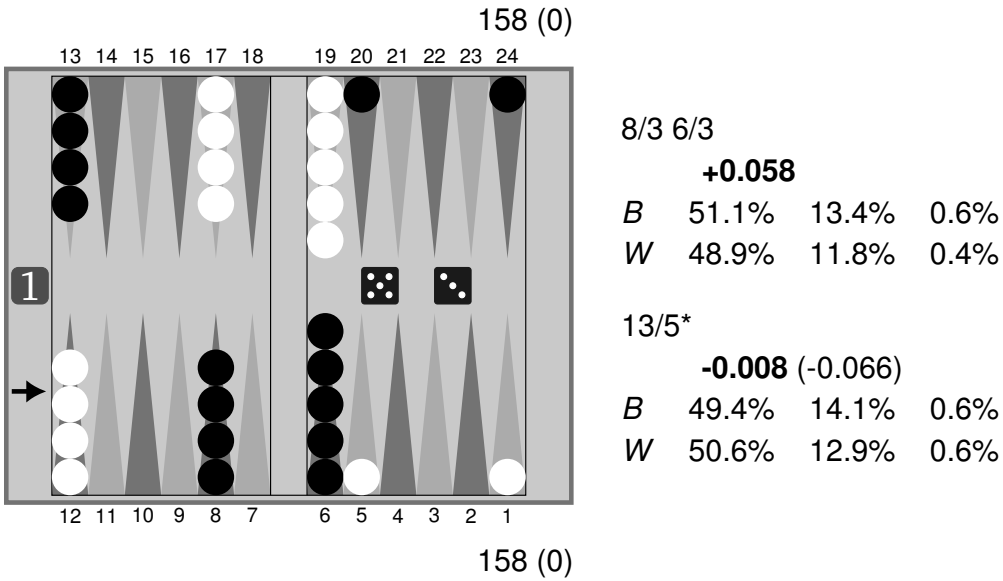


Diagram 2.4: Black shouldn't play 13/5\* since he is ahead in development.

8 point. Whenever White fails to hit back or roll or (13 numbers), the advantage will shift to Black.

Let's compare this to the position in diagram 2.4 where Black started with a before White rolled hers. Now after making the 3 point, Black is ahead in the race and has the developmental advantage. 8/3 6/3 also leads to a better checker distribution than hitting loose because it unstacks the 6 point and doesn't strip the 8 point as it did in position 2.3. These differences from the previous position outweigh the temporary gain of initiative achieved by 13/5\*, as you can see in the statistics column of diagram 2.4: hitting is almost a blunder here.

As I have already mentioned, hitting loose loses ground, on average, in the race. When your initial plays favor racing, therefore, you should play solid and safe rather than hitting loose and risking your racing advantage. In position 2.5 Black already escaped with one checker with a . Making the 3 point and trying to conserve this developmental advantage is clearly the best play even though hitting and unstacking the mid-point leaves Black with a much better checker distribution. This observation can be generalized:

Game planning or tactical needs are usually more important than improving your checker distribution.

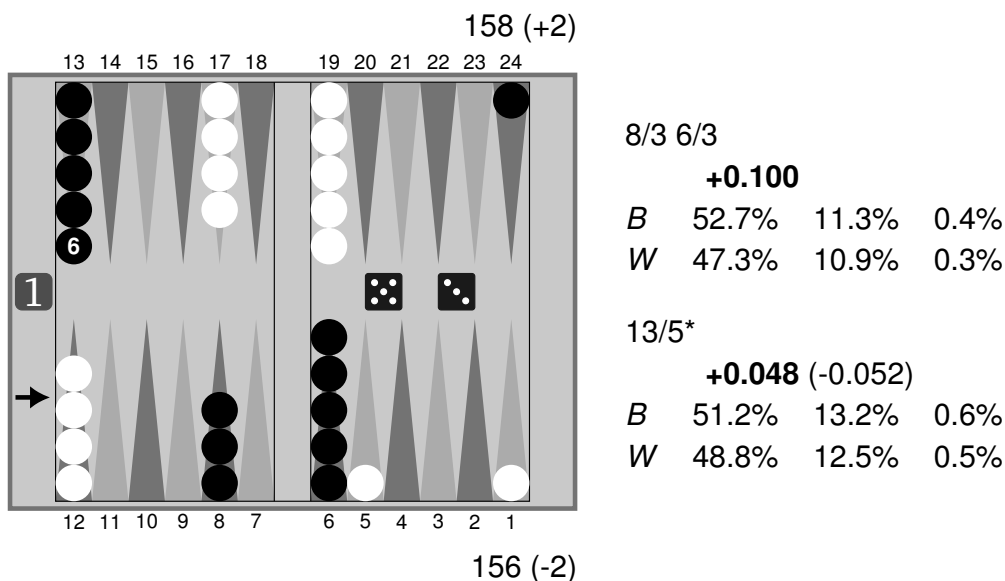


Diagram 2.5: Black shouldn't jeopardize his racing lead by playing 13/5\*.

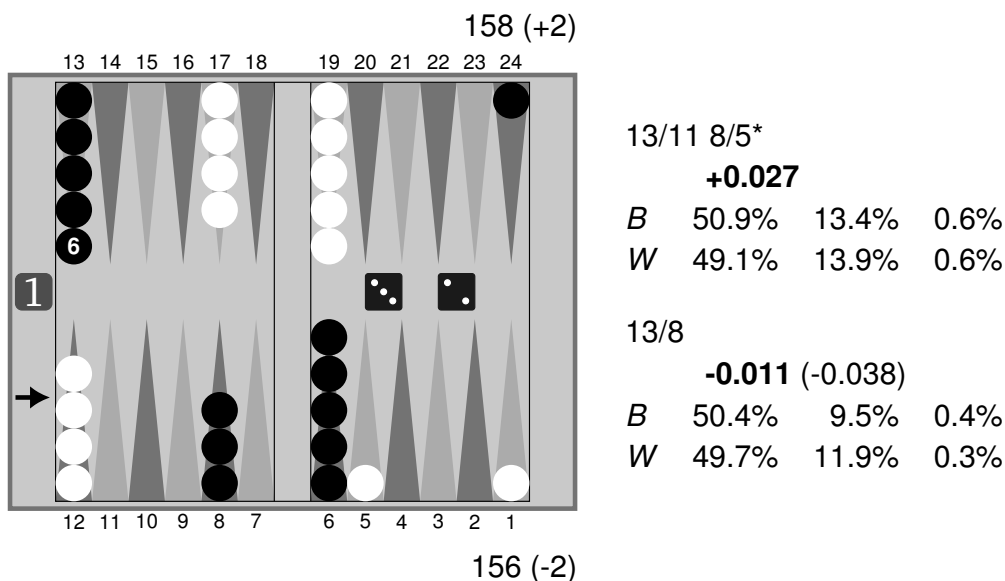


Diagram 2.6: Hitting is correct when there is no constructive alternative.

Note that Black shouldn't hit in position 2.5 because making the 3 point is a constructive alternative. When the alternative only improves your distribution but is non-constructive, like playing 13/8 in position 2.6, you should simply apply our rule from the beginning of the chapter and hit loose on the 5 point.

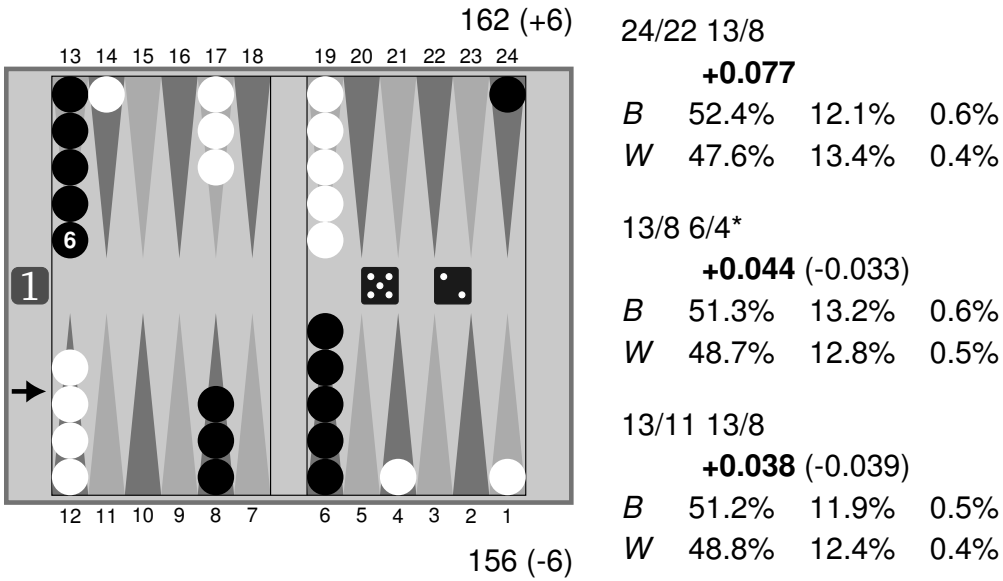


Diagram 2.7: Stepping up to the 22 point significantly improves Black’s chances of escaping.

You can find more exceptions to our rule when your choice is to hit loose on the 4 point; since making that point is less valuable than making the 5 point, you are less inclined to take risks in order to fight for it. Position 2.7 is a good example. Black should play 13/8 with the 6 and then consider his options with the 4. 24/22 fits better into Black’s game plan than 13/11 because he is ahead in the race. Advancing the back checker to the 22 point makes escaping much easier, whereas 13/11 risks losing the racing advantage when White rolls one of her eight hitting numbers. There are three further reasons why the “standard play” of hitting loose is inferior to 24/22.

- Black is “only” fighting for the 4 point.
- Advancing to the 22 point is a significant positional improvement which is why it can be considered as a constructive alternative.
- The checker on the 22 point is not under much threat of being attacked.

All of these reasons *combined* make position 2.7 an exception, and a slight change in the position leads to completely different results. Playing 24/22 with the 4 becomes the worst of the three options when White



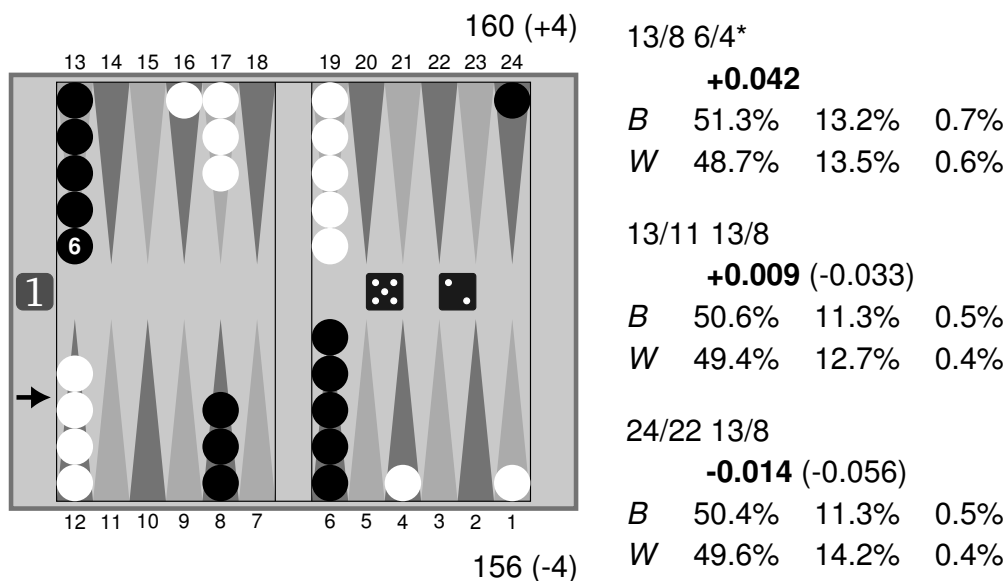


Diagram 2.8: White has good chances to make a valuable point. Therefore it becomes more important to put her on the bar.

replies to Black's  $\text{6/4}$  with a  $\text{4/3}$  instead of a  $\text{3/2}$ , as you can see in diagram 2.8. Stepping up here with the back checker is less effective because White has more numbers with which to attack it. Furthermore, with some fours she will simply make the 9 point and block most of Black's escaping numbers.

In position 2.7, hitting loose on the 4 point is about as strong as bringing a checker down from the mid-point. In position 2.8 6/4\* is clearly better than 13/11; White's builder on the 9 point is more threatening than her builder on the 11 point in position 2.7 because it gives White more rolls to make a good point. The tempo aspect of the hitting play thus becomes more important, meaning that Black has more incentive to put White on the bar and keep her from developing her front position. Of course, this concept does not only apply to early game positions:

The better your opponent's builder distribution, the more attractive hitting becomes.

## Hitting Loose when Your Opponent's Home Board Is Strong

Hitting loose is more dangerous when your opponent's home board is strong because her return hits from the bar are more costly. How strong

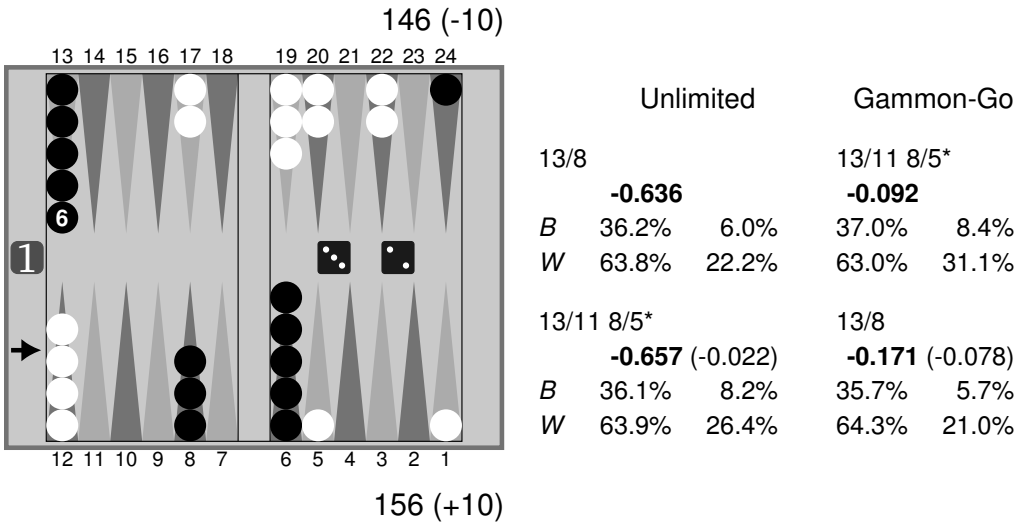


Diagram 2.9: Hitting is a small mistake only because Black loses too many gammons.

does it have to be so that it becomes better to choose a safer but non-constructive alternative over hitting loose on the 5 point? You can see in position 2.9 that hitting is a reasonable option even when the opponent has a good three-point board. Playing 13/8 is slightly better for money only because it loses fewer gammons. Consequently, at scores like gammon-go where gammon losses don't matter it would be a big mistake to play passively.

However, when Black rolls instead of in this position, not hitting loose on the 5 point is a 109 blunder, as you can see in diagram 2.10. The big difference between the two rolls can easily be explained. First, hitting with the and thereby unstacking the 6 point leads to a much better checker distribution for Black than hitting with the and stripping the 8 point in position 2.9. Hence Black's equity is higher after 13/8 6/5\* (-0.603 in position 2.10) than after 13/11 8/5\* (-0.657 in position 2.9). Second, in position 2.10 Black wants to keep his back checker on the 24 point. Advancing it to the 23 point not only blocks Black's sixes but it also leaves the back checker more vulnerable to being attacked. This is why 13/8 24/23 leads to a lower equity for Black than 13/8 in position 2.9 (-0.712 instead of -0.636). In other words, the aggressive play gains value when the roll is instead of while the passive play loses value, which is why the difference is so big between the two rolls.

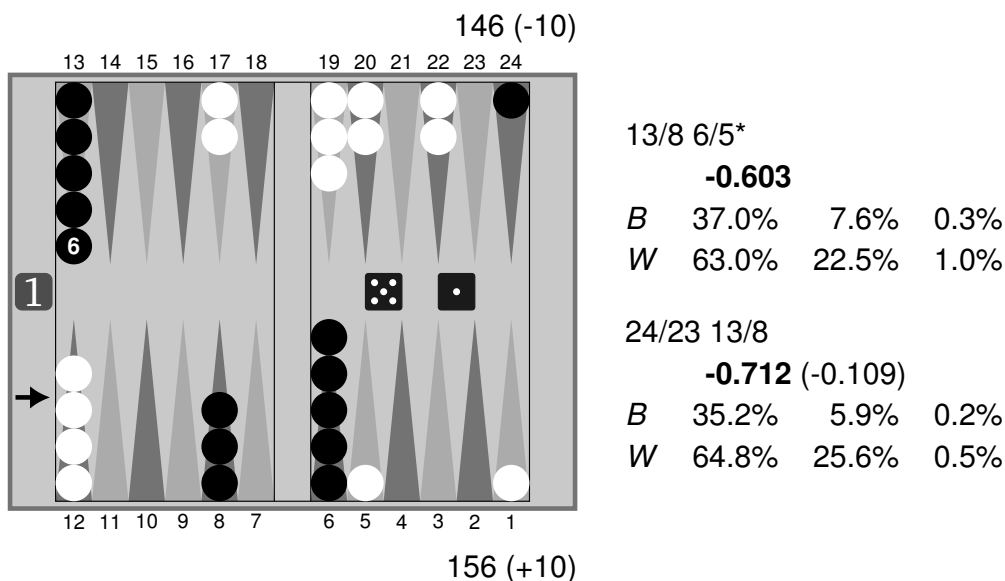


Diagram 2.10: The passive play is actually more dangerous.

I misplayed the in position 2.10 because I thought at the time that the safe versus bold criteria like relative home board strength or number of checkers back all argued in favor of the safe play. Unfortunately, I failed to realize that the “safe” play in this position is not safe at all for various reasons:

- The checker on the 23 point is an easy target for an attack.
- Because of Black’s many checkers in the outfield White will frequently win a gammon even if she manages to close out only one checker.
- Black will often be forced to expose another blot anyway because of his inflexible position.

As you can see in the statistics column of diagram 2.10, the seemingly safer play loses even more gammons than the aggressive hit. Note that not hitting also fails to observe our rule that you should look for an active play when you are in bad shape and the game is slipping away from you. There is another rule of thumb that I find useful in these situations:

When the position is scary and you feel that you will lose lots of gammons no matter what you do, make the move you think will win the most games.

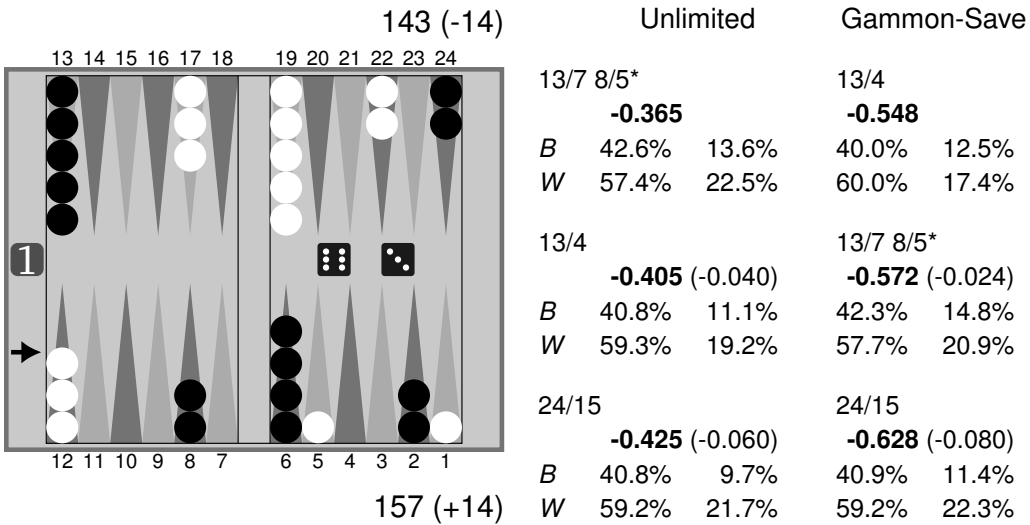


Diagram 2.11: Very aggressive hitting plays are often correct when the more passive alternatives leave a direct shot as well.

In position 2.10, for example, you should simply ask yourself what you would do at DMP and go with that play.

Position 2.11 shows how aggressively you can hit loose when the alternatives are non-constructive and leave direct shots anyway. When I try to figure out the best move in a position like this the following concept is the first thing that comes to my mind:

In the early game when you are down in the race and not behind a prime, jumping into the opponent's outfield with one of your back checkers is usually wrong if there is any reasonable alternative available.

This rule makes us discard 24/15 in position 2.11, leaving us with 13/7 8/5\* and 13/4 as reasonable alternatives. The choice between breaking the 8 point and leaving 3 blots or keeping the structure but playing passively is difficult. When in doubt, I would adhere to the following rule of thumb:

Hit loose when the quiet play leaves a direct shot anyway.

Another argument for hitting is the fact that Black has already made his deuce point. Since the deuce point and the 8 point are too far apart to form part of a prime, the 8 point loses value once the deuce point is

made. Thus I would be less reluctant to break it. As you can see in the statistics column of diagram 2.11, the safer, more passive approach is only correct at gammon-save where one of your top priorities is to avoid a gammon loss and winning a gammon is worthless.

## 2.2 Hitting Loose or Making an Advanced Anchor

When the choice is between hitting loose or securing an anchor on your opponent's 5 point or 4 point you should apply the following rule of thumb:

It is almost always better to make your opponent's 5 point than to hit loose on your own 5 point. When the choice is between your opponent's 4 point and hitting loose on the 5, make the anchor as a default.

Position 2.12 is no exception. It might be tempting for Black to hit loose because making the advanced anchor gives White many numbers to hit Black's blot on his 9 point. Note, however, that this is not a big concern

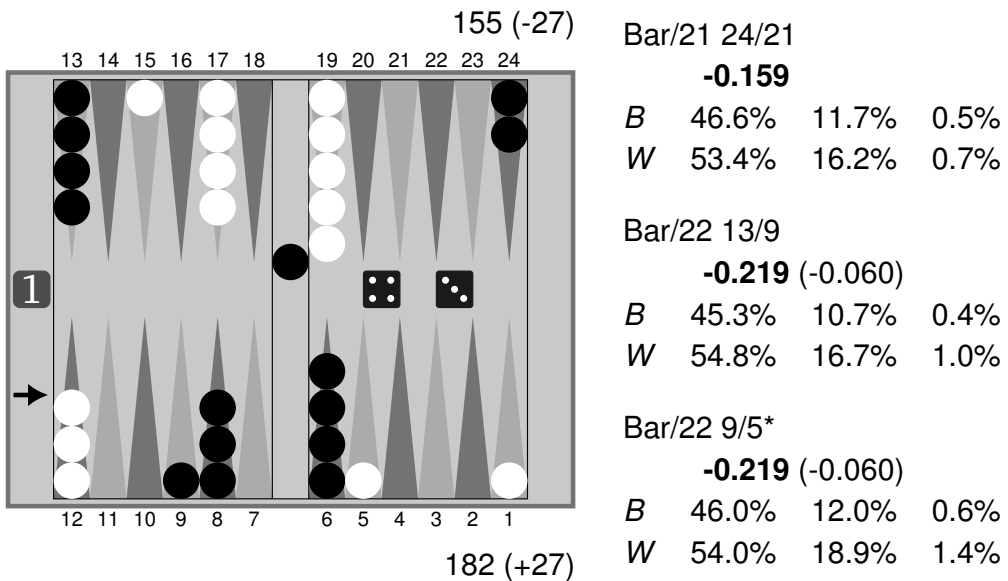


Diagram 2.12: Making an advanced anchor is usually better than hitting loose.

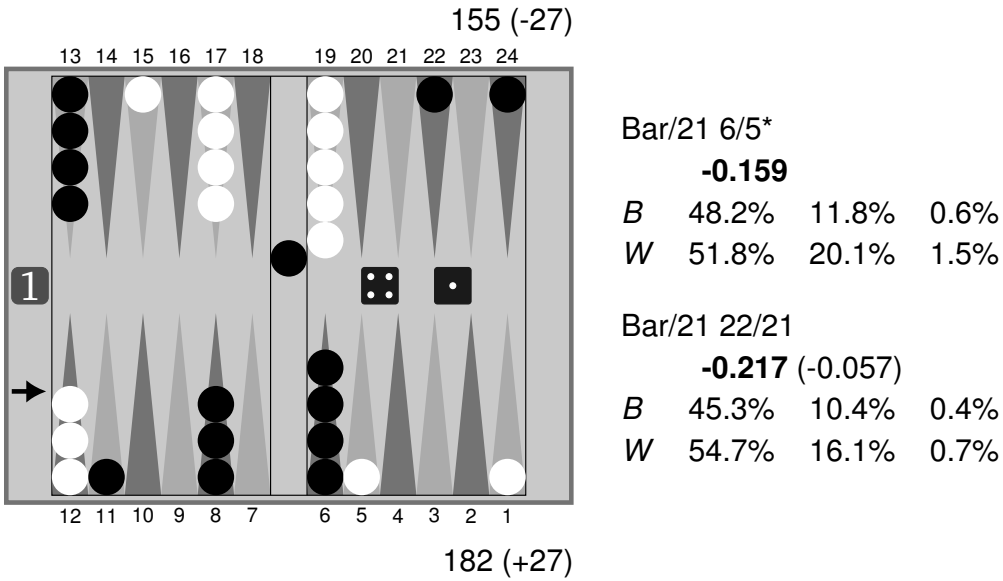


Diagram 2.13: This position is one of the few exceptions to the rule mainly because all of White’s numbers play well if Black does not hit.

here because of duplication: White would also like to use fours to make Black’s 5 point, so hitting Black’s checker on the 9 is not without cost.

With some slight changes to position 2.12 we can construct an example where hitting is better than anchoring. In position 2.13 Black can hit with the from the 6 point, which is always preferable to hitting with the from 8 point in the opening. Additionally, making the 4 anchor is worse than in position 2.12 because this time White’s numbers are perfectly diversified: sixes hit, fours make the anchor on Black’s 5 point, and combinations of fives, threes, and aces make White’s 5 point. White’s worst numbers are and and even these are not entirely useless. With she escapes and with she makes her 10 point.

### How Strictly Should You Apply Rules of Thumb?

Following our rule of making the advanced anchor instead of hitting loose leads to a sizable mistake in position 2.13. Nevertheless, I believe that, on average, you are better off following these rules unless you are *very* sure that you are facing an exception. And naturally, making the advanced anchor becomes even clearer when the alternative is to hit loose on your own 4 point. From my own experience I can say that I have been punished for “creative” plays far more often than I would

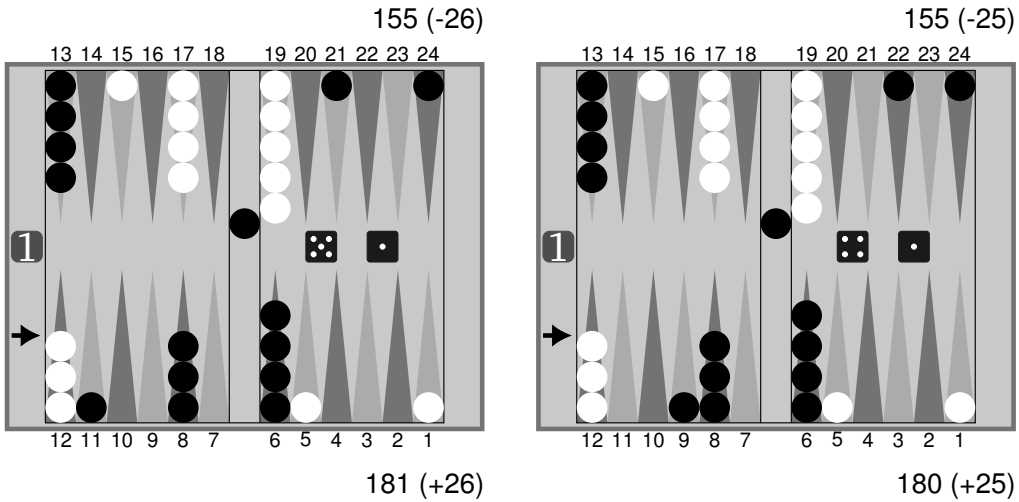


Diagram 2.14: When in doubt, you should make the advanced anchor. Hitting is slightly inferior in both positions.

have liked. Usually this happens when I immediately see an obvious, straightforward move but then, after deeper analysis, I come up with factors that argue against it. In the end I convince myself that I have found an exception to my general rules and make a non-standard play. True, when you make such a move and it is correct you look like a genius, but I think that more often you will look like a fool when the obvious move turns out to be far better than your creative play. Especially when you are not an expert player, you should stick to general principles even when that leads to a moderate mistake every once in a while.

In order to illustrate this point I constructed two more variations from position 2.12. In both positions in diagram 2.14 you can hit loose from the 6 point. In the left position the alternative is making the anchor on the 20 point. In the right position you can only make the 21 anchor like in position 2.13, but now White's fours are duplicated again. Not applying our rule and hitting loose is a mistake in both positions. To find exceptions conditions have to be perfect like in 2.13, and identifying these spots is difficult even for very strong players.

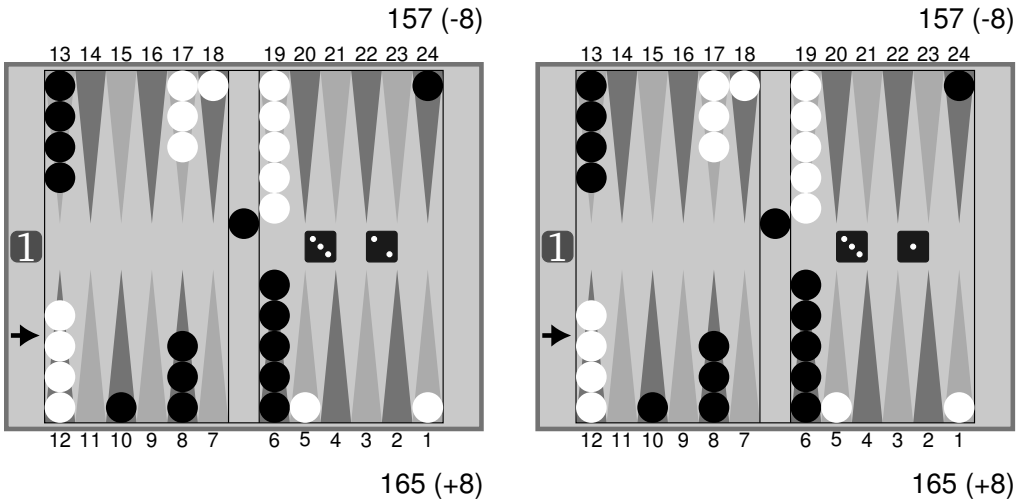


Diagram 2.15: We cannot be certain whether hitting or playing 13/10 is better. However, we can be sure that making the point is more attractive with 5-5 than with 6-6.

## 2.3 Hitting Loose or Making an Outfield Point

An outfield point is generally weaker than a strong anchor. This is why there is no default play when we are given the choice between hitting loose on the 5 point or making a good point in our outfield. However, we can look at the factors that favor one or the other play. In the position in diagram 2.15, for example, we would much rather hit loose on the 5 point with a 6-6 than with a 5-5. One reason that we have already encountered can be summarized in a simple rule:

It is much more attractive to hit loose by unstacking the 6 point than by stripping the 8 point.

The second advantage of hitting loose with the 6-6 is that it allows us to enter on the 22 point. This is much better than entering on the 24 point because our opponent has many rolls that make her bar point, and it would be very bad for us to be stuck on the 24 point when that happens. With the 5-5, by contrast, we would have to enter on the 23 point in order to hit, which is not of much help if our opponent makes her bar point. Note that making the 22 anchor is not a good idea. It is too passive and leaves our opponent without any bad numbers. We can



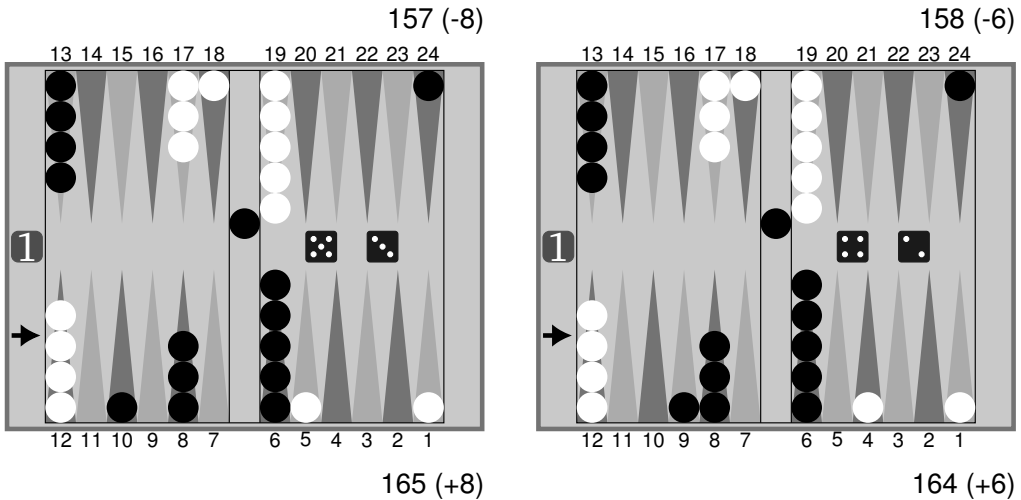


Diagram 2.16: Fighting for the 4 point is less attractive. You shouldn't hit loose in the position on the right.

be pretty confident that making the 10 point is better with the  $\bullet\bullet$  and that it looks like hitting is better with the  $\bullet\bullet$ .

What if we roll  $\bullet\bullet$  in this position? Playing Bar/20 13/10 should be about as good as playing Bar/23 13/10 with  $\bullet\bullet$ . On the one hand we enter on a better point, but on the other hand our opponent has more good numbers with which to attack us. We should discard entering on the 20 point and stripping our 8 point with 8/5\*. Entering with the  $\bullet$  and hitting with the  $\bullet$  looks fine but certainly less attractive than unstacking the 6 point with the  $\bullet$  when the roll is  $\bullet\bullet$ . All in all we cannot be sure whether hitting is better than making the 10 point with any of the three rolls, but our analysis allows us to rank the plays: hitting is most attractive with  $\bullet\bullet$  and least attractive with  $\bullet\bullet$ , and  $\bullet\bullet$  should be somewhere in between.

In the right position of diagram 2.16 the choice is between making a good outfield point and hitting loose on the 4 point. Entering with the  $\bullet\bullet$  and unstacking the 6 point with the  $\bullet$ , which is similar to the  $\bullet\bullet$  play in diagram 2.15, looks quite strong. However, 6/4\* only fights for the 4 point which is significantly weaker than the 5 point. This is actually such a big difference that it allows us formulate a rule of thumb:

As a default make the outfield point rather than hit loose on the 4 point.

Following this rule, we should play Bar/23 13/9 in the right position.

## 2. HITTING LOOSE IN THE EARLY GAME

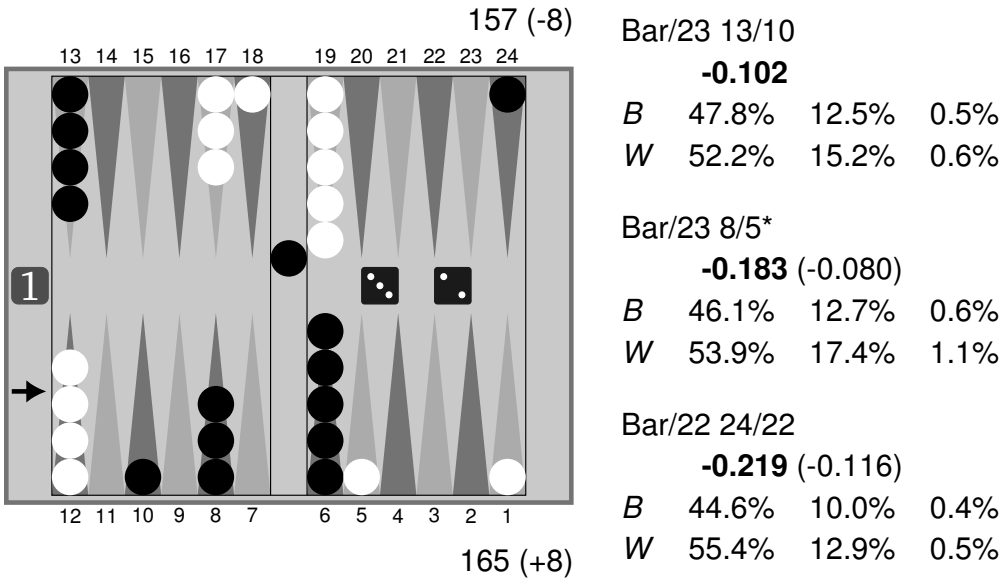


Diagram 2.17: Hitting loose with is a big mistake.

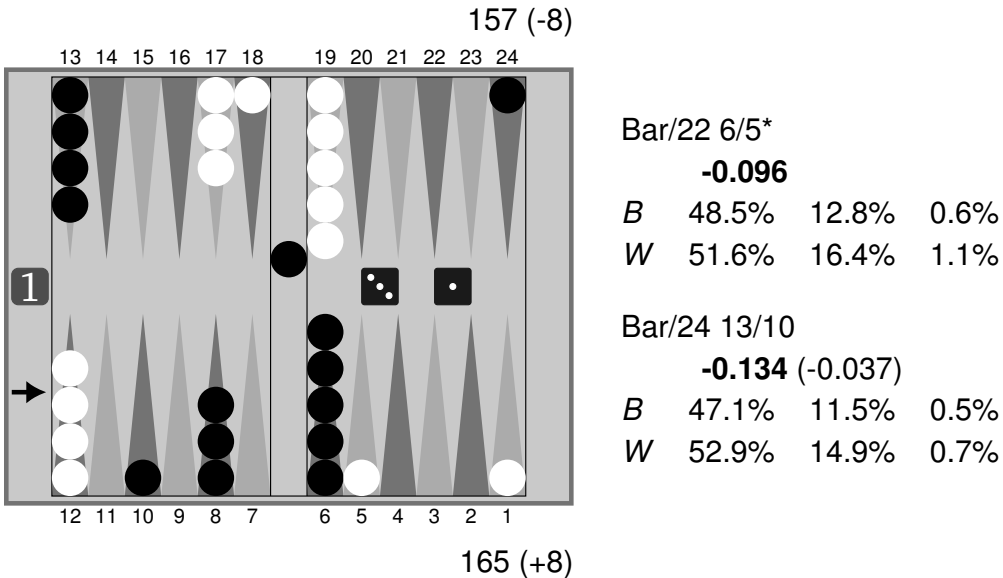


Diagram 2.18: Hitting loose gains in value when the roll is .

Diagrams 2.17 to 2.20 show the rollout results of the four previously discussed positions. Hitting loose with turns out to be a blunder, whereas it is the correct play with ; with it doesn't matter what you do, as long as you hit with the and not with the . Hitting loose generally increases gammon rates for both players, so you should be

## 2.3. Hitting Loose or Making an Outfield Point

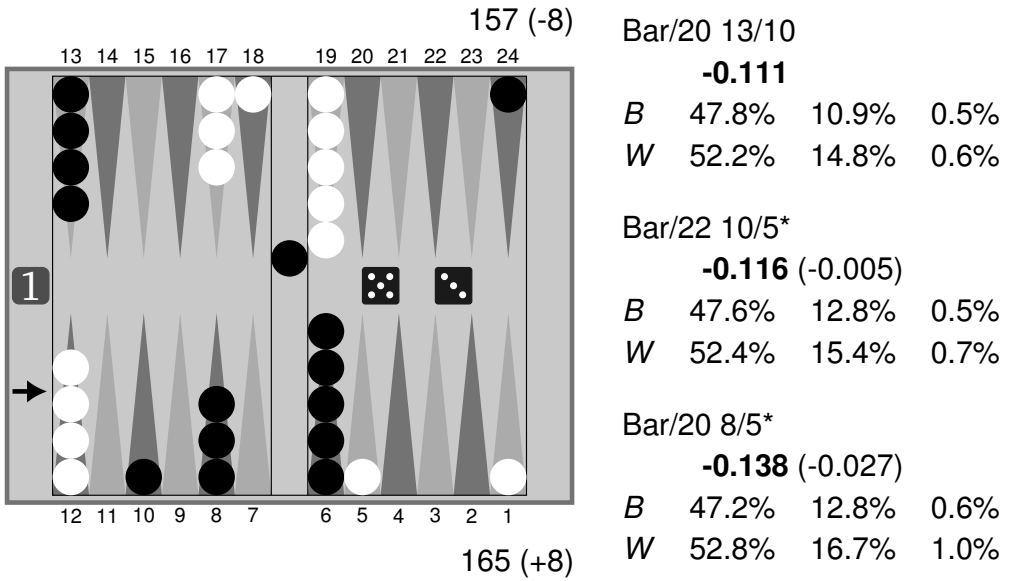


Diagram 2.19: With  $\square \square$  Bar/22 10/5\* is as good as making the 10 point. The main difference is that hitting increases gammon rates.

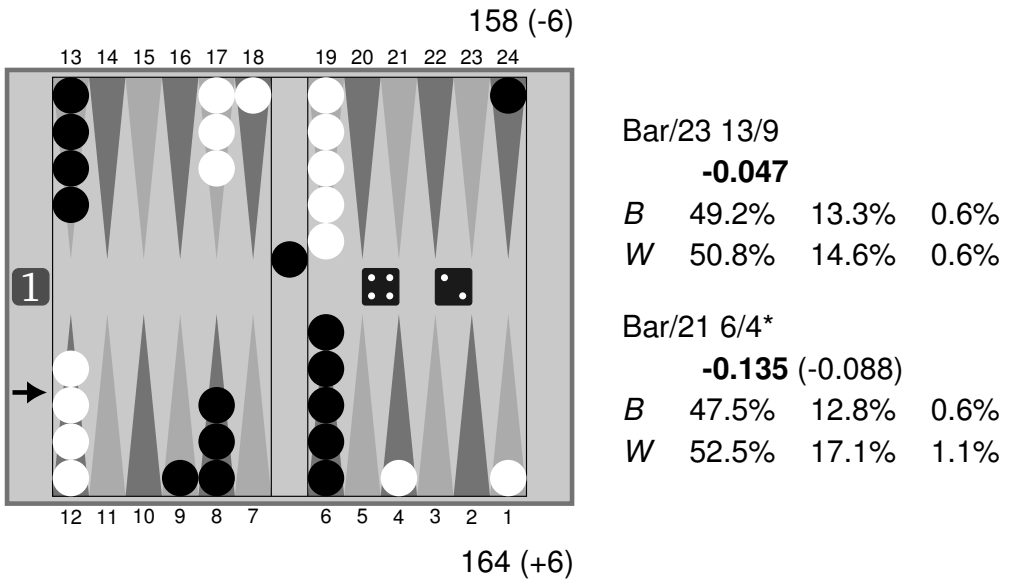


Diagram 2.20: It is usually correct to make the outfield point when the alternative is to hit loose on the 4 point.

more inclined to make the point at gammon-save and to hit at gammon-go. Following our rule and making the nine point is much better than hitting loose on the 4 point, as you can see in diagram 2.20.

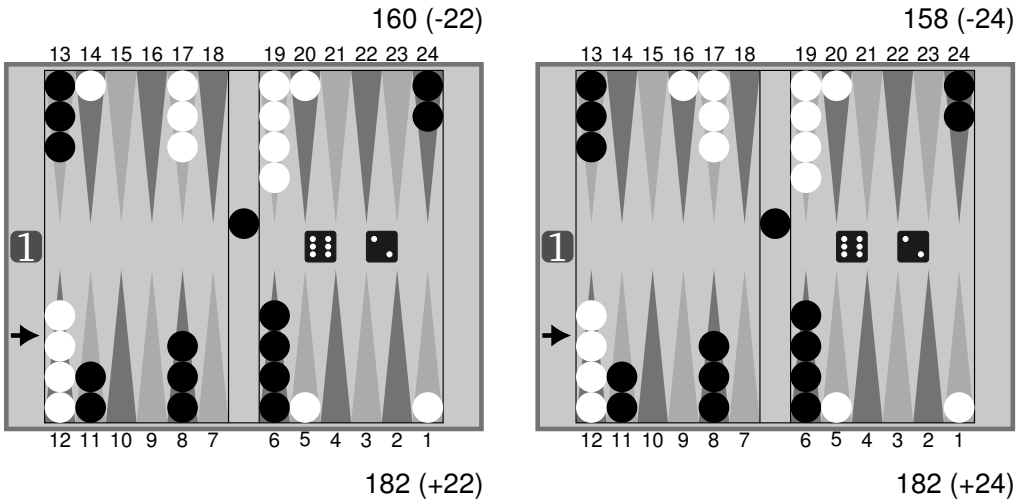


Diagram 2.21: In which of the two positions would you rather hit?

The question of whether to break an outfield point in order to hit loose is essentially the same as whether to make a point instead of hitting. The argument for hitting in both positions in diagram 2.21 is obvious: Black wants to keep White from covering her 5 point and hitting reduces the numbers that do so. Since the positions are almost identical, it might be hard to see at first glance why hitting is much more attractive in the position on the right. The reason is of a tactical nature. On the left, after Bar/23 11/5\* *all* of White's number from the bar except for either make her 5 point or hit Black's blot on his own 5 point, and some numbers do both. On the right, by contrast, all of White's sixes from the bar play badly except for . Generally, I find it very helpful to look at how my opponent's numbers that don't enter from the bar play elsewhere when I am not sure whether to hit. Then I use this tactical criterion as a decider:

You should be much more inclined to hit when your opponent has no good use elsewhere for her non-entering number(s). A hit loses value when a number that you block in your home board can be used constructively.

For the early game this general concept can be simplified.

When you are not sure whether to hit, look how your opponent's sixes play from the bar. When your opponent can use sixes elsewhere don't hit, and when they play poorly hit.

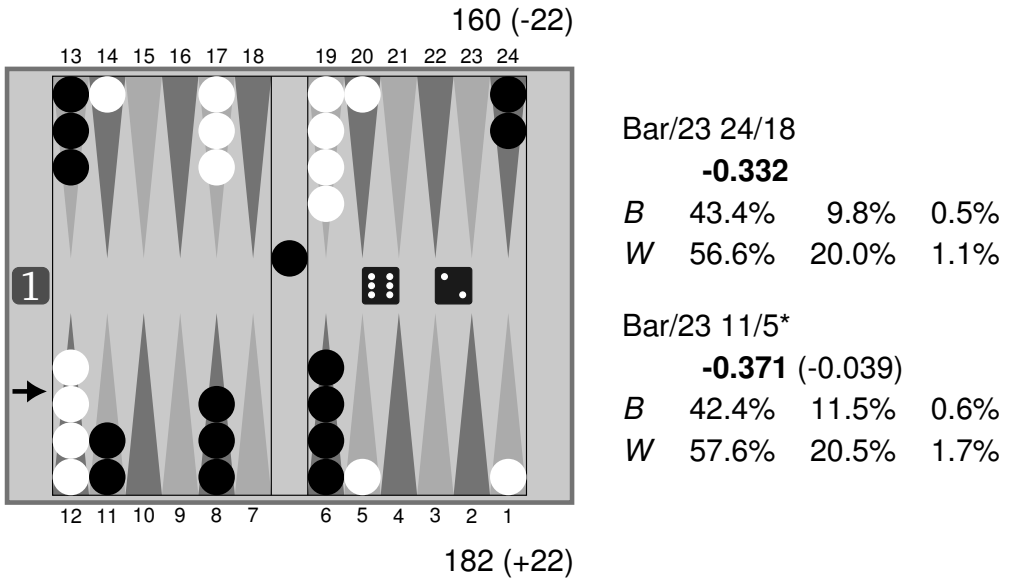


Diagram 2.22: Hitting doesn't give White any bad entering numbers.

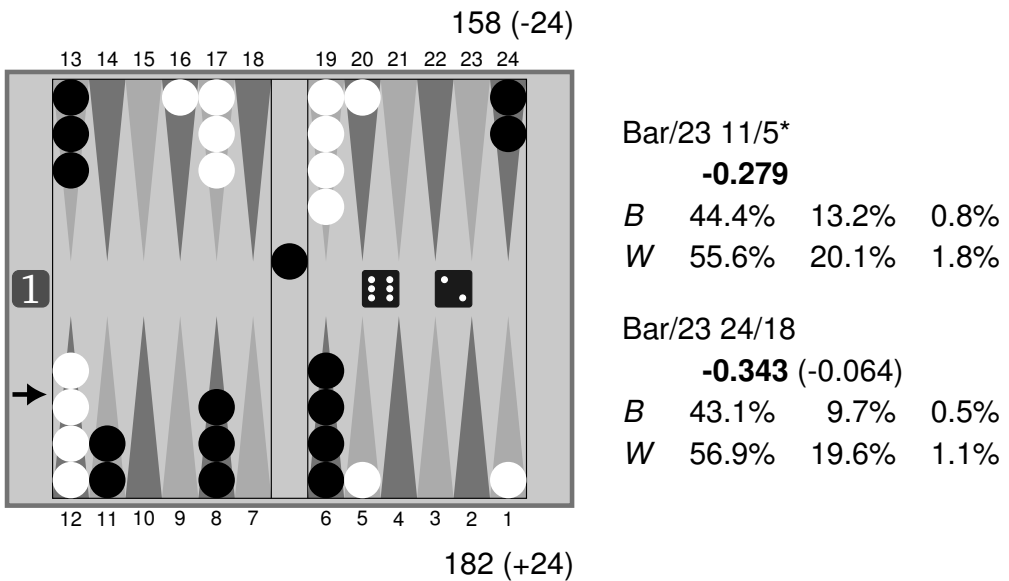


Diagram 2.23: After hitting White has many bad sixes from the bar.

### How to Draw Reliable Conclusions from XG's Analysis

You can see in diagrams 2.22 and 2.23 that hitting is indeed clearly correct when White's builder is on Black's 16 point and a mistake when it is on Black's 14 point. How can I be confident that the reason for this is White's sixes from the bar and not something else? After all, XG's

analysis only tells us (hopefully) the correct decision but not *why* a certain move in a given situation is best. This is why explanations from backgammon commentators, teachers, and authors, including myself, have to be taken with a grain of salt. They are interpretations of XG's results based on knowledge and logic, but you cannot prove their accuracy. The danger of misinterpreting XG's data is high, especially when looking at one position in isolation. I am usually able to give a good explanation after seeing XG's results as to why play A is better than play B in a given situation. But had XG favored play B instead, I probably could have given an equally convincing explanation for the opposite result.

In order to provide more certainty as to my interpretation of XG's result, I *always* look at variations of the original position before coming to a definitive conclusion about the "why", and I recommend the reader to do the same. Over the board, I wrongly chose to hit in position 2.22. When reviewing the play I had a hunch that hitting was wrong because it left my opponent without bad numbers from the bar, which is why I created the variation by moving White's builder 2 pips to Black's 16 point. As I suspected, hitting then turned out to be correct.

In order to interpret the results correctly, it is important to look as well at how the change affects the alternative to hitting. You can see in the statistics columns of diagrams 2.22 and 2.23 that the splitting play Bar/23 24/18 yields about the same equity for Black in both positions ( $-0.332$  in 2.22 and  $-0.343$  in 2.23). The only play affected by the change is the hitting play: it gains a lot of value in position 2.23 (Black's equity jumps from  $-0.371$  to  $-0.279$ ). I thus concluded that I only needed to look at the merits of Bar/23 11/5\* in both positions in order to find what makes them different. Had the equity of the split also moved, things would have been more complicated. As a next step I needed to look at White's rolls from the bar. Since her sixes produce the biggest equity swings between the two positions, I could be fairly confident that my explanation was correct.

Throughout the entire book I use the above methodology. When a position appears in isolation, it simply means that I didn't consider the analyzed variations helpful enough to appear as well. I think that this method is also a great tool for identifying misconceptions about the game. Before I look at the analysis of a variation I try to predict in which direction the equities for the different checker play options will move. If, for example, I had predicted that hitting in a certain variation should be less attractive but the opposite turns out to be the case, I can infer

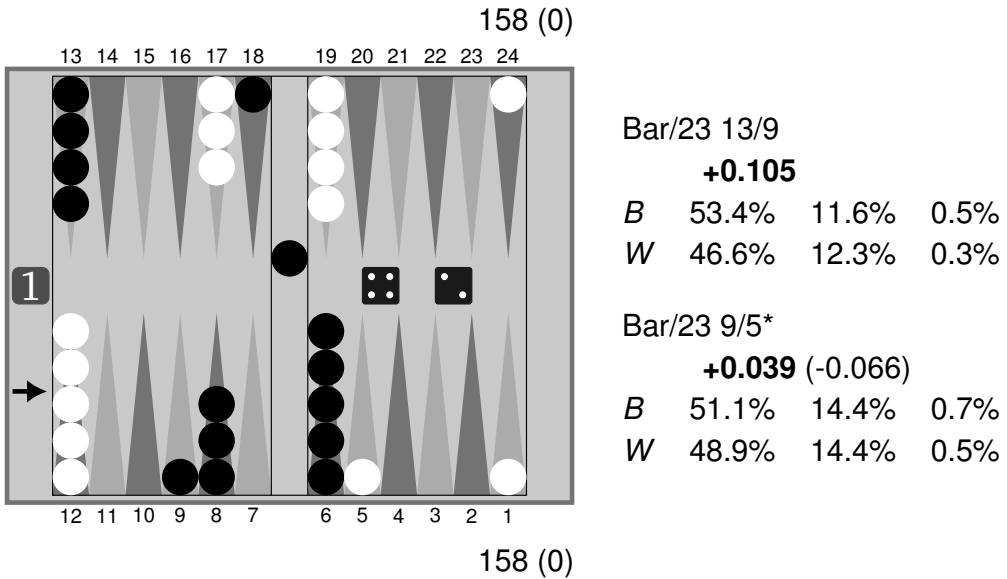


Diagram 2.24: Black would like to take advantage of White's weak position and hit. Hitting is nevertheless a mistake because all of White's 35 entering numbers hit back.

that I am misunderstanding the position and that further study on the topic is needed.


In position 2.24 you can make good arguments for hitting and for making the 9 point. The latter gives Black a lasting asset and tries to conserve his developmental advantage. However, not hitting will give White a chance to consolidate her weak overall position: fours give her an advanced anchor, fives cover the ace, and sixes and aces hit Black's blot on her bar point. Again, tactics decide which play is correct. When Black hits, White's numbers from the bar are perfectly diversified: fives and fours hit the blot on Black's 5 point while aces and sixes hit on White's bar point. As a consequence, *all* of White's 35 entering numbers hit something. Thus Black's gain of initiative after hitting is an illusion, since he will almost always find himself on the bar.

As you can see in diagram 2.24 hitting is a big mistake. At gammon-go the play is fine because it makes it more difficult for White to get an advanced anchor and therefore increases Black's gammon rate. To verify that indeed White's return hits make the difference, I moved Black's blot from the 18 point to the 22 point. Now White has many bad sixes and some bad aces from the bar. According to the XG rollout hitting is better

than making the 9 point in this variation.

### Be more Inclined to Hit Loose with a Stronger Home Board

So far in this chapter we have looked almost exclusively at positions where the attacker had only a one-point board, as is oftentimes the case in the early game. One of the main benefits of hitting is that your opponent may dance. Therefore, hitting becomes more attractive when the attacker has a stronger board.

You can see the effect that increased board strength has in diagram 2.25. Black made his 4 point on his first roll and White made her 3 point; then the sequence was the same as in position 2.24. Not hitting here is a big mistake. The strategic reason for this is that ownership of Black's 5 point is even more important than in position 2.24 for both sides. If White is able to make the 20 point anchor then Black's 4 point loses its value as a blocking point, so Black should try everything to keep that from happening. The tactical reason for playing 9/5\* with the  is that Black has a two-point board, so that White now has four dancing numbers instead of only one. In fact, Black's position would be so strong after White dances that she shouldn't accept a double from Black. In other words, hitting wins the game immediately more than

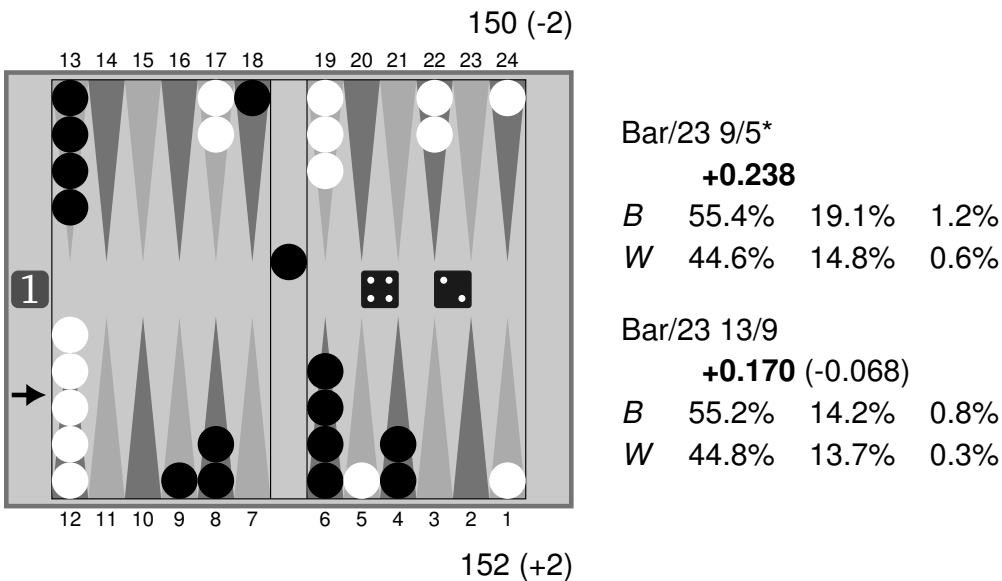


Diagram 2.25: Black wins the game with the cube when he hits and White dances.



one out of ten times. In the next chapter where we discuss hitting loose in the middle game, we will see more positions where both sides have stronger home boards and/or better priming structures.

## 2.4 Summary

- In the early game when there is no constructive alternative, hit loose on your 5 point and, generally, on your 4 point.
- The better your opponent's builder distribution, the more attractive hitting becomes.
- It is almost always better to make your opponent's 5 point than to hit loose on your own 5 point. When the choice is between anchoring on your opponent's 4 point and hitting loose on the 5, make the anchor as a default.
- Hit loose when the passive alternative leaves a direct shot anyway.
- It is much more attractive to hit loose by unstacking the 6 point than by stripping the 8 point.
- Make an outfield point rather than hit loose on the 4 point.
- When you are not sure whether to hit, look how your opponent's sixes play from the bar. When your opponent can use sixes elsewhere don't hit, and when they play poorly hit.
- When you are behind in development you should actively try to change the course of the game. Conversely, when you are ahead in development, you should generally be inclined to play more conservatively.
- Game planning or tactical needs are usually more important than improving your checker distribution.
- When you think that you will lose lots of gammons no matter what you do, make the move you think will win the most games.
- When you are down in race and not behind a prime, jumping into the opponent's outfield with one of your back checkers is usually wrong if there is any reasonable alternative available.